



The Sizewell C Project

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APPENDIX 9B: YOXFORD VISSIM MODEL TECHNICAL NOTE

Contents

- Technical Note describing the Development of the Yoxford VISSIM Model



EDF Energy

SIZEWELL C - YOXFORD MICROSIMULATION MODELLING

Model Validation and Forecasting Report



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January 2020 CONFIDENTIAL



EDF Energy

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Model Validation and Forecasting Report

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JUNCTION MITIGATION DESIGNS

1. PROJECT BACKGROUND

1.1. SIZEWELL C PROPOSALS

- 1.1.1. EDF Energy is proposing to expand the existing nuclear power station at Sizewell on the Suffolk coast on land immediately to the north of the existing Sizewell B site. The Sizewell C Project (the Project) would be one of the biggest and most technologically complex construction projects ever built in the UK.
- 1.1.2. The construction of Sizewell C would involve the daily movement of large numbers of construction workers as well as the movement of large amounts of building materials and equipment. The peak construction workforce for Sizewell C is anticipated to be 7,900 construction workers and 600 associated development workers. The current proposals include:
- Options for an on-site accommodation campus, as well as a number of caravans on nearby land east of Eastlands Industrial Estate (LEEIE), helping to significantly reduce the number of workforce journeys through towns and villages close to the construction site;
 - Two park and ride sites, one for construction workers approaching Sizewell from the north on the A12 and the other for those approaching from the south on the A12;
 - Direct bus services operating from Ipswich, Lowestoft and Leiston and Knodishall, as well as shuttle buses from Saxmundham rail station and the LEEIE;
 - Junction improvement at A12 / B1122 Yoxford;
 - Junction improvement at A12 / A144;
 - A Two Village bypass, around Farnham and Stratford St Andrew; and
 - Sizewell Link Road, joining the A12 south of Yoxford to the B1122 east of Theberton.

1.2. STRATEGIC TRAFFIC MODELLING

- 1.2.1. A VISUM traffic model was developed for the purposes of assessing Sizewell C traffic impacts. The study area and modelled network for the VISUM model was agreed with the local highway authority, Suffolk County Council (SCC) and extends to Lowestoft to the north, Ipswich to the south and the A140 to the west.
- 1.2.2. A VISUM Base Model of the existing road network has been developed using a wide range of Manual Classified Counts (MCC) and Automatic Traffic Counts (ATC) on the local road network which were conducted in May 2015, and from count information from the Highway England Traffic Flow Data System (TRADS) which holds information on traffic flows at sites on the motorway and trunk road network. In addition, SCC provided count data from a number of their permanent count sites.
- 1.2.3. A number of forecast scenarios were modelled in VISUM to represent 2023, 2028 and 2034. Each year was modelled as a Reference Case, without the addition of Sizewell C related traffic and a 'with-Sizewell' scenario known respectively as the Early Years, Peak Construction and Operational Phase scenarios. The Reference Case scenarios assume increases in traffic levels arising from general growth as well as the additional traffic associated with major development sites nearby. Committed highway schemes are also included in these scenarios. The forecast Sizewell C VISUM scenarios were developed based on assumptions about construction traffic provided by EDF and results from a bespoke gravity model.

- 1.2.4. The VISUM model was developed for seven individual hours; three AM hour models and four PM hour models as follows:
- 06:00 to 09:00 hours
 - 15:00 to 19:00 hours
- 1.2.5. Details of the VISUM model development are provided in chapters 6 to 8 of the Sizewell C Transport Assessment.

1.3. PURPOSE OF VISSIM MODELLING

- 1.3.1. The Sizewell C Joint Local Authority Group (JLAG) raised concerns about the operation of the highway network at Yoxford and at Darsham at a meeting on 17 July 2015. The purpose of this modelling study is to determine the impact of Sizewell C traffic on the area around Yoxford, with particular emphasis on the A12 junctions, including the A1120 and B1122 in Yoxford and the A144. The study would also inform design of the Darsham Park & Ride access and consider the interaction of these works with the remainder of the highway network in the area.
- 1.3.2. The VISSIM modelling reported here draws on the gravity modelling and VISUM strategic traffic modelling and adopts the same forecast years and construction traffic movement assumptions made for those studies. The VISUM strategic modelling includes trips associated with the periodical outages at Sizewell B (typically over a six week period every 18 months) as agreed with SCC.
- 1.3.3. In turn, all of the VISSIM modelling presented in this note includes Sizewell B outage trips, thus representing a worst-case scenario which allows a robust network performance assessment to be undertaken.

2. METHODOLOGY

- 2.1.1. A VISSIM microsimulation model was developed in VISSIM 9.00-12. The first step in this process was to produce a base traffic network within the VISSIM scenario management framework. This base network includes all settings, network objects and base data, and serves as a template which forms the basis of all model scenarios. Full details of the base model development are provided in Chapter 3.
- 2.1.2. A total of fourteen scenarios were created within the scenario managed file by applying various combinations of modifications to the base network. A brief description of each of the fourteen scenarios that have been modelled is given in Table 1.

Table 1 – Modelled Scenarios

Scenario Number	Name	Description
1 - 2	2015 AM/PM	2015 Base Year – base 2015 flows.
3 – 4	2023 RC AM/PM	2023 Reference Case – 2023 flows with no Sizewell traffic and no mitigation.
5 – 6	2023 EY AM/PM	2023 Early Years - 2023 flows with early Sizewell traffic and no mitigation.
7 – 8	2028 RC AM/PM	2028 Reference Case – 2028 flows with no Sizewell traffic and no mitigation.
9 – 10	2028 PC AM/PM	2028 Peak Construction – 2028 flows with Sizewell traffic and the following embedded mitigations: A12 / B1122 roundabout, A12 / A144 upgrade, Darsham P&R, new P&R roundabout and Sizewell Link Road.
11 – 12	2034 RC AM/PM	2034 Reference Case – 2034 flows with no Sizewell traffic and no mitigation.
13 – 14	2034 OP AM/PM	2034 Operational Phase – 2034 flows with Sizewell traffic and the following embedded mitigations: A12 / B1122 roundabout, A12 / A144 upgrade and Sizewell Link Road.

- 2.1.3. The AM scenarios were modelled from 06:00 to 09:00, while the PM scenarios were from 15:00 to 19:00. Longer modelled periods were deliberately selected so that the assessment could take into account both the traditional highway peak periods when general traffic flows are high and Sizewell traffic is anticipated to be low and also the early morning and afternoon periods (07:00-08:00 and 15:00-16:00) when general traffic is lower but Sizewell traffic is at its peak.
- 2.1.4. Scenarios 1 and 2 represent the current base year conditions. Base year traffic was obtained from Manual Classified Counts, which were processed to estimate complete origin-destination routes and coded into the model as dynamic OD matrices. For the purposes of base year calibration and validation, three time periods were selected: 08:00 – 09:00, 15:00 - 16:00 and 17:00 - 18:00. The base model was validated against 2015 junction queue lengths and journey time data for these three hours. The base year model validation and calibration is detailed in Chapter 4.

- 2.1.5. Scenarios 3 to 6 model the forecast year 2023. Growth in background traffic and Sizewell C construction traffic were obtained from the strategic highway model (VISUM) and assigned dynamically to the VISSIM model. A small number of roads are included in the micro-level VISSIM model but are not included in the macro-level VISUM model. For trips originating or terminating at these locations, growth has been estimated using TEMPro growth factors instead of the VISUM model.
- 2.1.6. Scenarios 3 and 4 represent the 2023 Reference Case scenario, which predicts the operation of the highway network under a “do nothing” scenario – i.e. forecast population and employment growth, but no Sizewell C construction activity. Scenarios 5 and 6 represent the 2023 Early Years scenario, which adds the Sizewell C construction traffic to the Reference Case scenario. The transport network and traffic demand assumptions used to build the Early Years scenario and a summary of its performance compared to the Reference Case and Base Year are detailed in Chapter 5.
- 2.1.7. Scenarios 7 to 10 represent the forecast year 2028. This year marks the period of peak construction activity at Sizewell C. Scenarios 7 and 8 develop the Reference Case, which predicts the operation of the highway network under a “do nothing at Sizewell” scenario. Scenarios 9 and 10 represent the 2028 Peak Construction scenario, which adds the Sizewell C peak construction traffic to the Reference Case scenario. The transport network and traffic demand assumptions used to build the Peak Construction scenario and a summary of its performance compared to the Reference Case and Base Year are detailed in Chapter 6.
- 2.1.8. Scenarios 11 to 14 model the forecast year 2034. This year represents the normal operation of Sizewell C once it has been fully constructed. Scenarios 11 and 12 model the Reference Case scenario, which predicts the operation of the highway network under a “do nothing at Sizewell” scenario. Scenarios 13 and 14 represent the 2034 Operational Phase scenario, which adds the Sizewell C operational traffic to the Reference Case scenario. The transport network and traffic demand assumptions used to build the Peak Construction scenario and a summary of its performance compared to the Reference Case and Base Year are detailed in Chapter 7.

3. BASE MODEL DEVELOPMENT

3.1. STUDY AREA

- 3.1.1. The VISSIM model network extent has been chosen based on the anticipated Sizewell C area of impact which includes a number of network locations which are more sensitive to growth in traffic flows. The modelled extent covers the A12 between Yoxford and the A12 junction with the A144, including junctions with the A1120, B1122, Westleton Road, Darsham service station, The Street, Willow Marsh Lane, Lymballs Lane and A144.
- 3.1.2. The extent of the B1122 is sufficient to capture the rail level crossing just east of Rookery Park. The level crossings on the A12 at Darsham station and on Willow Marsh Lane are also included within the model along with the Darsham Service Station entrance / exit.
- 3.1.3. The modelled area is shown in Figure 1.

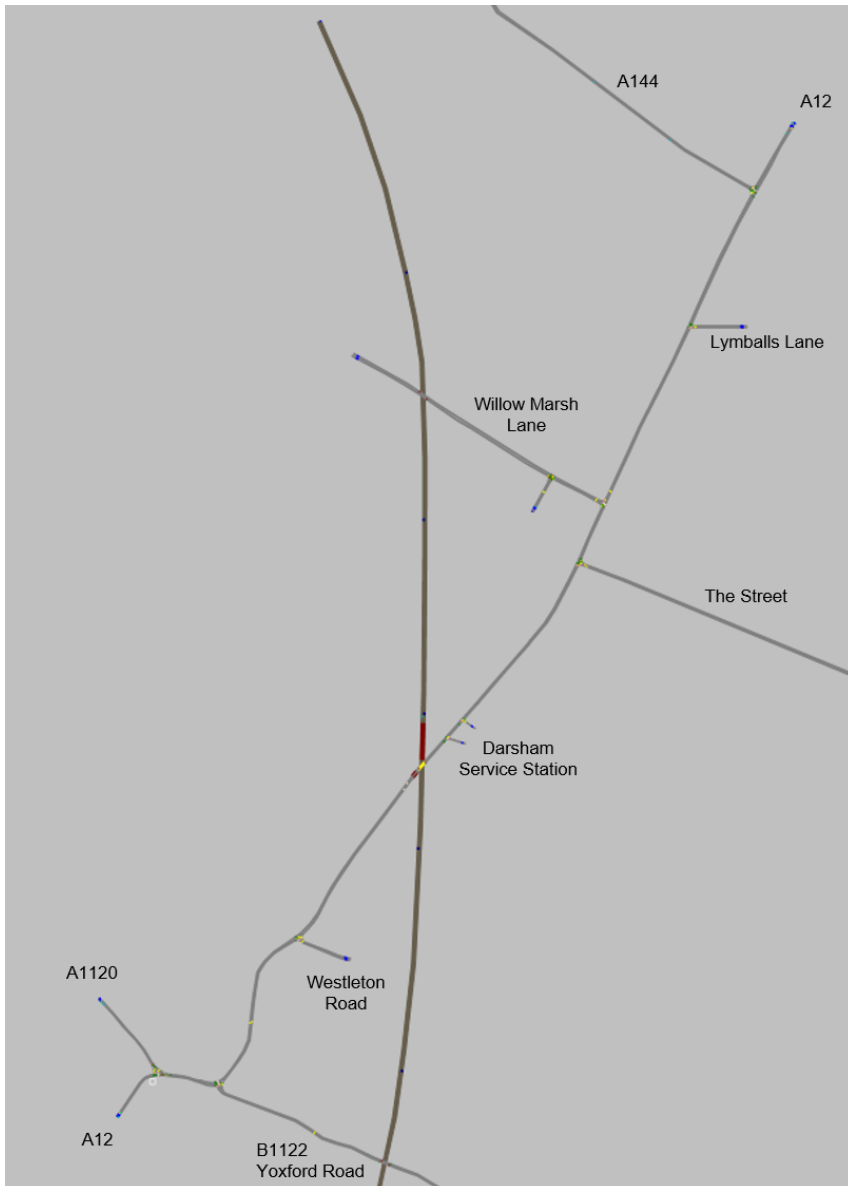


Figure 1 – Modelled Study Area

3.2. DATA COLLECTION

TRAFFIC COUNTS AND QUEUE LENGTHS

- 3.2.1. Manual classified counts (MCCs) and queue length observations were recorded at each of the major junctions in the study area to allow the VISSIM model to be calibrated. The strategic VISUM modelling represents an average Monday to Thursday during AM modelled hours and a Friday during PM modelled hours, as this was shown to be busier than other weekdays. In line with this, MCCs and queues were collected for the purpose of the VISSIM modelling on Friday 8 May 2015 (3-7pm) and Monday 11 May 2015 (6-10am) at the following locations:
- A12 Brook Street / A1120 High Street, Yoxford;
 - A12 Brook Street / B1122 Middleton Road;
 - A12 Main Road / Petrol Filling Station near Darsham; and
 - A12 London Road / A144.
- 3.2.2. Additional MCCs and queue lengths were collected along the A12 to infill the MCC and queue data collected in May 2015. MCCs and queue lengths were recorded on Wednesday 30 September 2015 (6-10am, 12-2pm, 3-7pm) at the following locations:
- A12 / Westleton Road;
 - A12 / The Street;
 - A12 / Willow Marsh Lane; and
 - A12 / Lymballs Lane.
- 3.2.3. Queue lengths and barrier down times were also recorded at the level crossings on the A12 near Darsham and on the B1122.
- 3.2.4. All traffic surveys were conducted using cameras installed on-site by Traffic Survey Partners (TSP). Traffic counts were reported in 15-minute time segments and queue lengths were reported in 5-minute time segments. TSP also provided video files for later analysis and verification of processed data. Figure 2 shows the locations of the junctions that were surveyed.

JOURNEY TIMES

3.2.5. Highway journey time observations were extracted from TrafficMaster data for four segments along the A12. Journey times from TrafficMaster represent the average weekday travel time across May 2015. Journey times were aggregated from 15-minute segments into whole hours across Monday to Thursdays in May. Journey time data was separated by direction (northbound and southbound) and time period (8-9am, 3-4pm and 5-6pm). The journey time segments are shown in Figure 3.

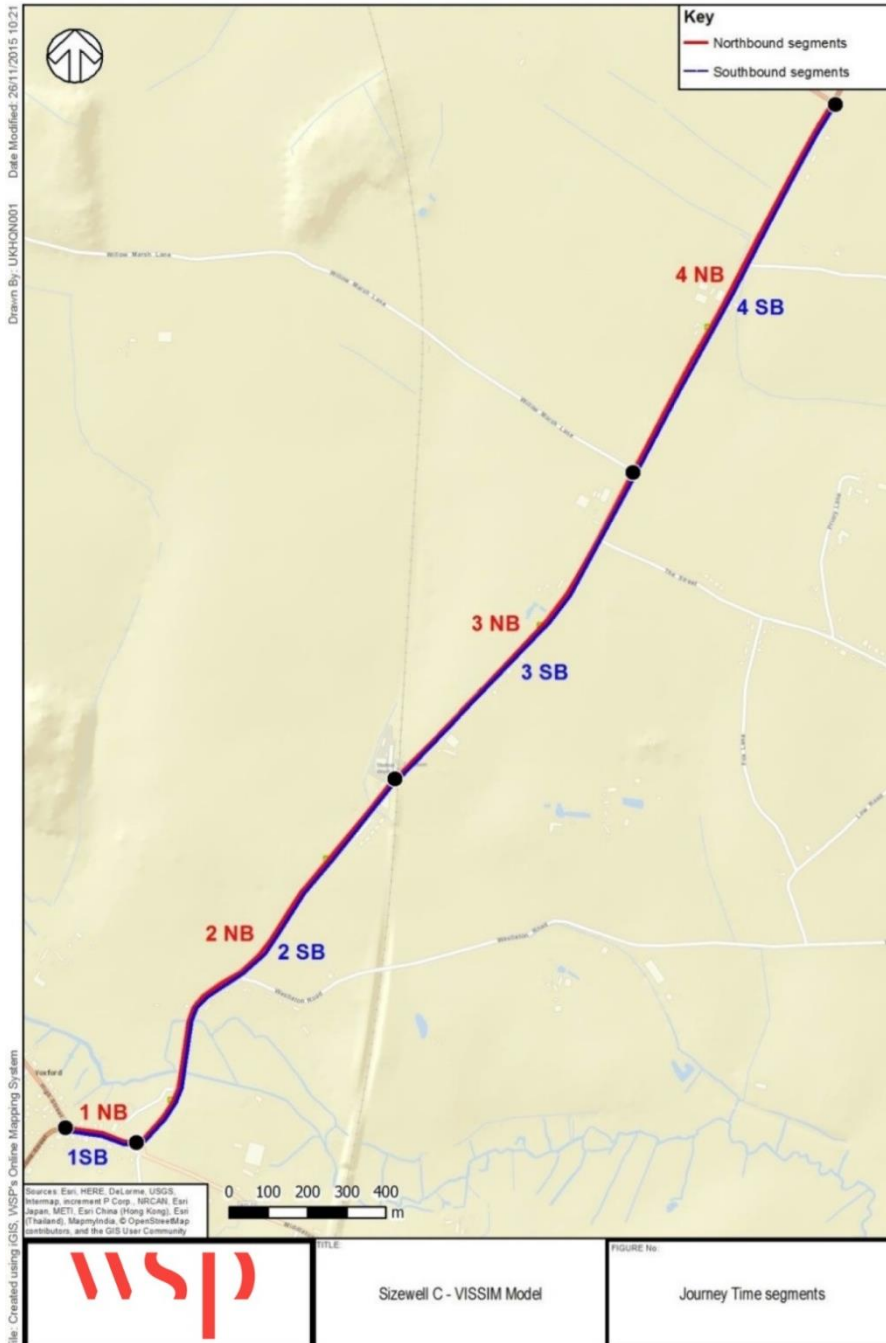


Figure 3 – Observed Journey Time Segments

3.2.6. The observed average journey time data is shown in Table 2.

Table 2 – TrafficMaster Observed Journey Times (seconds)

Section	AM Peak (08:00-09:00)		Inter Peak (15:00-16:00)		PM Peak (17:00-18:00)	
	NB	SB	NB	SB	NB	SB
1	14	13	13	23	16	15
2	60	61	58	62	57	62
3	68	66	72	85	67	72
4	52	48	60	51	48	49
Total	194	187	203	222	188	197

LEVEL CROSSING SURVEY

3.2.7. The operation of the level crossing on the A12 near Darsham and the level crossing on the B1122 Yoxford Road was surveyed on Wednesday 30 September 2015 during the AM, Inter and PM peak periods. Using video footage provided by TSP, the level crossing barrier closures were recorded to determine the time of closure and duration of each closure. Figure 4 shows the location of the level crossing surveys.

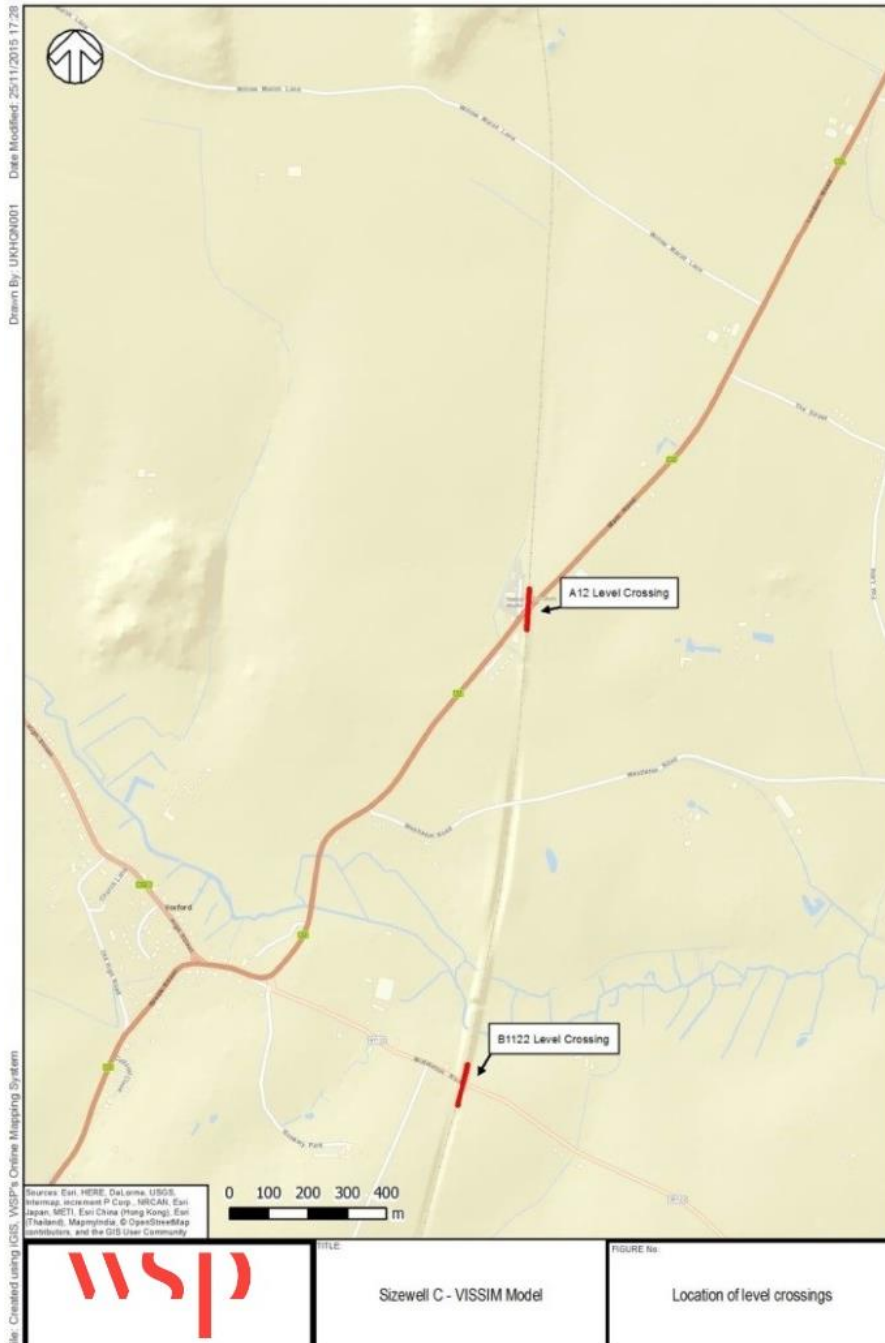


Figure 4 – Level Crossing Survey Locations

3.2.8. The average observed level crossing barrier down time is shown in Table 3.

Table 3 – Level Crossing Barrier Closure Duration (seconds)

Train Arrival Direction and Crossing Location	8-9 AM	3-4 PM	5-6 PM
Northbound train at B1122	31	35	33
Southbound train at B1122	31	37	33
Northbound train at A12	45	45	45
Southbound train at A12	102	135	70

3.2.9. The barrier down time is significantly longer when southbound trains approach the A12 crossing. This is because Darsham railway station is positioned immediately north of the A12 crossing and the barrier is lowered whilst the southbound train dwells at the station before using the crossing.

3.3. MODEL CONSTRUCTION

BASE NETWORK STRUCTURE

- 3.3.1. The modelled study area is described in Section 3.1. This area of road network has been constructed in VISSIM using Ordnance Survey Mastermap as an indication of kerb lines. The extent was chosen so that the key junctions of interest were included, as well as sufficient areas of the surrounding network to allow traffic arriving at the key junctions to be accurately modelled, e.g. platooning. The modelled area was also extended where necessary to accommodate current and forecast queues.
- 3.3.2. The majority of network links were coded as “Inter-urban (motorized) W99” links using the Wiedemann99 car-following model. The number of “observed vehicles” was increased from two to four to improve driver-vehicle interaction, but otherwise driver behaviour parameters were kept as the VISSIM defaults. A small number of multi-lane links were adjusted to use the “free lane selection” link type to allow vehicles to select the most appropriate lane based on their route, e.g. a right turning vehicle selecting the right-hand lane.
- 3.3.3. Desired speed profiles were created for car, motorcycle and bus as per Transport for London’s default VISSIM model template. These speed profiles cover the following speed limits: 10mph, 20mph, 30mph, 40mph, 50mph and 60mph. Each speed profile ranges between a lower and upper limit to replicate driver tendency to travel at speeds not exactly equal to the sign-posted speed. The speed profiles for 30mph and 40 mph were adjusted during calibration to a linear distribution with tighter boundaries to allow observed speeds to be better replicated. The speed profiles result in the formation of natural platoons on the A12 as faster moving vehicles catch-up with slower moving vehicles. Desired Speed Decisions (DSDs) were applied using these speed profiles in the model to replicate speed limit changes. The speed limit applied on the A12 through Yoxford was 30mph and north of the River Yox the speed limit increases to 40mph. The speed limit of 60mph north of Willow Marsh Lane was also applied. The B1122, Willow Marsh Lane and other connecting roads were assigned speed limits of 30mph, whilst the A1120 Yoxford High Street was assigned a desired speed of 20mph to reflect the nature of this area.

- 3.3.4. Reduced Speed Areas (RSAs) were assigned across the model to replicate the need for vehicles to slow down on sharp bends and at junctions. Initially a reduced speed distribution of 10mph was used universally for all reduced speed areas. Reduced speed area distributions were then adjusted during calibration to allow observed queues to be matched. This resulted in changing the reduced speed areas to 20mph at the major junctions (A12 / A1120, A12 / B1122 and A12 / A144) and on the A12 level crossing.
- 3.3.5. Priority rules were applied at junction conflict points to replicate gap acceptance behaviour. Where appropriate, separate time and distance gap rules were applied. Rules were separated for cars and HGVs where required. Gap acceptance times were selected depending on the nature of the conflict and to calibrate the observed queuing behaviour. Higher gap acceptances were required to achieve safe priority behaviours within the 60mph section of the A12.
- 3.3.6. Level crossings were modelled using VISSIM's Vehicle Actuated Programming (VAP) language. VAP files were created to close the rail barriers (by means of a red signal) when a train approached the crossing. Approaching trains were detected using "virtual loop detectors" on the rail alignment sections. Closure times were programmed to replicate those observed on-street (see Table 3). Priority rules were also used at level crossings to keep the rail tracks clear of queuing traffic. Reduced speed areas of 20mph were added to the level crossing to simulate traffic slowing whilst passing over the crossing.
- 3.3.7. Two VAP files were created:
- LevelXingA12_v2.VAP – for the A12 level crossing; and
 - LevelXing_v2.VAP – for the B1122 and Willow Marsh Lane crossings.
- 3.3.8. T-junctions with flares were modelled by adding an extra lane at the stopline or by extending the appropriate turning connectors to allow two cars to sit side by side whilst waiting to pull out.
- 3.3.9. Nodes were created at each junction and entry to the model for the dynamic assignment of the origin – destination matrices. The nodes at the entry to the model represent the model zones and they are connected to the network by using "parking lots". Table 4 contains the list of zones used in the model. Zone 902 (Darsham Park and Ride) is included in the base year model as an empty zone that will be used in the forecast year scenarios.

Table 4 – Zoning System

Zone	Name	Zone	Name
506	The Street	15350	B1122
902	Darsham Park and Ride	16000	Westleton Road
14828	A1120	16001	Petrol Station
14830	A12 S	16002	Willow Marsh Lane
14834	A144	16003	Lymballs Lane
15048	A12 N		

- 3.3.10. Junction nodes are used in dynamic assignment to allow / prohibit certain movements (defined as "edges" in VISSIM) in the junction. Edges have been closed where appropriate to avoid vehicle

movements that would not happen in reality. Junction nodes have also been used for validation and delay evaluation purposes.

- 3.3.11. Travel time measurements were introduced along the A12 for validation and evaluation purposes, replicating the sections from the observed data shown in Figure 3.
- 3.3.12. Queue counters were added at all give way lines at each of the junctions to allow the modelled queues to be calibrated to the observed queue lengths and to allow a comparison of queues to be made in the forecast scenarios.

BASE YEAR MATRIX DEVELOPMENT

- 3.3.13. The Yoxford VISSIM model contains a total of 11 zones, as specified in Table 4.
- 3.3.14. Five vehicle types were used in the base year model:
 - Car (100);
 - LGV (700);
 - HGV (200);
 - Bus (300); and
 - Train (400).
- 3.3.15. Car, LGV, bus and train use the default 2D / 3D model distribution. HGV contains both OGV1 and OGV2 models with a share of 50% each, as observed in the MCC data.
- 3.3.16. Vehicle compositions are used to determine the percentage of each vehicle type in a specific vehicle input or matrix. Matrices have been generated for Car, LGV and HGV separately, so the vehicle compositions are also defined for each vehicle type separately.
- 3.3.17. Vehicle classes are used to group vehicle types for dynamic assignment and evaluation purposes. Vehicle classes have been created for each individual vehicle type.
- 3.3.18. Car, LGV and HGV demand was included in the model as dynamic assignment matrices. Traffic flow spreadsheets were prepared using the surveyed traffic flows to balance total in-flow and out-flow at adjacent traffic counts. As almost all junctions were surveyed there were only minor discrepancies between adjacent counts.
- 3.3.19. The matrices for the model cover the AM period (06:00 – 09:00) and PM period (15:00 – 19:00). As mentioned in the methodology, these periods were selected so that the assessment could take into account both the traditional highway peak periods and also the periods (06:00-07:00 and 15:00-16:00) when general traffic is lower but Sizewell traffic is at its peak.
- 3.3.20. Matrix trips were loaded onto the zones in 15-minute segments based on the traffic flow spreadsheets. A 15-minute warm-up period was applied to allow traffic to build up in the modelled network prior to the start of the core modelled period, so that traffic conditions are realistic at the beginning of the modelled period.
- 3.3.21. Junction turning flow diagrams are provided for each time period in Appendix A.

Convergence

- 3.3.22. As mentioned above, traffic flows have been input to the network as dynamically assigned matrices. Although there are no route choices available in the network, dynamic assignment has been used as it is a more efficient way to generate Origin – Destination trips than using fixed routes.

- 3.3.23. An iterative convergence procedure takes place by assigning vehicles to different paths until equilibrium is reached. The criterion for model convergence in the model has been set as follows:
- Travel time on paths: change of up to 20% on 85% of links;
 - Volume on edges: change of up to 50 vehicles on 98% of edges; and
 - Minimum simulation runs: four.
- 3.3.24. Convergence was reached for each scenario in the minimum permitted amount of simulation runs as there is no route choice in the network.

PUBLIC TRANSPORT SERVICES

- 3.3.25. Three public bus services were identified as running through the study area:
- Borderbus service no. 521 (Halesworth – Aldeburgh);
 - Framlingham High School services TM01 (Leiston – Framlingham); and
 - TM02 (Reydon – Framlingham).
- 3.3.26. These bus services were added to the model according to published timetables. Table 5 lists the frequency of each bus service as they have been included in the model in each time period.

Table 5 – Public Bus Services Frequencies per 3hr (AM) or 4hr (PM) period

Service and Direction	6-9 AM	3-7 PM
No. 521 northbound	0	2
No. 521 southbound	1	1
TM01 westbound	1	0
TM01 southbound	0	1
TM02 northbound	0	1
TM02 southbound	1	0

- 3.3.27. Bus services were included in the model as fixed public transport lines and in lieu of observed dwell time information, a dwell time distribution has been applied to provide some variation in dwell times with an average of 20 seconds. This is considered to be reasonable for a rural bus service where passenger numbers are unlikely to be large.
- 3.3.28. Train services were included in the model as fixed public transport routes with a stop at Darsham station. Modelling the train services allowed the realistic replication of the level crossing barriers which impact flows on the A12, Willow Marsh Lane and the B1122. The northbound and southbound train services were added to the model according to the published timetable, applying an entry offset equal to the time taken by the train between the entry to the model and the stop at the station. Trains were assumed to stop at Darsham station for an average of 60 seconds which was selected to allow the level crossing barrier down time to be calibrated to observed data. Whilst a southbound train dwells at Darsham Station, the level crossing barrier is closed so the length of train dwell time directly impacts barrier down time Table 6 shows the train services that were included in the model for each time period.

Table 6 – Train Service Frequency per 3hr (AM) and 4hr (PM) period

Service and Direction	6-9 AM	3-7 PM
Lowestoft – Ipswich	4	5
Ipswich - Lowestoft	2	5

4. BASE MODEL CALIBRATION AND VALIDATION

4.1. CRITERIA

4.1.1. The base year scenario was calibrated against traffic flows and queue length data and independently validated against observed journey times to confirm that the model is able to represent current (2015) traffic conditions. Three time periods were selected for validation and calibration: 08:00 – 09:00 (AM peak hour), 15:00 – 16:00 (Inter peak hour) and 17:00 – 18:00 (PM peak hour). The calibration and validation criteria used was based on Department for Transport (DfT) guidelines set out in TAG Unit M3.1 Highway Assignment Modelling.

CALIBRATION

4.1.2. Modelled turning flows at junctions were compared against observed counts using the two criteria set out in Table 7. The first criterion uses differences in flow whilst the second criterion uses the GEH statistic which offers a reliable method of comparing the similarity of two flows irrespective of their magnitude, as shown below.

$$GEH = \sqrt{\frac{(M - C)^2}{(M + C)/2}}$$

where: GEH is the GEH statistic;
M is the modelled flow; and
C is the observed flow.

Table 7 – Traffic Flow Calibration Criteria (source: TAG Unit 3.1)

Table 2 Link Flow and Turning Movement Validation Criteria and Acceptability Guidelines		
Criteria	Description of Criteria	Acceptability Guideline
1	Individual flows within 100 veh/h of counts for flows less than 700 veh/h	> 85% of cases
	Individual flows within 15% of counts for flows from 700 to 2,700 veh/h	> 85% of cases
	Individual flows within 400 veh/h of counts for flows more than 2,700 veh/h	> 85% of cases
2	GEH < 5 for individual flows	> 85% of cases

4.1.3. Observed queue data has also been used to calibrate the model by comparing modelled and observed queues in 5-minute intervals. Queue lengths were measured as the maximum occurring during each 5-minute interval. There are no formal queue length comparison criteria prescribed by industry guidance, but in general the length, variability and profile of modelled queues throughout the hour should be similar to those observed.

VALIDATION

4.1.4. Journey times from the model were compared to observed journey times by way of an independent validation check. The WebTAG criteria set out in Table 8 has been used to assess the model validation.

Table 8 – Journey Time Validation Criteria (source: TAG Unit 3.1)

Table 3 Journey Time Validation Criterion and Acceptability Guideline	
Criteria	Acceptability Guideline
Modelled times along routes should be within 15% of surveyed times (or 1 minute, if higher than 15%)	> 85% of routes

4.2. TRAFFIC FLOW CALIBRATION

4.2.1. Modelled turning flows at each junction were compared against observed turning flows by vehicle type (Car, LGV and HGV) and for all vehicle types combined. As the observed traffic flows were directly input into the model, this check was considered to be calibration rather than an independent validation of the model’s ability to replicate observations. Traffic flow calibration tables are provided in Appendix B for the AM, Inter and PM peak hour models.

AM PEAK HOUR (08:00 – 09:00)

4.2.2. The AM peak hour was found to closely replicate observed turning flows for all vehicle types.

4.2.3. Overall the model slightly over-predicted observed flows (+1.1%) but overall flow totals were within DfT validation criteria (GEH < 5.0) with an average GEH value of 0.2. Table 9 provides a summary of the AM peak hour flow validation against DfT criteria.

Table 9 – AM Peak Hour Turn Flow Validation Summary

	GEH Statistics - AM			Individual Flows		
	GEH < 5	GEH < 6	GEH < 10	f < 700	700 < f < 2700	f > 2700
Car	100.0%	100.0%	100.0%	100.0%	No Data	No Data
LGV	100.0%	100.0%	100.0%	100.0%	No Data	No Data
HGV	100.0%	100.0%	100.0%	100.0%	No Data	No Data
All Veh.	100.0%	100.0%	100.0%	100.0%	No Data	No Data

4.2.4. Figure 5 shows how the modelled and observed turning flows compare and demonstrates that the correlation between the two is strong. The gradient is higher than 1.0 (1.0125) which confirms the slight overestimate of flows. The R² value (0.9996) is very close to 1, which indicates that the modelled flows do correlate with observed flows and confirms that a good level of flow calibration has been achieved.

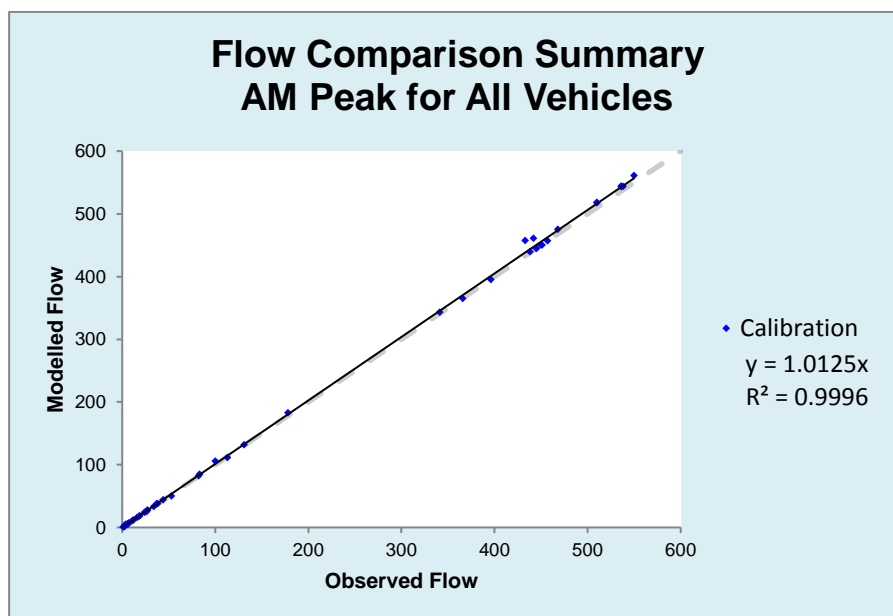


Figure 5 – AM Peak Hour Plot of Modelled vs. Observed Turn Flows

INTER PEAK HOUR (15:00 – 16:00)

4.2.5. The Inter peak hour model replicated observed junction turn flows for all vehicles types in the hour well. Overall the model slightly over-predicted observed flows (+0.1%) but flow totals were within DfT validation criteria (GEH < 5.0) with an average GEH of 0.1. All individual surveyed turn movements met DfT flow validation criteria with a GEH value of less than 5.0. Table 10 provides a summary of the Inter peak hour flow validation against DfT criteria.

Table 10 – Interpeak Hour Turn Flow Validation Summary

	GEH Statistics - IP			Individual Flows		
	GEH < 5	GEH < 6	GEH < 10	f < 700	700 < f < 2700	f > 2700
Car	100.0%	100.0%	100.0%	100.0%	No Data	No Data
LGV	100.0%	100.0%	100.0%	100.0%	No Data	No Data
HGV	100.0%	100.0%	100.0%	100.0%	No Data	No Data
All Veh.	100.0%	100.0%	100.0%	100.0%	No Data	No Data

4.2.6. Figure 6 shows a plot of modelled against observed junction turn flows showing that the correlation between modelled and observed flows was very good. The gradient is more than 1.0 (1.0026) which confirms the slight overestimate of flows. The R² value (0.9997) is very close to 1, showing tight correlation with observed flows.

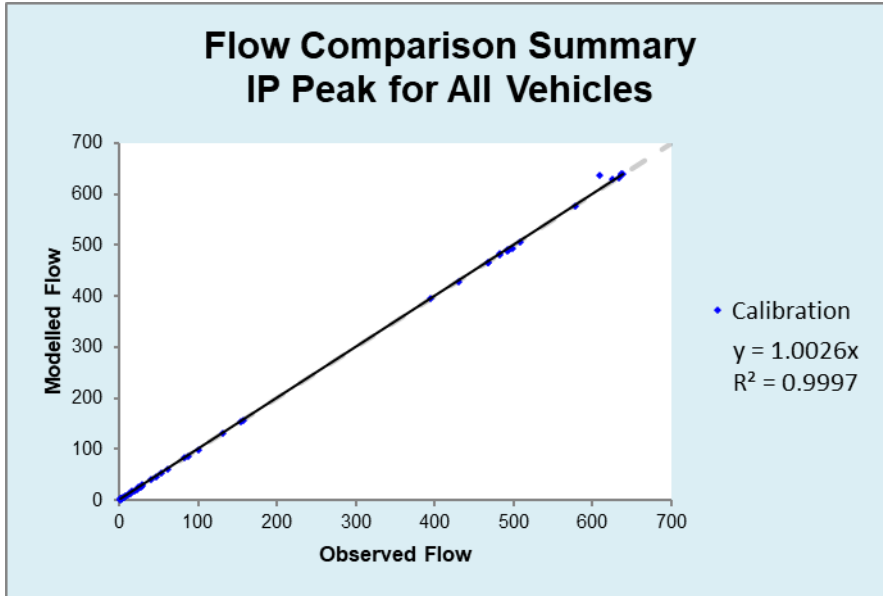


Figure 6 – Inter Peak Hour Plot of Modelled vs. Observed Turn Flows

PM PEAK HOUR (17:00 – 18:00)

4.2.7. The PM peak hour model replicated observed junction turn flows for all vehicles types in the hour very well. Overall the model perfectly predicted observed flows (0.8% difference) with an average GEH of 0.2. All individual surveyed turn movements met DfT flow validation criteria with a GEH value of less than 5.0. Table 11 provides a summary of the PM peak hour flow validation against DfT criteria.

Table 11 – PM Peak Hour Turn Flow Validation Summary

	GEH Statistics - PM			Individual Flows		
	GEH < 5	GEH < 6	GEH < 10	f < 700	700 < f < 2700	f > 2700
Car	100.0%	100.0%	100.0%	100.0%	No Data	No Data
LGV	100.0%	100.0%	100.0%	100.0%	No Data	No Data
HGV	100.0%	100.0%	100.0%	100.0%	No Data	No Data
All Veh.	100.0%	100.0%	100.0%	100.0%	No Data	No Data

4.2.8. Figure 7 shows a plot of modelled against observed junction turn flows showing that the correlation between modelled and observed flows was very good. The gradient is more than 1.0 (1.0088) which confirms the slight overestimate of flows. The R² value (0.9997) is very close to 1, showing tight correlation with observed flows.

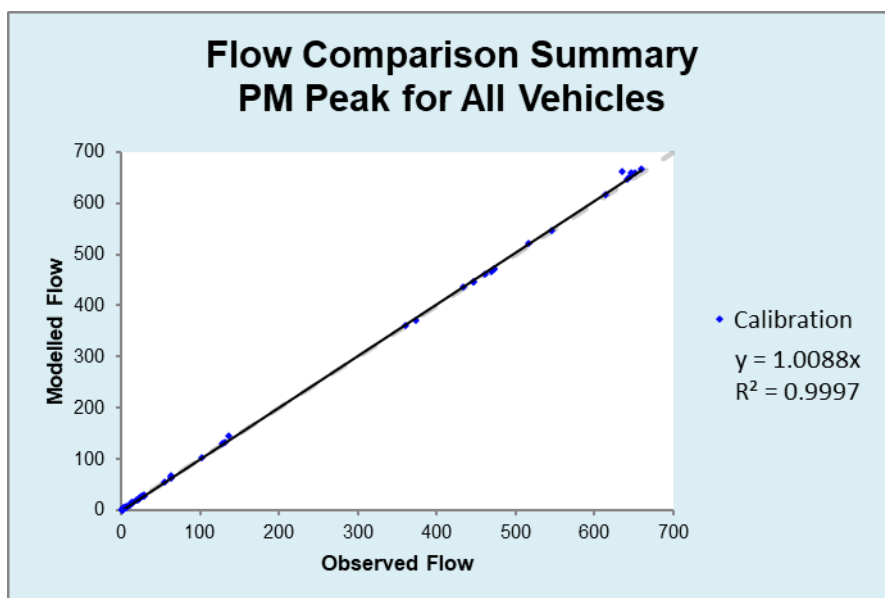


Figure 7 – PM Peak Hour Plot of Modelled vs. Observed Turn Flows

4.3. QUEUE LENGTH CALIBRATION

- 4.3.1. Queue lengths were observed at the ten locations identified in Section 3.2. Queue lengths were also recorded at the two level crossings on the A12 near Darsham and on the B1122 Yoxford Road. Queue length calibration graphs are provided in Appendix B for the AM, Inter and PM peak hours.
- 4.3.2. Observed queue lengths at most of the junctions were very short (typically less than two vehicles). The model was able to replicate this and therefore a more detailed comparison was not made. Slightly longer queues were observed at the following junctions:
- A12 / A1120;
 - A12 / B1122; and
 - A12 / A144.
- 4.3.3. The model showed some variation in queue lengths between iterations and across the peak hours, in line with fluctuations in demand, but the model generally replicated the observed queue lengths very well. At some approaches the model shows a slight over-prediction of queue length, but still within a reasonable range of the observations.

AM PEAK HOUR (08:00 – 09:00)

- 4.3.4. Figure 8 and Figure 9 show the observed and modelled queue lengths at the A12 and B1122 level crossings respectively.

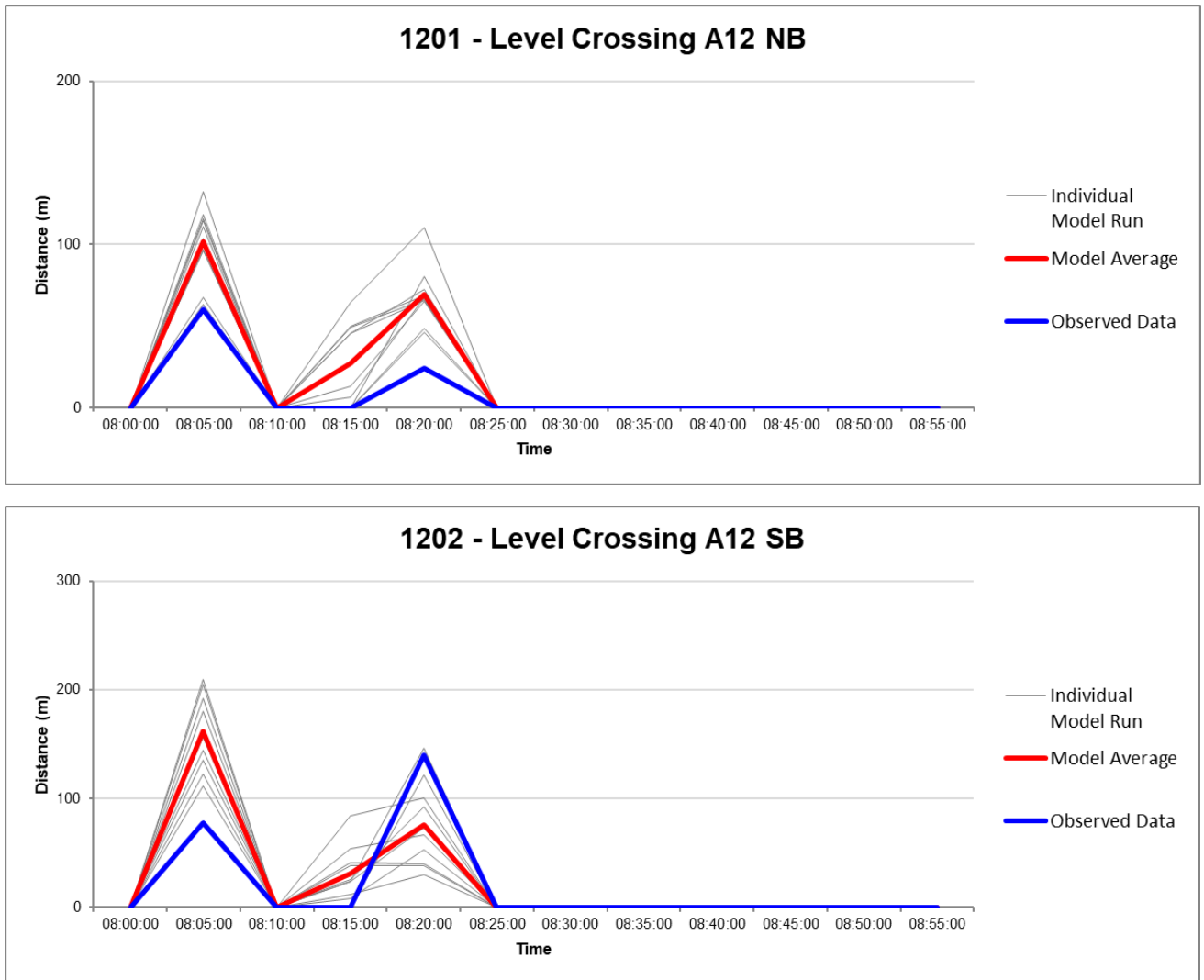


Figure 8 – A12 Level Crossing Queue Length Validation (AM peak)

- 4.3.5. The level crossing on the A12 was closed twice during the AM peak, once at 08:07 for a northbound train and once at 08:21 for a southbound train. This resulted in queues forming northbound and southbound on the A12 at two distinct points in the hour.
- 4.3.6. Queue lengths are highly dependent on the nature of the traffic platoon which arrives when the barrier is closed and so there was significant variability shown in modelled queue lengths across individual model runs. Considering this variability, and the fact that the observed queues represent a single day, modelled and observed queues were shown to be reasonably well matched.

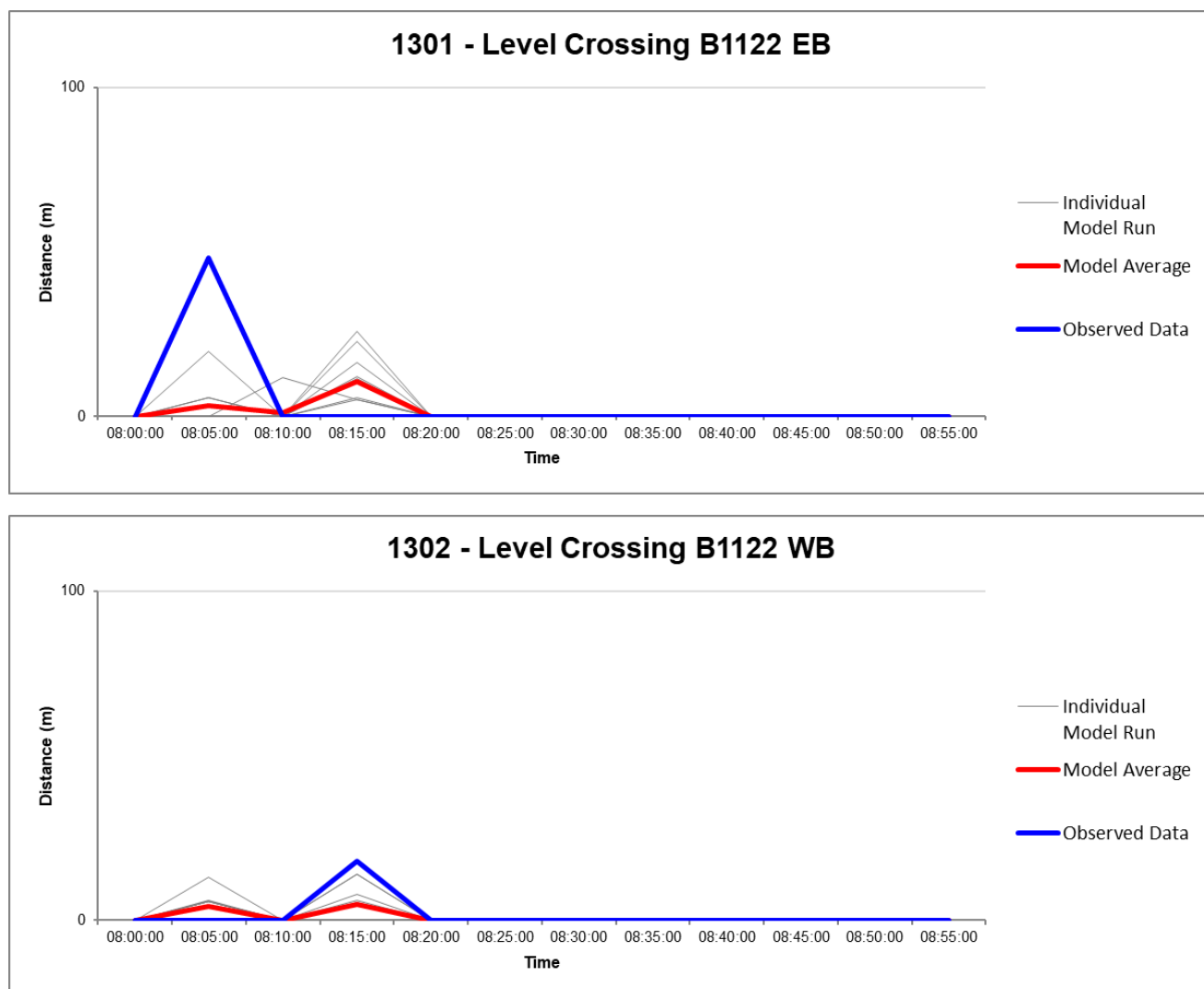


Figure 9 – B1122 Level Crossing Queue Length Validation (AM peak)

- 4.3.7. The B1122 level crossing also closed twice during the AM peak hour and the model accurately reflected the timing and magnitude of observed queues. Traffic flows on the B1122 were much lower than on the A12 and so queue lengths were therefore also much shorter. The similarity of modelled and observed queues were again generally good, considering the variability in traffic platooning and the fact that the queue length survey represents a single day.
- 4.3.8. Overall the model replicated observed queue lengths well in the AM peak hour.

INTER PEAK HOUR (15:00 – 16:00)

- 4.3.9. Figure 10 and Figure 11 show the observed and modelled queue lengths in the Inter peak hour at the A12 and B1122 level crossings respectively.

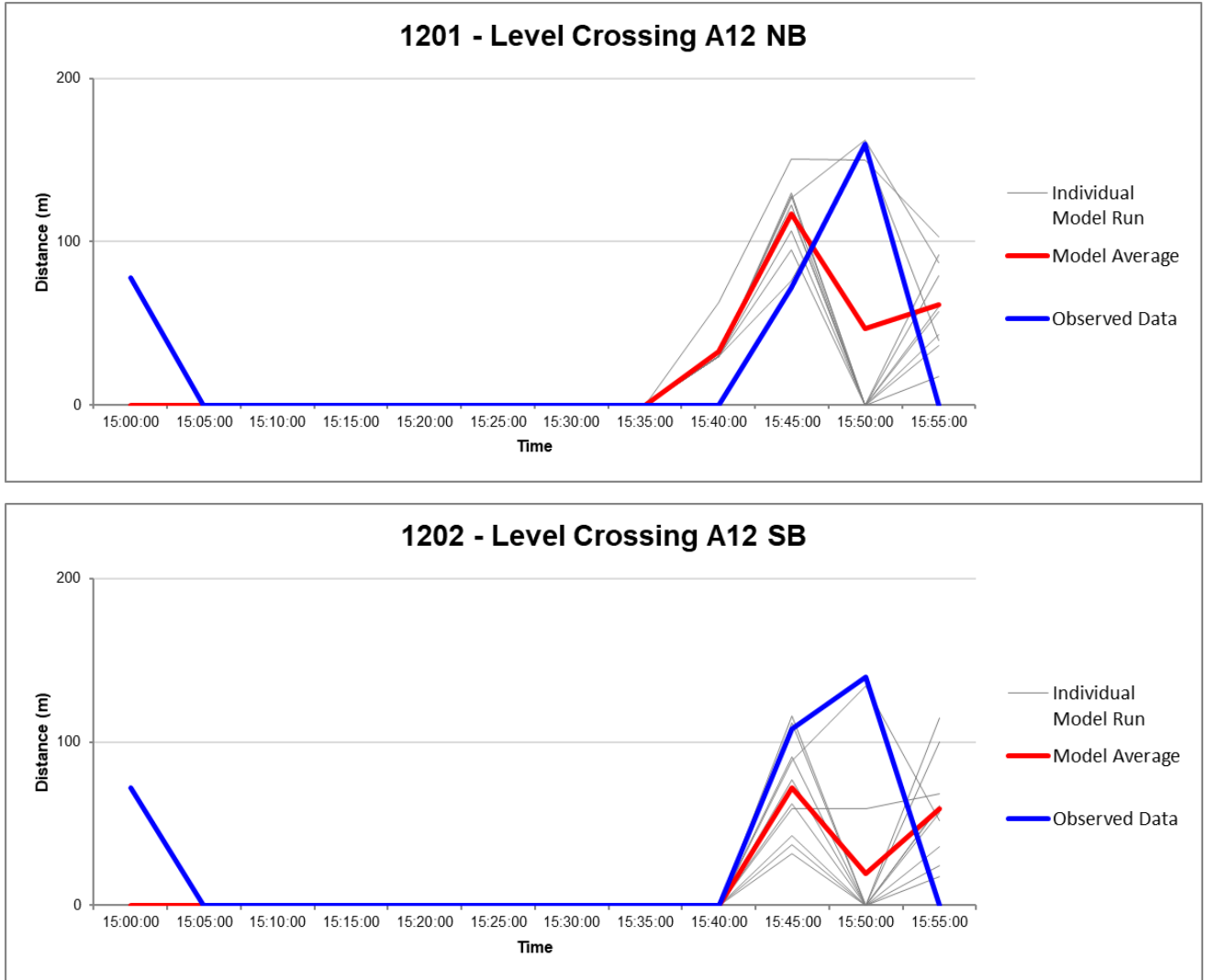


Figure 10 – A12 Level Crossing Queue Length Validation (Inter peak)

4.3.10. The level crossing on the A12 was recorded as closing three times during the Inter peak hour; at 15:00 and 16:00 for northbound trains, and once at 15:49 for a southbound train. There was a slight time offset between the observed closures and the scheduled train timetable which informs the modelled trains and this difference is therefore reflected in the graph. However, the magnitude of queue lengths reported from the model still match observed queue lengths on the A12.

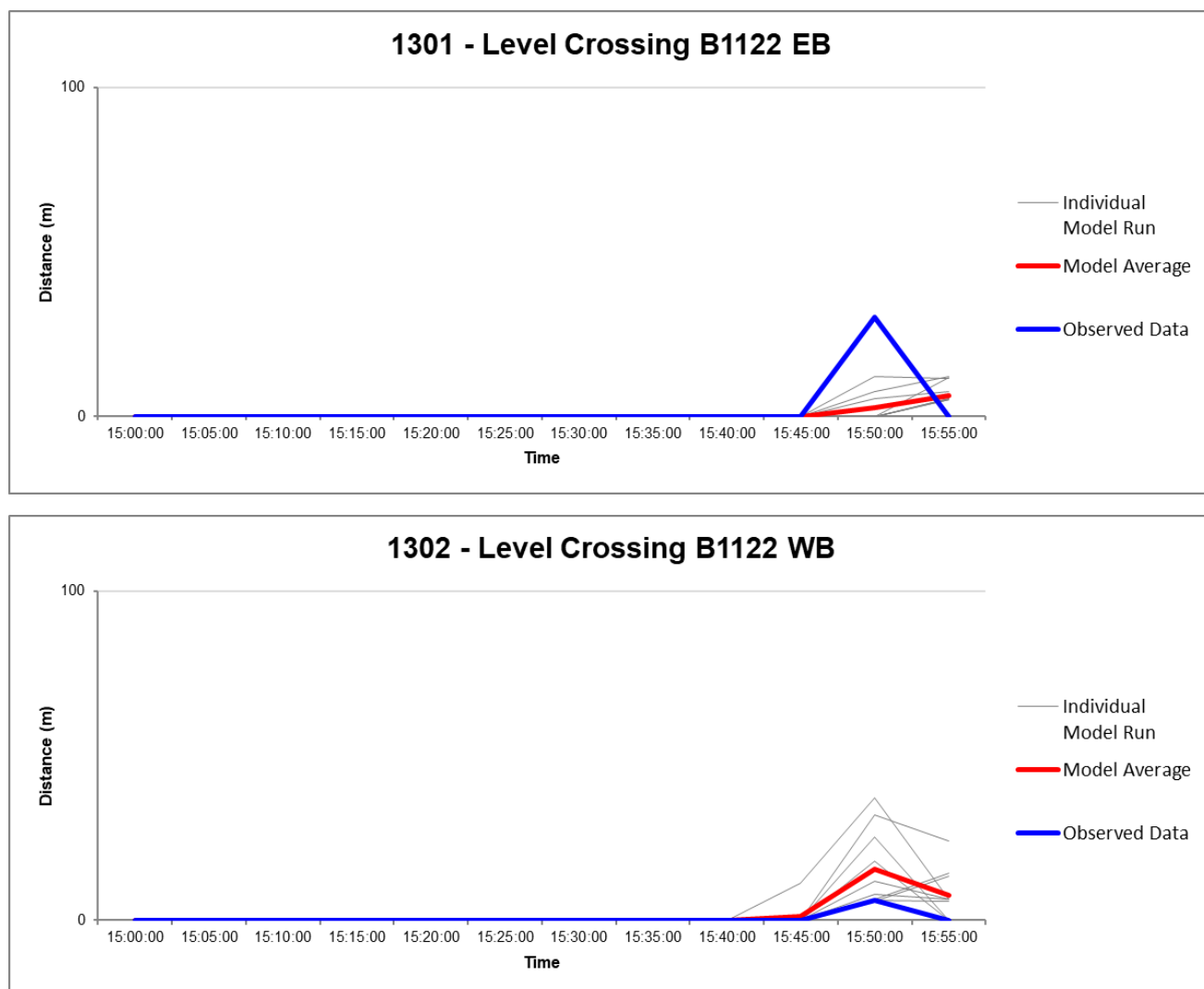


Figure 11 – B1122 Level Crossing Queue Length Validation (Inter peak)

- 4.3.11. Modelled queue lengths at the level crossing on the B1122 were much shorter than on the A12 and matched the observed queue profile. The eastbound modelled queue was shorter than that observed, but this is thought to be due to the nature of the platoon arrival when the barrier was down and the fact that the queue length survey was carried out on one day only.
- 4.3.12. Overall the model replicated observed queue lengths well in the Inter peak hour.

PM PEAK HOUR (17:00 – 18:00)

- 4.3.13. Figure 12 and Figure 13 show the observed and modelled queue lengths at the A12 and B1122 level crossings respectively.

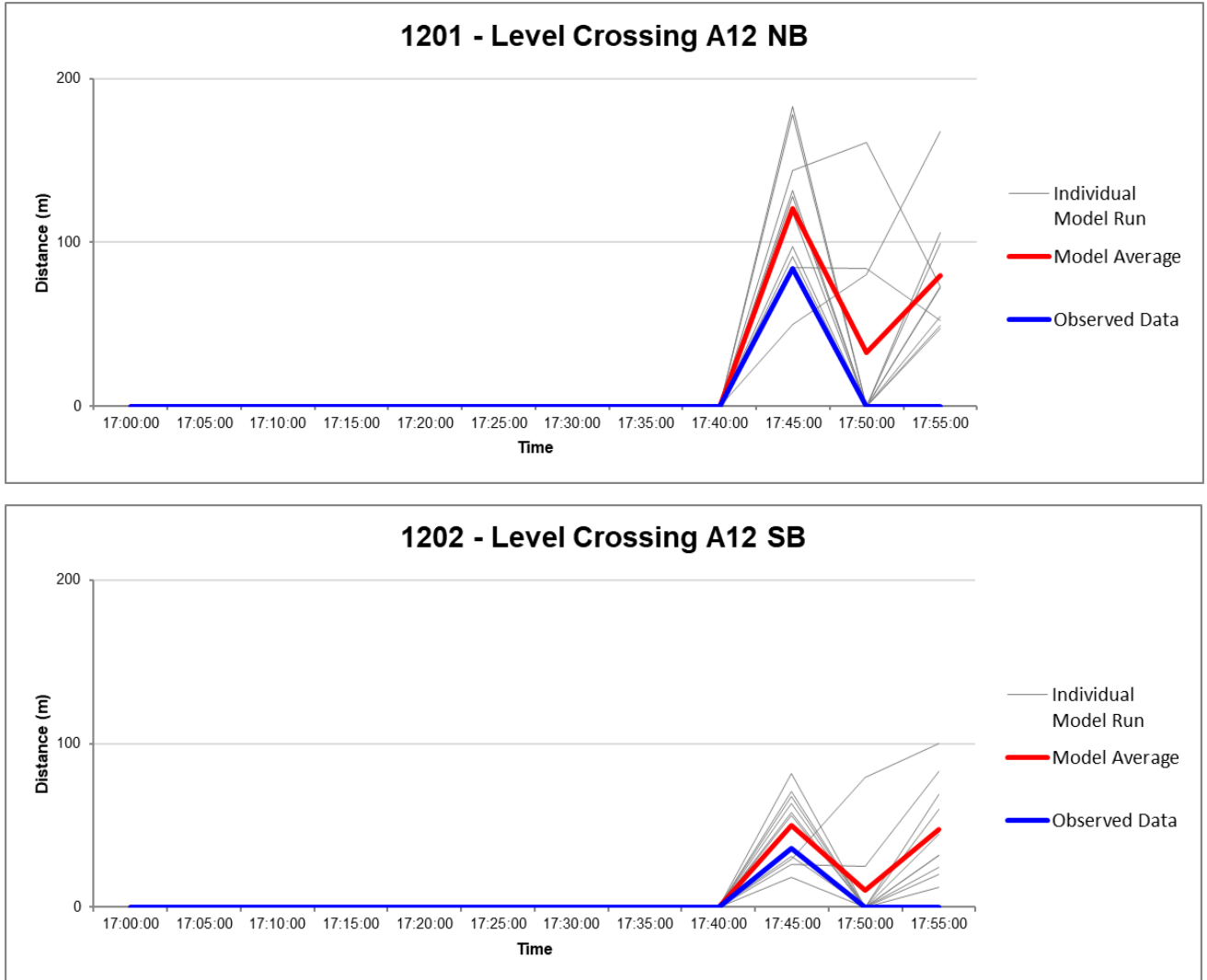


Figure 12 – A12 Level Crossing Queue Length Validation (PM peak)

4.3.14. The level crossing on the A12 closed twice during the PM peak, once at 17:49 for a southbound train and once at 18:00 for a northbound train. This resulted in queues forming northbound and southbound on the A12 at two distinct points in the hour. Overall queue lengths matched observed reasonably well.

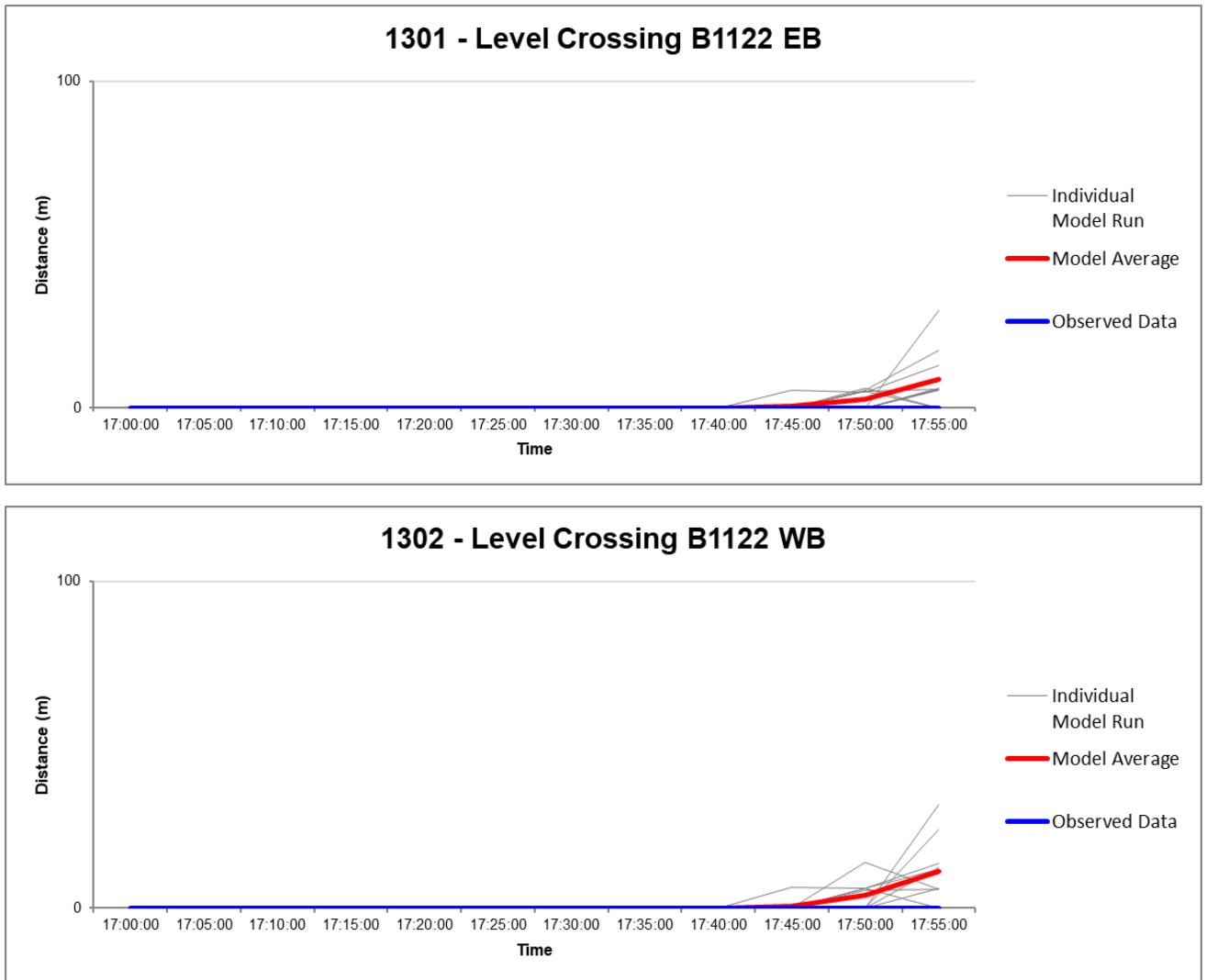


Figure 13 – B1122 Level Crossing Queue Length Validation (PM peak)

4.3.15. Queues at the level crossing on the B1122 were very small in the PM peak hour as reflected in the model. Overall the model replicated observed queue lengths well in the PM peak hour.

4.4. JOURNEY TIME VALIDATION

4.4.1. Journey time validation tables and graphs are provided in Appendix B for the AM, Inter and PM peak hours.

AM PEAK HOUR (08:00 – 09:00)

4.4.2. Modelled northbound and southbound A12 journey times matched AM peak hour observed journey times well along the full route. Table 12 shows the observed average and modelled journey times on the A12 for each recorded section. There were small differences along individual segments, but overall the model showed a good fit. Figure 14 shows the modelled and observed journey times for each segment.

Table 12 – AM Peak Hour Observed and Modelled Journey Times

Route:	Observed (S)	Modelled (S)	Diff (S)	Diff (%)	Distance (m)	WebTAG Criteria
1 - Section 1 NB	14	14	0	2.8%	185	PASS
2 - Section 2 NB	60	68	8	13.3%	1115	PASS
3 - Section 3 NB	68	68	-1	-0.8%	1055	PASS
4 - Section 4 NB	52	59	7	13.2%	1062	PASS
5 - Section 4 SB	48	56	8	16.8%	1066	PASS
6 - Section 3 SB	66	72	6	9.6%	1074	PASS
7 - Section 2 SB	61	68	7	11.5%	1097	PASS
8 - Section 1 SB	13	16	3	24.7%	190	PASS

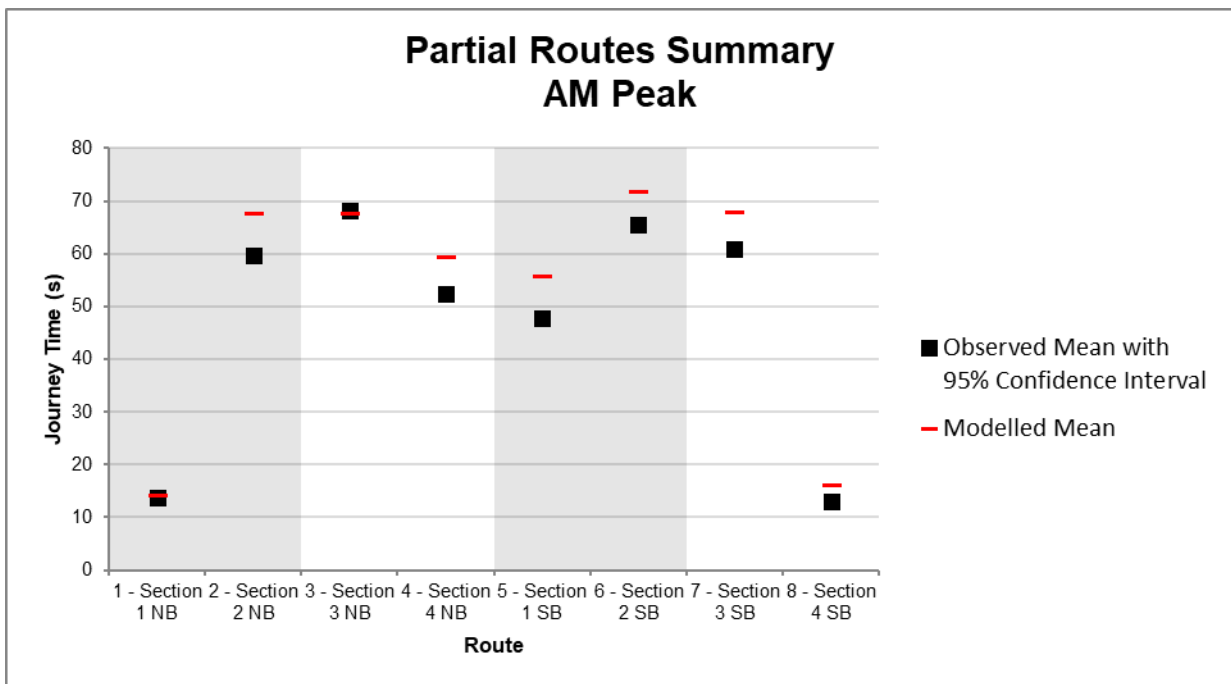


Figure 14 – AM Peak Hour Journey Time Segments

4.4.3. Figure 15 and Figure 16 show the cumulative journey times in the northbound and southbound directions respectively. Cumulative journey times were shown to be within DfT criteria ($\pm 15\%$) in both directions.

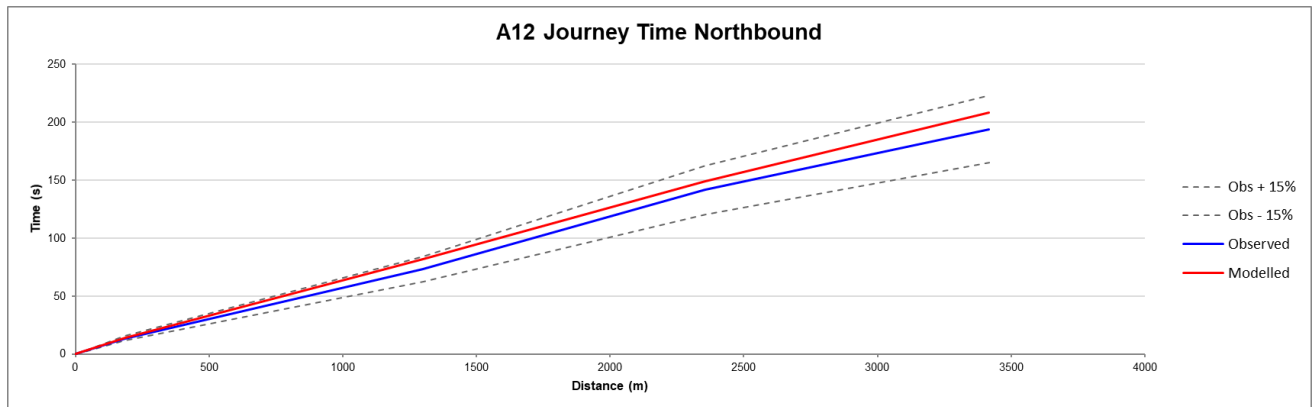


Figure 15 – AM Peak Hour Journey Time Northbound



Figure 16 – AM Peak Hour Journey Time Southbound

INTER PEAK HOUR (15:00 – 16:00)

4.4.4. Modelled northbound and southbound A12 journey times matched Inter peak hour observed journey times well along the full route. Table 13 shows the observed average and modelled journey times on the A12 for each recorded section. There were small differences along individual segments, but overall the model showed a good fit. Figure 17 shows the modelled and observed journey times for each segment.

Table 13 – Inter Peak Hour Observed and Modelled Journey Times

Route:	Observed (S)	Modelled (S)	Diff (S)	Diff (%)	Distance (m)	WebTAG Criteria
1 - Section 1 NB	13	14	1	9.3%	185	PASS
2 - Section 2 NB	58	68	10	16.6%	1115	PASS
3 - Section 3 NB	72	68	-4	-6.1%	1055	PASS
4 - Section 4 NB	60	60	0	0.0%	1062	PASS
5 - Section 4 SB	51	55	4	8.0%	1066	PASS
6 - Section 3 SB	85	69	-16	-19.3%	1074	PASS
7 - Section 2 SB	62	67	5	8.9%	1097	PASS
8 - Section 1 SB	23	18	-6	-24.6%	190	PASS

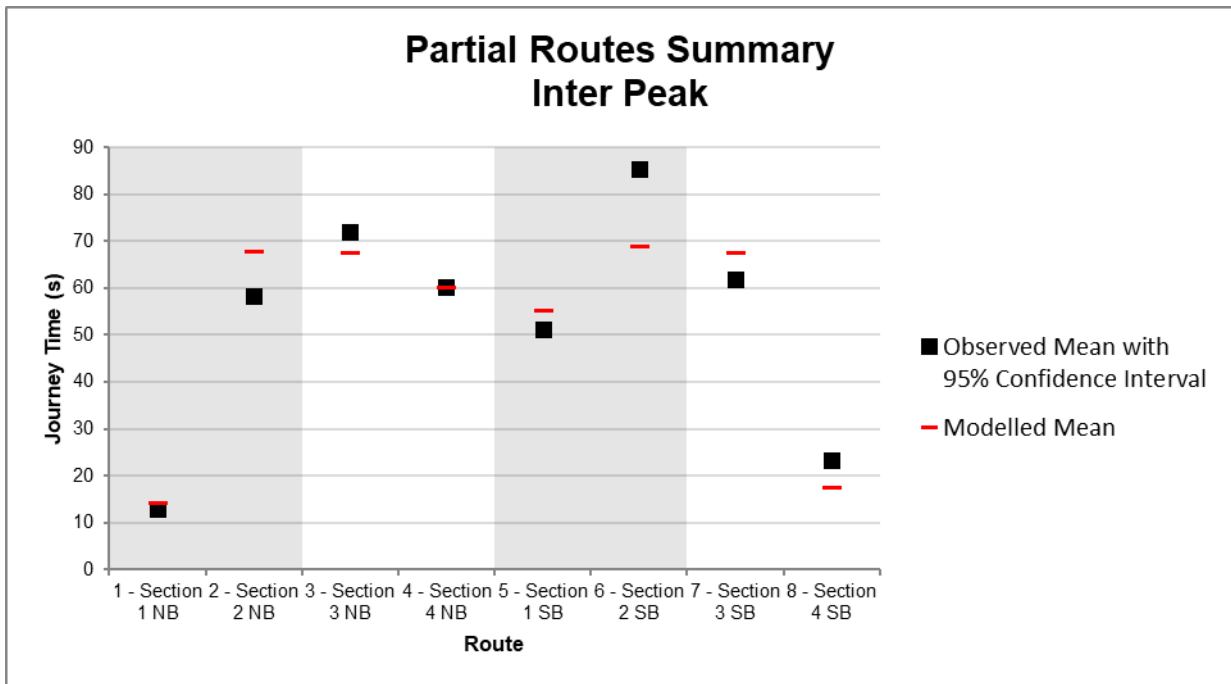


Figure 17 – Inter Peak Hour Journey Time Segments

4.4.5. Figure 18 and Figure 19 show the cumulative journey times in the northbound and southbound directions respectively. Cumulative journey times were shown to be within DfT criteria ($\pm 15\%$) in both directions.

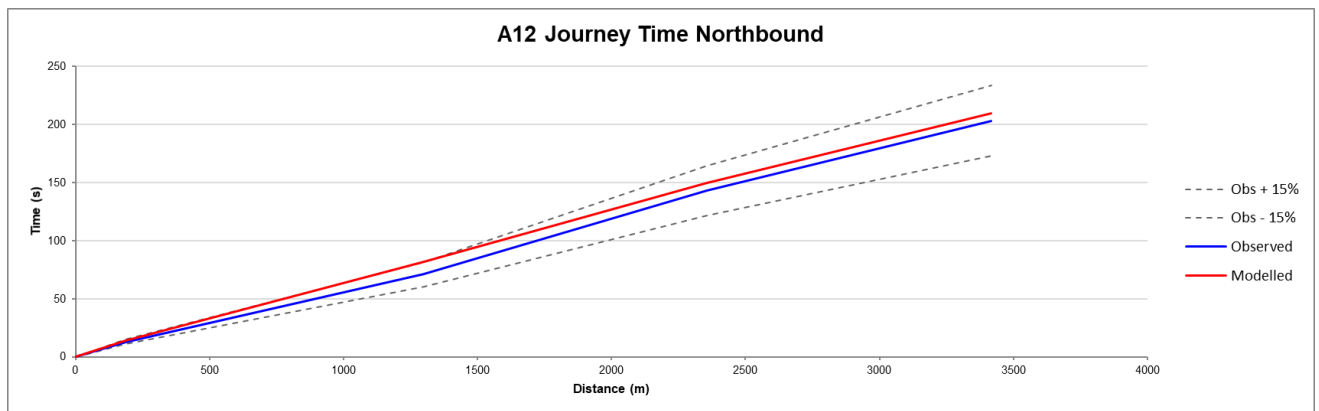


Figure 18 – Inter Peak Hour Journey Time Northbound

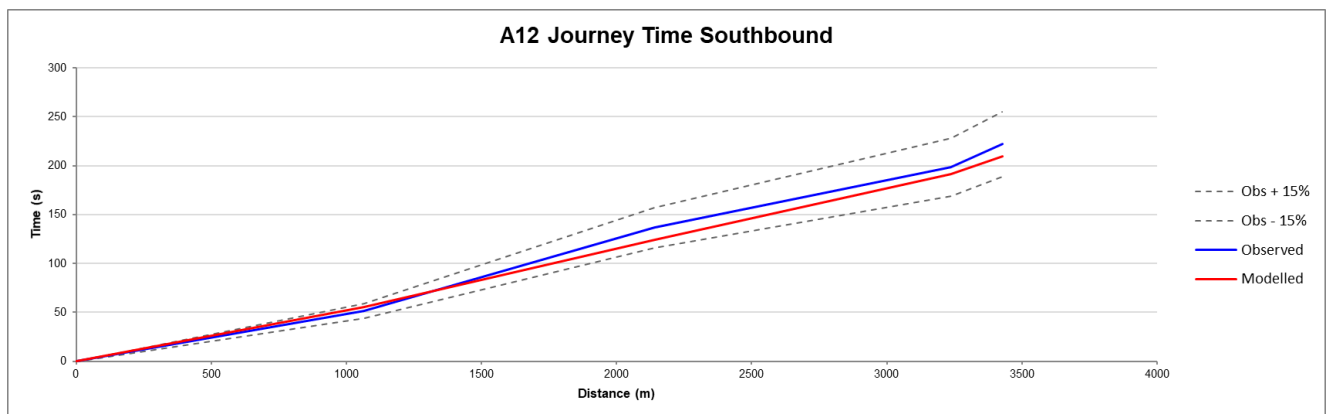


Figure 19 – Inter Peak Hour Journey Time Southbound

PM PEAK HOUR (17:00 – 18:00)

4.4.6. Modelled northbound and southbound A12 journey times matched PM peak observed journey times well along the full route. Table 14 shows the observed average and modelled journey times on the A12 for each recorded section. There were small differences along individual segments, but overall the model showed a good fit. Figure 20 shows the modelled and observed journey times for each segment.

Table 14 – PM Peak Hour Observed and Modelled Journey Times

Route:	Observed (S)	Modelled (S)	Diff (S)	Diff (%)	Distance (m)	WebTAG Criteria
1 - Section 1 NB	16	14	-2	-12.3%	185	PASS
2 - Section 2 NB	57	68	11	19.4%	1115	PASS
3 - Section 3 NB	67	67	-1	-1.0%	1054	PASS
4 - Section 4 NB	48	60	12	25.2%	1064	PASS
5 - Section 4 SB	49	54	5	10.0%	1066	PASS
6 - Section 3 SB	72	68	-4	-5.3%	1053	PASS
7 - Section 2 SB	62	67	6	9.2%	1117	PASS
8 - Section 1 SB	15	17	2	14.6%	190	PASS

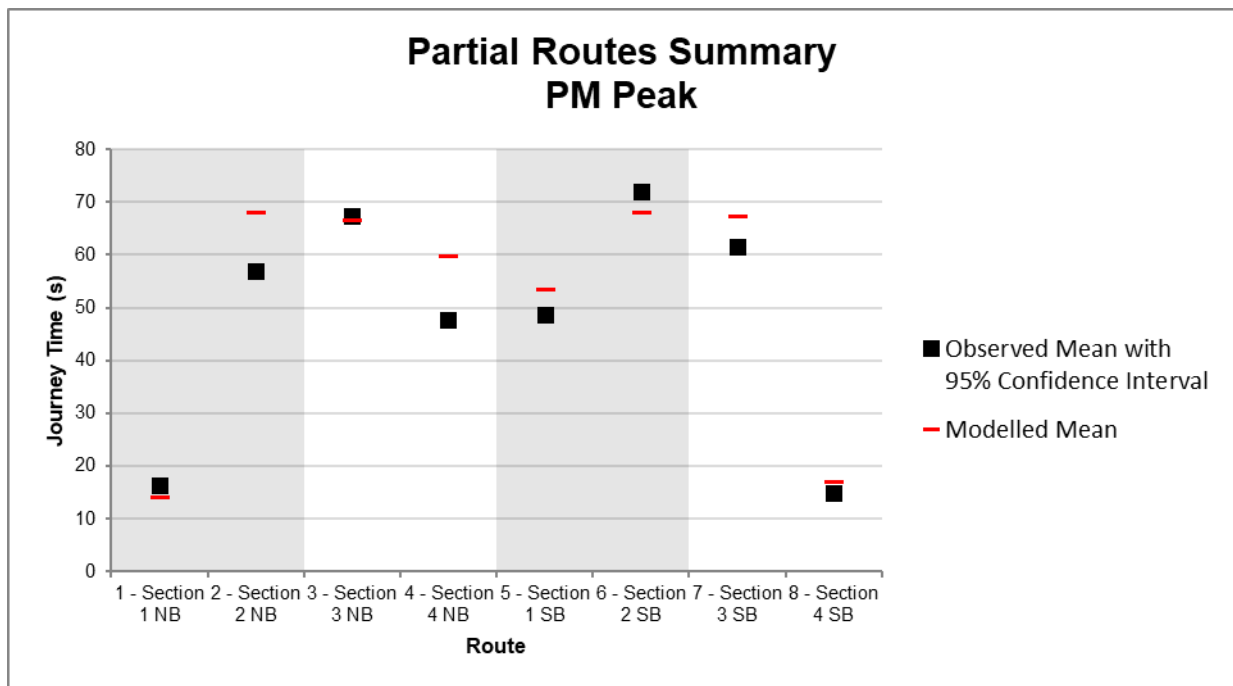


Figure 20 – PM Peak Hour Journey Time Segments

4.4.7. Figure 21 and Figure 22 show the cumulative journey times in the northbound and southbound directions respectively. Cumulative journey times were shown to be within DfT criteria (+/- 15%) in both directions.

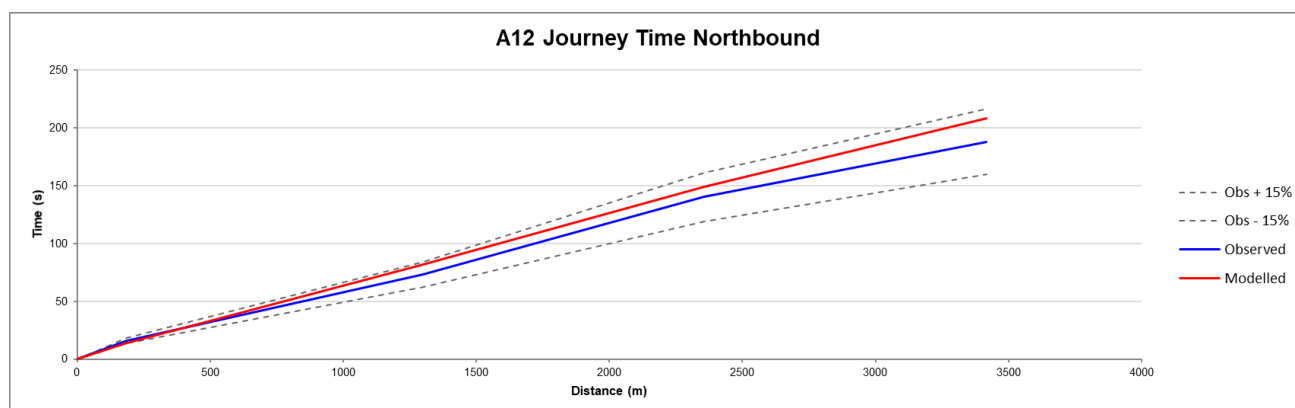


Figure 21 – PM Peak Hour Journey Time Northbound

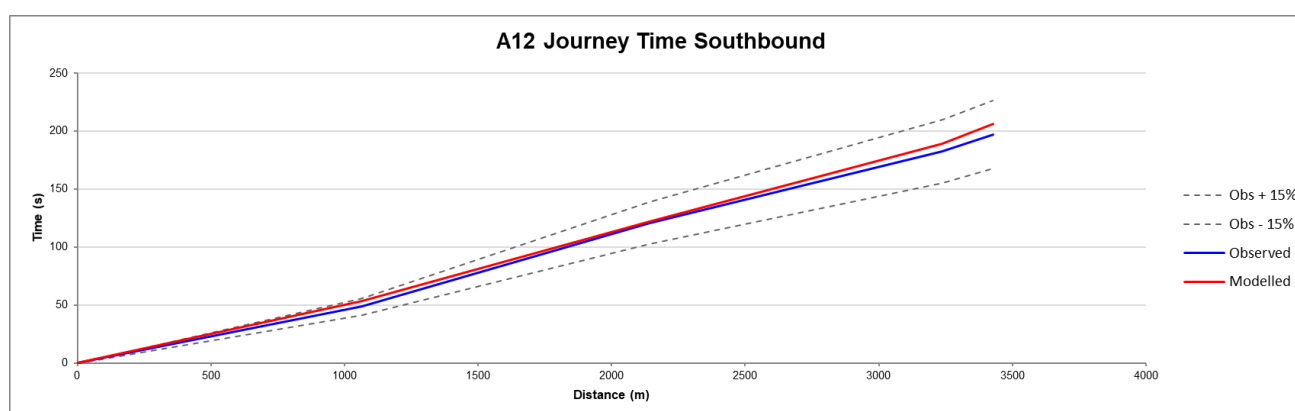


Figure 22 – PM Peak Hour Journey Time Southbound

4.5. SUMMARY OF MODEL CALIBRATION AND VALIDATION

- 4.5.1. Modelled traffic flows at junctions were shown to match observed turn flows very well across the modelled network. Overall modelled junction flows were slightly less than observed (-1%) but met DfT turn flow criteria in all three peak hours.
- 4.5.2. At some locations the model predicted that there would be significant variability between individual simulation runs and in some cases this leads to a discrepancy between observed and modelled queue lengths. However, comparison of the observed and modelled queue lengths across the hour confirmed that the model was generally able to replicate the location, length and time of queues well across the modelled network.
- 4.5.3. Observed journey times northbound and southbound on the A12 were replicated well by the model meeting DfT criteria (within +/- 15%) during all peak hours. Journey times for individual segments were also compared to confirm that delays were in the correct locations along the full route.

5. FORECAST SCENARIO – 2023 EARLY YEARS

5.1. SCENARIO ASSUMPTIONS

- 5.1.1. 2023 represents the 'Early Years' stage of the construction of Sizewell C. During this year, an initial workforce of 1,500 workers is deployed at Sizewell C construction site. From this amount, 600 will be residing in 400 caravans at land east of Eastlands Industrial Estate (LEEIE) and the rest as per the gravity model.
- 5.1.2. Whilst 2023 does not represent the full demand in terms of the number of workers, it does represent a scenario where the workforce has begun to arrive but most mitigation is yet to be provided. It is important to test 2023 to establish the level of impact that may occur whilst the mitigation schemes are being built and therefore not yet providing their intended relief.
- 5.1.3. In addition to the 1,500 main site construction workers, a further 730 workers are deployed to Additional Development (AD) sites as follows:
- 100 workers at Two Village bypass construction site;
 - 300 workers at Sizewell Link Road construction site;
 - 100 workers at Darsham Park & Ride construction site;
 - 100 workers at Wickham Market Park & Ride construction site;
 - 30 workers at A12/B1122 Yoxford roundabout construction site; and
 - 100 workers at the Freight Management Facility.
- 5.1.4. It is assumed that workers at the A12/B1122 roundabout construction site will park at the Darsham P&R construction site, and a shuttle bus service will transport workers between the two sites.
- 5.1.5. All these construction sites have their associated HGV deliveries per day, travelling along the A12 from the north and south on fixed routes, as follows:
- SZC main development site – 300 HGVs each way;
 - Two Village bypass – 60 HGVs each way;
 - Sizewell Link Road – 100 HGVs each way;
 - Darsham Park & Ride – 21 HGVs each way;
 - Wickham Market Park & Ride – 21 HGVs each way; and
 - A12/B1122 Yoxford roundabout – 10 HGVs each way.
- 5.1.6. It is also assumed that HGVs to the main SZC site will use the B1122. The proposed HGV delivery profile across the day, at all sites, is shown in Figure 23 below.

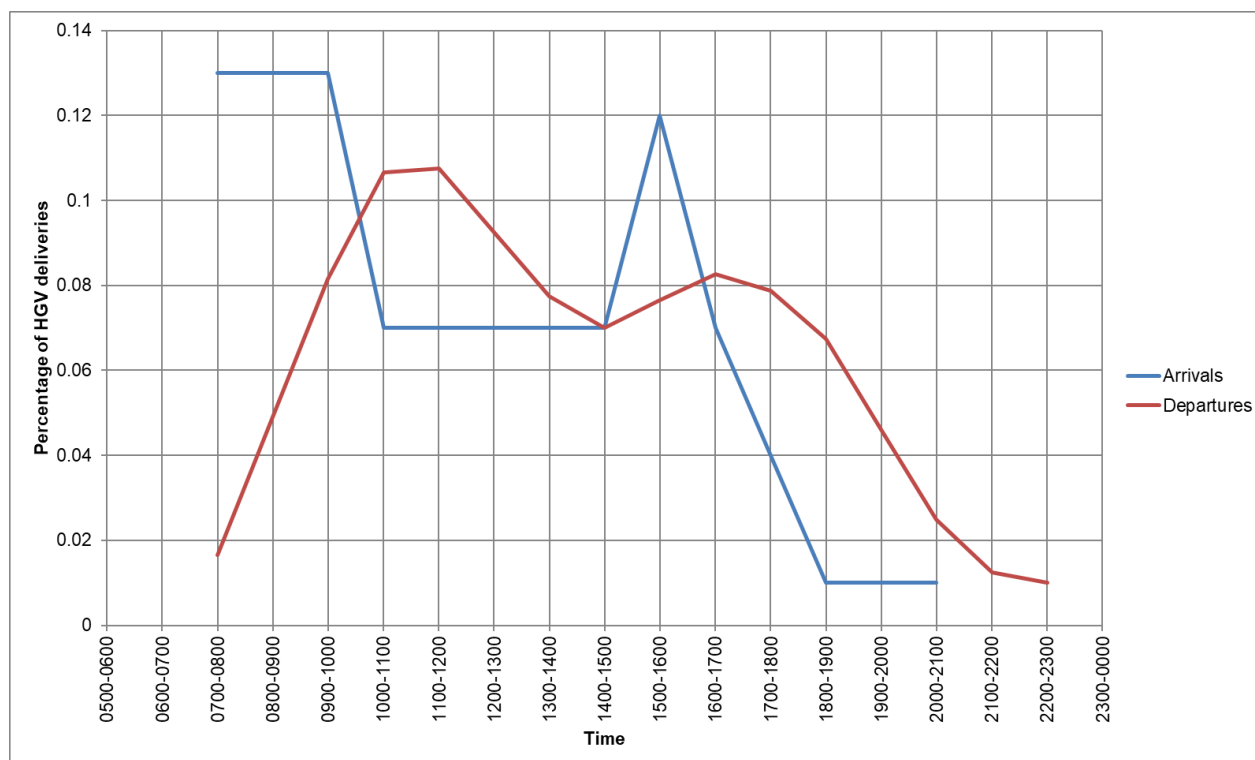


Figure 23 – Proposed HGV delivery profile

TRANSPORT NETWORK ASSUMPTIONS

5.1.7. The transport network being used in the 2023 model scenarios remains similar to that used in the base year, with no embedded mitigation assumed to be completed. The only network changes included in the ‘with development’ models are the provision of a number of accesses to serve the different construction sites in the study area.

Figure 24 shows the access to the A12 / B1122 roundabout construction site. A temporary bus stop and HGV deliveries access has been placed east of the junction, accessed from the B1122. This bus stop is provided to facilitate the shuttle bus service moving construction workers from the temporary Darsham Park & Ride to the A12 / B1122 site. Detailed planning of how this construction site will operate bus drop offs and deliveries is yet to be undertaken so these assumptions have been made within the model to allow the estimated bus and HGV trips to be accommodated. The locations and operation of these facilities will be better defined at a later stage of planning and the assumptions used within the modelling do not represent a preferred location or an indication of the site management strategy.



Figure 24 – Temporary bus stop and HGV delivery access at Yoxford junction

5.1.8. As the Darsham Park & Ride and associated access roundabout on the A12 are likely to be under construction by 2023, a temporary access has been included in the 2022 Early Years network. Figure 25 shows the temporary access to the Darsham Park & Ride construction site, modelled as a simple T junction on Willow Marsh Lane. As with the A12 / B1122 construction site, a detailed site operation plan is not yet available so an assumption was made about how access to the construction site might be made in 2023.



Figure 25 – Darsham P&R site access

TRAFFIC DEMAND ASSUMPTIONS - 2023

5.1.9. Two new layers of traffic demand were included in the forecast year scenarios; ‘Growth traffic’ and ‘Sizewell C traffic’. The number of vehicle types in the model therefore increases from five in the base year to twelve in the 2023, 2028 and 2034 scenarios, as listed below:

- Car (100), **Car Growth (101)**, **Car SZC (102)**;
- LGV (700), **LGV Growth (701)**, **LGV SZC (702)**;
- HGV (200), **HGV Growth (201)**, **HGV SZC (202)**;
- Bus (300), **Bus SZC (302)**; and
- Train (400).

5.1.10. Traffic flows were extracted from the strategic VISUM model described in Section 1.2. A subnetwork of each VISUM model (one for each hour) was created for the study area which allowed origin-destination matrices to be extracted. Figure 26 shows the extent of the VISUM subnetwork.

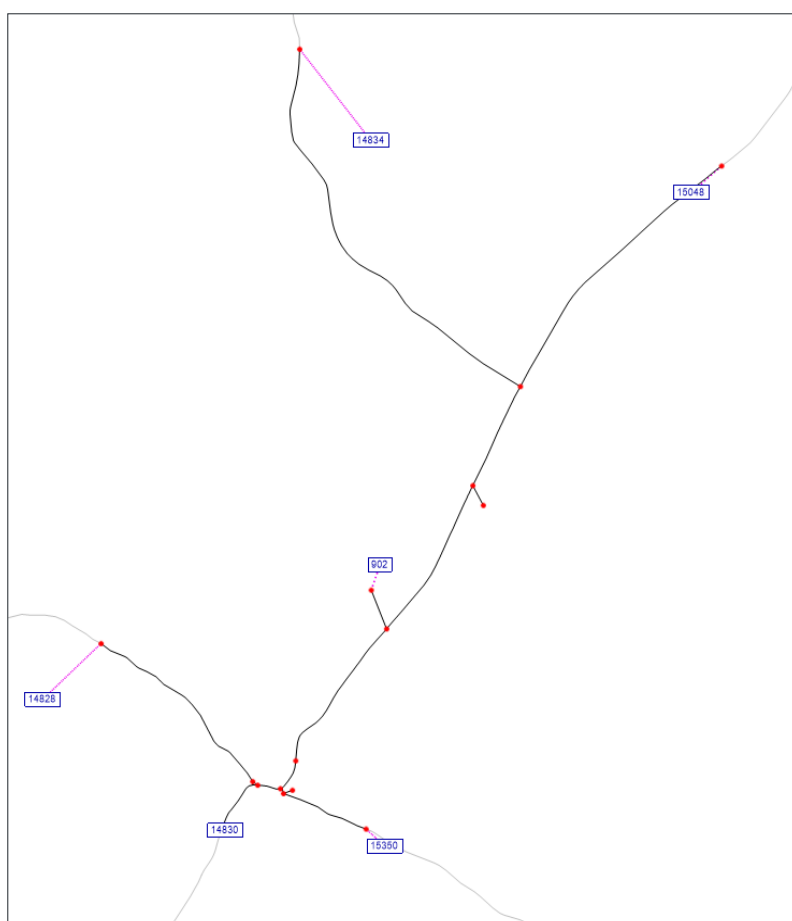


Figure 26 – VISUM subnetwork in the modelled area

5.1.11. A total of seven zones are included in the VISUM sub-network, connected on to the A12 South, A1120, B1122, P&R access, The Street, A144 and A12 North. For the purposes of this report, these zones are classified as major roads, whilst additional zones within the study area that are not included in the VISUM model have been termed ‘minor roads’. A list of the roads deemed minor and major is provided in Table 15.

Table 15 – Major and minor road classification

	Demand Category
Major Roads (included in VISSIM and VISUM)	<ul style="list-style-type: none"> • A12 South • A1120 • B1122 • P&R access • The Street • A144 • A12 North
Minor Roads (included in VISSIM but <u>not</u> in VISUM)	<ul style="list-style-type: none"> • Lymballs Lane • Willow Marsh Lane • Darsham Service Station • Westleton Road

5.1.12. The VISUM model contains the following matrices:

- Car (base + growth);
- LGV (base + growth);
- HGV (base + growth);
- Car SZC: car trips associated with Sizewell C;
- LGV SZC: LGV trips associated with Sizewell C;
- Car SPR: car trips associated with the nearby Scottish Power (SPR) ‘East Anglia One’ construction; and
- Car SZB RF: car trips associated with Sizewell B Relocation Facility.

VISSIM Matrices

5.1.13. The VISUM models have been used to generate the VISSIM forecast matrices, which build on top of the base year matrices obtained from observed data. As the VISUM models do not separate base and growth traffic in the forecast scenarios, the VISUM base year flows have been subtracted from the forecast year flows to calculate the ‘major road’ growth flows. This method resulted in a small number of negative values where the base flows were slightly higher than the forecast flows. These negative values have been subtracted from the base year matrices. The hourly origin-destination growth matrices have been converted into 15-minute matrices by using the base year profiles.

5.1.14. Growth on ‘minor road’ flows were estimated by applying a TEMPro growth factor (NTEM¹ dataset 7.2) to the observed base flows on these roads.

5.1.15. The ‘minor road’ and ‘major road’ growth flows were put together to create 11x11 matrices to cover the whole VISSIM study area. These have been input into the VISSIM model as the “Growth” matrices for each 15- minute period.

¹ National Trip-End Model

- 5.1.16. The Scottish Power development flows are also growth flows but have been kept separate in the VISSIM model with a 1-hour profile.
- 5.1.17. The Sizewell C construction worker private car traffic was extracted from the 2023 Early Years VISUM model which assumed a total construction workforce of 1,500 workers at Sizewell C, plus an additional 730 workers on Associated Development sites. The SZC construction traffic assigned in VISSIM matrices is formed of construction worker private car movements to and from:
- Darsham Park & Ride site;
 - Sizewell C construction site; and
 - Sizewell Link Road and Two Village bypass construction sites (A12 south).
- 5.1.18. Table 16 provides a summary of the different layers of traffic input and how they have been incorporated into the model.

Table 16 – 2023 Demand input sources

	Major to Major	Major to Minor	Minor to Major	Minor to Minor
Base flows	Observed data (15-minute)	Observed data (15-minute)	Observed data (15-minute)	Observed data (15-minute)
Growth flows	Calculated from VISUM matrices (15-minute)	Growth factor applied to observed data (15-minute)	Growth factor applied to observed data (15-minute)	Growth factor applied to observed data (15-minute)
	SPR VISUM matrices (1-hour)			
Sizewell C flows	SZC VISUM matrices (1-hour)			

- 5.1.19. Table 17 and Table 18 show the total demand for the model by hourly time period for the Reference Case and Early Years scenarios respectively.

Table 17 – 2023 Network Traffic Reference Case (in vehicles per hour)

	6–7 am	7–8 am	8–9 am	3-4 pm	4-5 pm	5-6 pm	6-7 pm
Base 2023	515	1,173	1,378	1,542	1,614	1,465	1,086
Background Growth	178	173	124	190	113	166	210
SPR	-	-	24	-	-	25	-
Sizewell C	-	-	-	-	-	-	-
Total	692	1,346	1,525	1,732	1,727	1,656	1,296

Table 18 – 2023 Network Traffic Early Years (in vehicles per hour)

	6–7 am	7–8 am	8–9 am	3-4 pm	4-5 pm	5-6 pm	6-7 pm
Base 2023	515	1,167	1,377	1,532	1,606	1,462	1,086
Background Growth	177	164	115	181	125	140	206
SPR	-	-	24	-	-	25	-
Sizewell C	92	306	64	28	52	244	166
Total	784	1,637	1,581	1,742	1,783	1,870	1,458

Sizewell C Bus services and HGV deliveries

5.1.20. In addition to the private worker traffic input as matrices in the model, there are other vehicle movements associated with Sizewell C:

- Buses shuttling workers between Darsham Park & Ride site and A12/B1122 Yoxford roundabout construction site.
- HGVs delivering construction materials and plant movements to and from:
 - Sizewell C construction site;
 - Darsham Park & Ride site;
 - Wickham Market Park & Ride site;
 - A12/B1122 Yoxford junction;
 - Two Village bypass; and
 - Sizewell Link Road.

5.1.21. Table 19 details the Sizewell bus services for 2023. As the park and ride sites are still under construction in 2023, the bus services are limited to a small number of services from the northern park and ride site towards the A12/B1122 Yoxford junction in the AM period and the reverse direction in the PM period. Bus services were coded into VISSIM as Public Transport Lines with fixed routes, departing from the temporary northern park and ride site and making a 5-minute drop-off stop at A12/B1122 Yoxford junction before returning to the northern park and ride site.

Table 19 – 2023 Early Years Sizewell Bus services

Service	Direction	6-7 am	7-8 am	8-9 am	3-4 pm	4-5 pm	5-6 pm	6-7 pm
Northern park and ride site to A12 / B1122 construction site	Southbound	0	2	0	0	0	0	0
	Northbound	0	0	0	0	0	2	0
Total		0	2	0	0	0	2	0

5.1.22. Table 20 shows the HGV deliveries to Sizewell C construction site as well as the deliveries to the associated development sites for each hour. These HGVs were modelled as vehicle type “202: HGV SZC” and are assigned to Public Transport Lines with fixed routes and equally spaced departure times.

Table 20 – 2023 Early Years HGV deliveries

Delivery Site	Direction	6-7 am	7-8 am	8-9 am	3-4 pm	4-5 pm	5-6 pm	6-7 pm
Sizewell C	Inbound	14	31	31	23	13	7	2
	Outbound	0	1	9	17	19	20	18
Darsham Park & Ride	Inbound	1	3	3	2	1	0	1
	Outbound	0	0	1	1	2	2	1
Wickham Market Park & Ride	Inbound	0	1	0	1	0	0	0
	Outbound	0	0	0	0	1	0	0
Yoxford Junction	Inbound	1	1	1	1	1	0	0
	Outbound	0	0	0	1	0	1	1
Two Village bypass	Inbound	0	2	1	1	1	0	0
	Outbound	0	0	0	0	1	0	1
Sizewell Link Road	Inbound	1	2	2	1	1	1	0
	Outbound	0	0	1	1	1	1	1
Total		17	41	49	49	41	32	25

5.2. SCENARIO PERFORMANCE COMPARISON

5.2.1. This section presents the performance comparison between the validated base year scenario (“2015”), the Reference Case scenario for 2023 (“2023 RC”), and the 2023 Early Years scenario (“2023 EY”) with Sizewell C construction traffic.

NETWORK-WIDE PERFORMANCE

5.2.2. Table 21 provides a number of network-wide statistics that were extracted from the three different VISSIM scenarios.

Table 21 – Network Performance Model Results

Overall Network Statistics	AM (6-9am)			PM (3-7pm)		
	2015	2023 RC	2023 EY	2015	2023 RC	2023 EY
Total Time Taken (h)	230	275	316	409	471	518
Total Distance (km)	13,622	16,150	18,324	23,941	27,256	29,603
Total Vehicles	3,118	3,604	4,156	5,831	6,558	7,146
Total Delay (h)	23	29	35	43	53	63
Avg. Time (s) / Vehicle	266	274	274	253	258	261
Avg. Time (s) / Mile	98	99	100	99	100	101

Avg. Distance (m) / Vehicle	4,370	4,482	4,409	4,105	4,156	4,143
Avg. Speed (mph)	37	37	36	36	36	35
Avg. Speed (kph)	59	59	58	59	58	57
Avg. Delay / Vehicle (s)	26	29	30	26	29	32

- 5.2.3. During the AM and PM peaks, the network-wide statistics show that time, distance and delay have a linear relationship with the number of vehicles in the network. The extra vehicles generated by Sizewell C do not cause a significant increase in the time, distance or delay per vehicle compared to the Reference Case scenario and impact is therefore minimal.
- 5.2.4. Reviewing the relative statistics, it is possible to observe that there is little variation between the different scenarios. For example, the VISSIM model predicts that the average driver will experience no increase in their journey time in 2023 Early Years AM peak compared to the Reference Case, and a 1 second (+3.4%) increase in delay. During the PM peak, the average travel time per vehicle is increased by 3 seconds (+1.2%) and the delay by 3 seconds (+10.3%). The average speed in the network remains almost the same across all the scenarios. The VISSIM model is sensitive to differences in scenarios so minor changes in delay should not be interpreted as a difference in performance and should instead be viewed as no change.
- 5.2.5. Figure 27 shows the average journey time along the A12 for each scenario. The graph demonstrates that the journey times along the main road show very little change for either direction or time period.

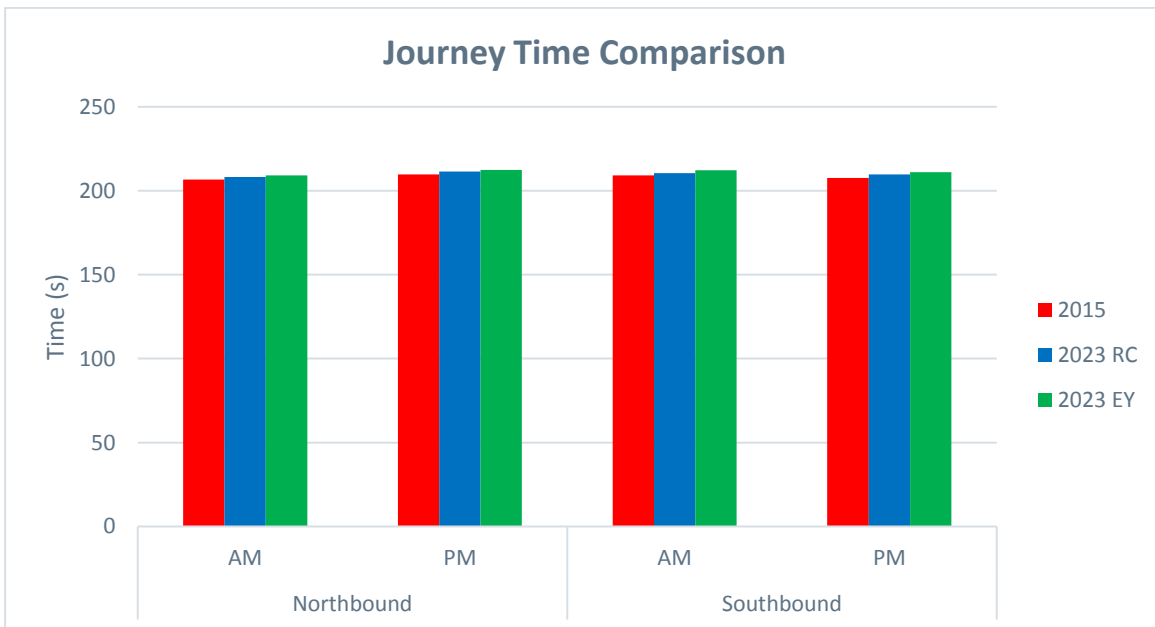


Figure 27 – 2023 A12 Journey Time comparison

- 5.2.6. Overall the network-wide statistics show that the impact felt by the average driver as a result of the Sizewell C Early Years construction traffic will be negligible both in the AM and PM periods.

JUNCTION PERFORMANCE

5.2.7. Queue and average delay results have been collected for all junctions in the model in order to assess the performance of each junction.

5.2.8. Figure 28 shows the average delay for each junction over the whole AM and PM periods. The values shown below represent the average of all turning movements in the junction.

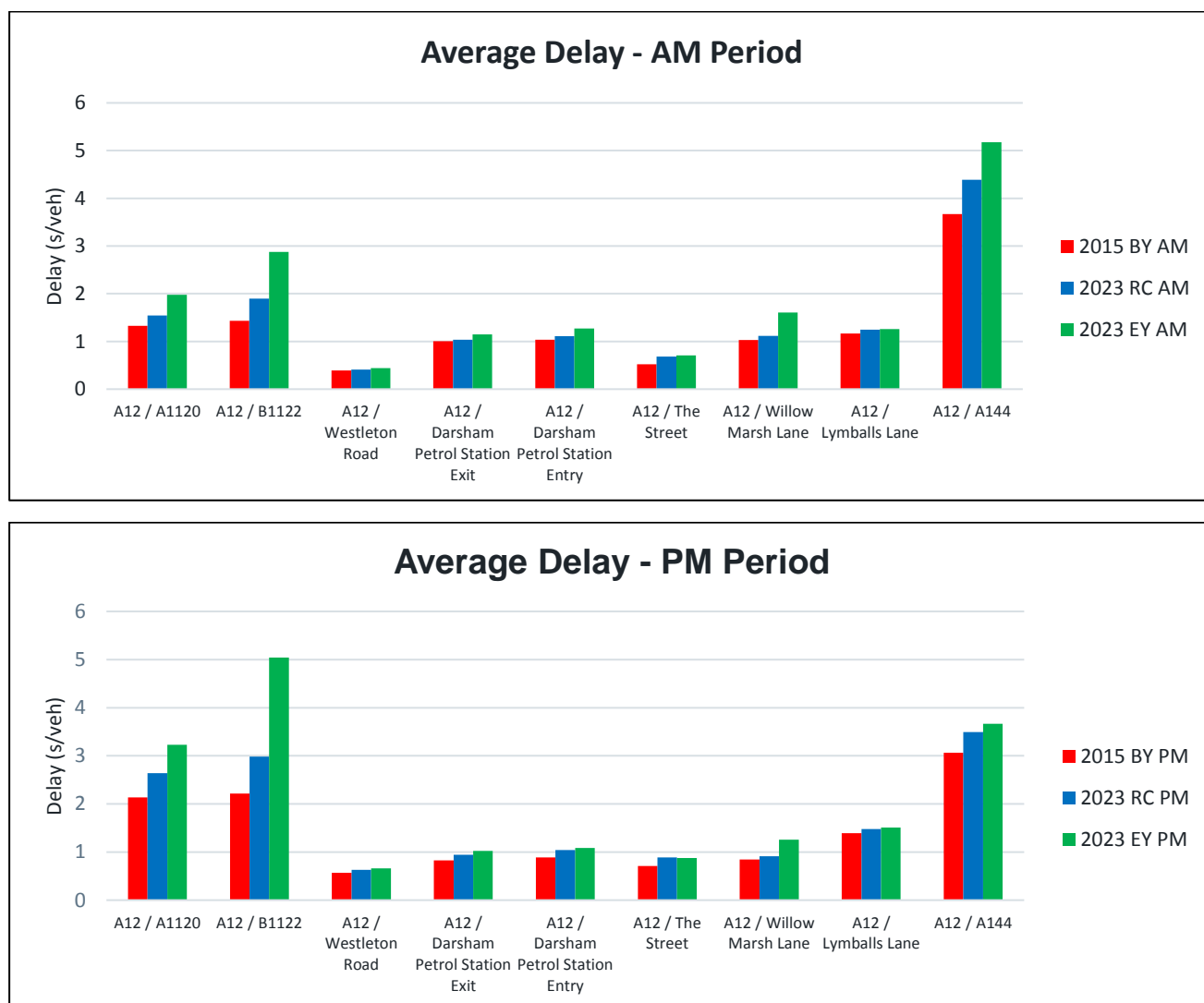


Figure 28 – Junction Average Delay

5.2.9. The graphs show that the level of delay is very low at the A12 junctions with Westleton Road, Darsham Petrol Station, The Street, Willow Marsh Lane and Lymballs Lane. A higher level of delay is observed at the A12 / A1120, A12 / B1122 and A12 / A144 junctions. The addition of Sizewell construction traffic increases delays by an average of 2 seconds per vehicle at the A12 / B1122 junction during the AM and PM periods and by approximately 1 second at the A12 / A144 junction during the AM period.

5.2.10. A more detailed results analysis of the peak hour queue lengths, and where appropriate delay, is provided below for the main junctions in the VISSIM network. The graphs shown below represent

the maximum queue recorded during each 5-minute period, averaged for all the simulation runs in each scenario. A full set of queue graphs for all junctions can be found in Appendix C.

A12 / A1120

5.2.11. Figure 29 shows the modelled queue lengths during the AM period at the A12 / A1120 junction. The graphs indicate that there is no queuing between 6 and 7 am, and that queues remain short (no more than 40m / 7 vehicles) during the rest of the AM period. There is little variation between the Reference Case and Early Years scenarios.

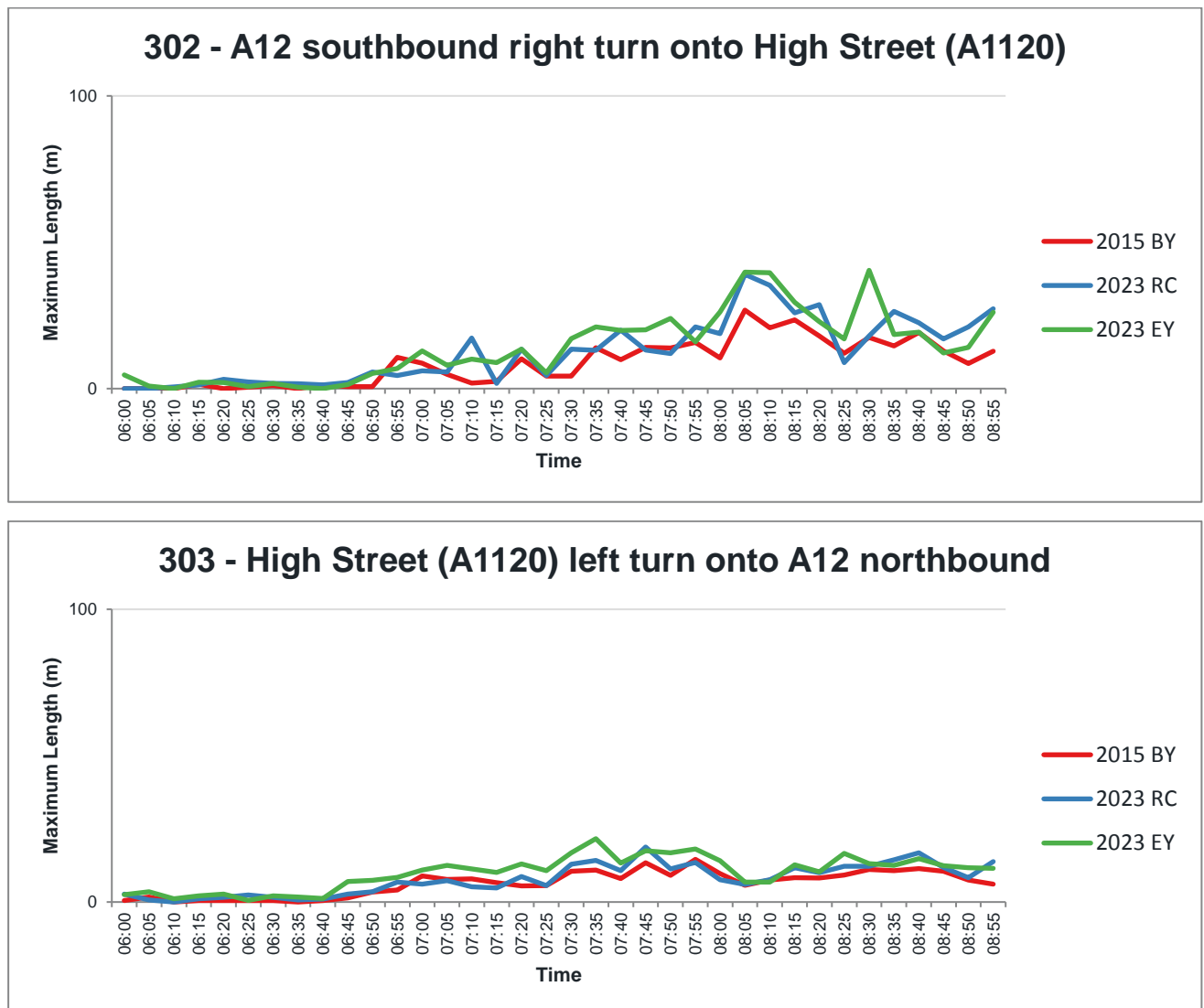


Figure 29 – A12 / A1120 AM Queue lengths

5.2.12. Due to the proximity between the A12 / A1120 and A12 / B1122 junctions, a more detailed analysis has been performed on the A12 southbound approach to the A1120 Yoxford High Street junction to assess the impact on the upstream junction, shown in Table 22. When the individual simulation runs are analysed, a large variability in queue length is shown in the model on the A12 southbound movement (queue counter #302) over time and between simulation runs. This is due to the varying gaps in A12 northbound traffic that opposes this movement. The variability in the presence of right-

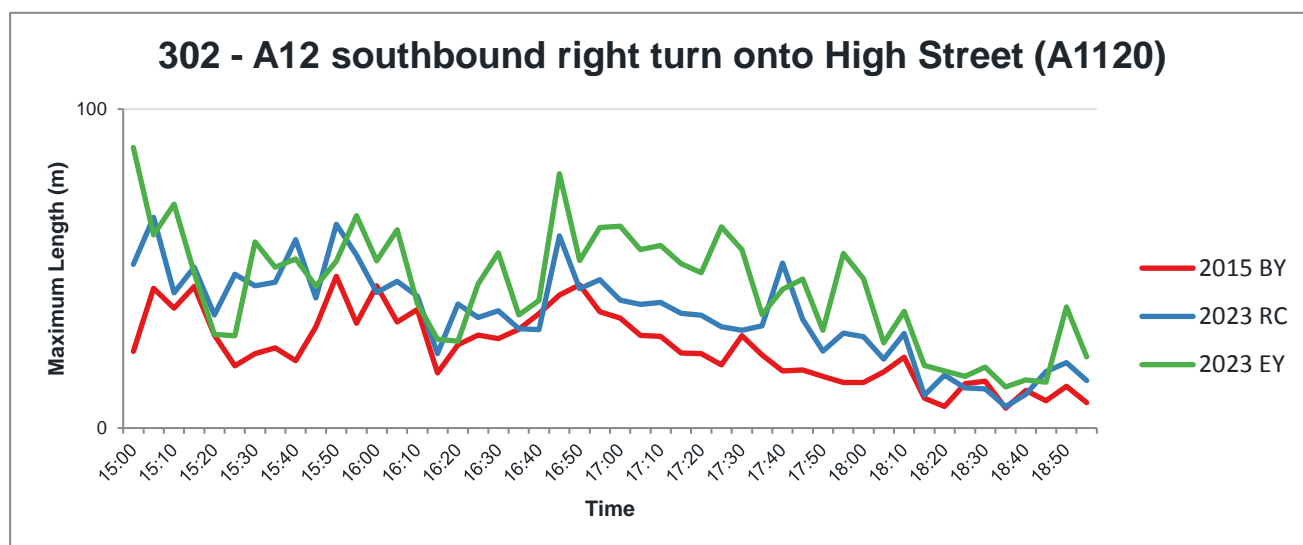
turning traffic, and the gaps in the northbound flow, results in fluctuating queue lengths which could reach back to the existing A12 / B1122 junction which is located approximately 150m upstream.

- 5.2.13. During the AM period, one out of ten runs in the 2023 Reference Case scenario and one out of ten runs in the 2023 Early Years scenario show a maximum queue of more than 150m at least once during the simulation, thus reaching the existing A12 / B1122 junction. This level of queueing occurs for less than five minutes in all runs.

Table 22 – A12 / A1120 queue spillback analysis – AM period

Scenario	Queuing distance between A12 / A1120 and existing A12 / B1122 (m)	Percentage of runs where queue reaches existing B1122 junction (%)	Length of time during which queue reaches existing B1122 junction	Absolute maximum queue (m)
2015 Base Year	150	0%	-	123
2023 Reference Case	150	10%	< 5 mins	155
2023 Early Years	150	10%	< 5 mins	166

- 5.2.14. Figure 30 shows the queue lengths during the PM period at the A12 / A1120 junction. The right-turn queues from the A12 southbound approach are higher in the PM period compared to the AM period. The queue in the Early Years Scenario are most noticeably higher than the Reference Case between 17:00 and 18:00, where the queue is approximately 30m longer but, on average, they do not exceed the 150m stacking area available. The queues on the High Street remain low during the modelled period.



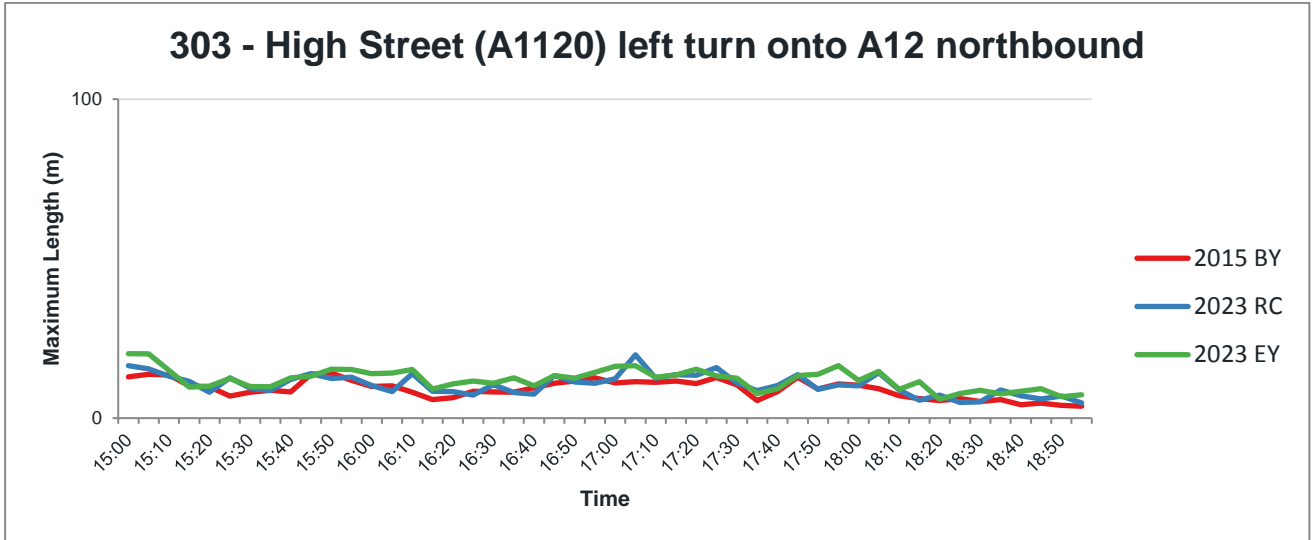


Figure 30 – A12 / A1120 PM Queue lengths

5.2.15. As with the AM period, a more detailed analysis has been conducted on the A12 southbound approach to determine the impact on the upstream junction, as shown in Table 23. This indicated that no runs in the 2023 Reference Case scenario and four out of ten runs in the 2023 Early Years scenario show a maximum queue of more than 150m at least once during the simulation, thus reaching the existing A12 / B1122 junction. This level of queueing occurs for less than five minutes in all runs and therefore impact is confined to a short period of time.

Table 23 – A12 / A1120 queue spillback analysis – PM period

Scenario	Queuing distance between A12 / A1120 and existing A12 / B1122 (m)	Percentage of runs where queue reaches existing B1122 junction (%)	Length of time during which queue reaches existing B1122 junction	Absolute maximum queue (m)
2015 Base Year	150	0%	-	122
2023 Reference Case	150	0%	-	144
2023 Early Years	150	40%	< 5 min	234

A12 / B1122

5.2.16. Figure 31 shows the modelled queue lengths during the AM period at the existing A12 / B1122 junction. The graph indicates that queues for the right turning movement from the A12 northbound onto the B1122 are predicted to be approximately 14m (2 vehicles) during the Reference Case scenario which is expected to increase to a maximum queue of 36m (6 vehicles) in the 2023 Early Years scenario.

5.2.17. The queues on the B1122 approach in the 2023 Reference Case are predicted to increase slightly compared to the 2015 Base scenario. An increase in queues on the B1122 can be observed from a

maximum of 25m (4 vehicles) in the Reference Case scenario to 44m (7 vehicles) in the Early Years scenario, especially from 07:15-08:00. This indicates that the Sizewell C traffic will have a small impact on the junction for a short period of time during the AM Peak.

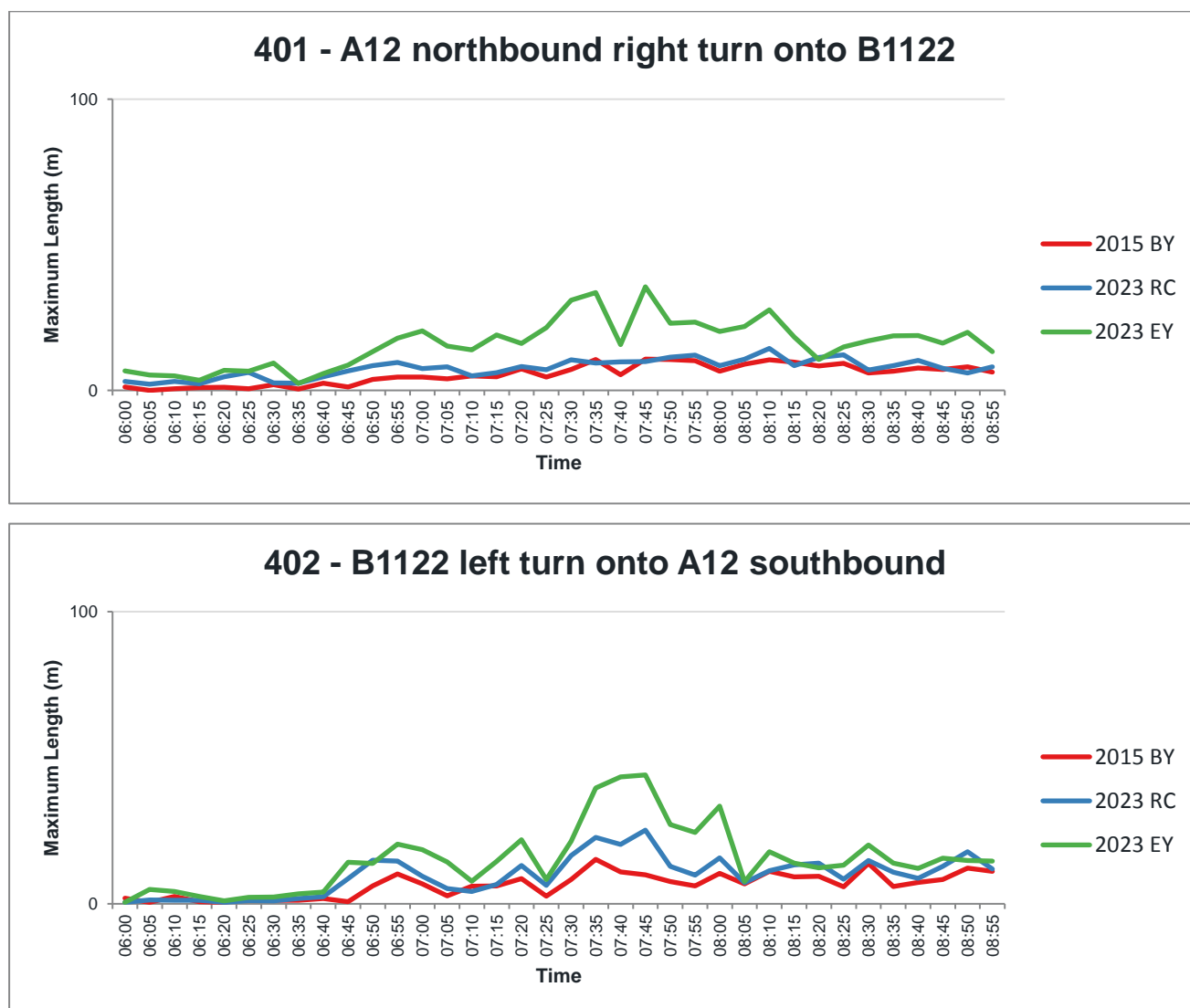


Figure 31 – A12 / B1122 AM Queue lengths

- 5.2.18. Due to the queuing on the B1122, additional analysis has been performed for the time period from 07:00-08:00 for the main movements at the junction. This analysis is shown in Table 24.
- 5.2.19. There is an increase in delay on the B1122 in the Early Years scenario compared to the Reference Case. The delay increases from 7 seconds to 14 seconds on the left turn and from 16 to 30 seconds on the right turn. On the right turn from the A12 south to the B1122, the delay per vehicle increases from 5 seconds in the Reference Case to 8 seconds in the Early Years scenario.

Table 24 – A12 / B1122 delay analysis

	Movement Delay (s/veh) 07:00 – 08:00		
	A12 S – B1122	B1122 - A12 S	B1122 - A12 N
2023 Reference Case	5	7	16
2023 Early Years	8	14	30

- 5.2.20. Due to the proximity between the A12 / A1120 and A12 / B1122 junctions, a more detailed analysis has been performed on the A12 northbound approach to the existing B1122 junction (queue counter #401) to determine the impact on the upstream A1120 junction, as shown in Table 25. This table shows that the queue for the right turn into the B1122 does not block back to the A1120 junction in any of the scenarios.

Table 25 – A12 / B1122 queue spillback analysis – AM period

Scenario	Queuing distance between A12 / A1120 and existing A12 / B1122 (m)	Percentage of runs where queue reaches A1120 junction (%)	Length of time during which queue reaches A1120 junction	Absolute maximum queue (m)
2015 Base Year	150	0	-	31
2023 Reference Case	150	0	-	33
2023 Early Years	150	0	-	115

- 5.2.21. Figure 32 shows the queue lengths during the PM period at the existing A12 / B1122 junction. The first graph shows that the queues at the A12 northbound right-turn lane are slightly increased in the Early Years Scenario compared to the Reference Case.
- 5.2.22. The queues on the minor arm (B1122) are generally higher during the PM period than in the AM period. They are moderately increased in the Early Years scenario compared to the Reference Case, especially from 17:00- 17:30. The maximum queue length for the Early Years scenario is 78m (thirteen vehicles), compared to 49m (eight vehicles) in the Reference Case.



Figure 32 – A12 / B1122 PM Queue lengths

- 5.2.23. Due to the long queues seen on the B1122 an additional analysis on the delay between 17:00 and 18:00 for the main movements at the junction is shown in Table 26.
- 5.2.24. There is a moderate increase in delay from the B1122 in the Early Years scenario compared to the Reference Case. The delay increases from 9 seconds to 24 seconds per vehicle on the left turn and from 26 to 45 seconds per vehicle on the right turn.

Table 26 – A12 / B1122 PM delay analysis

	Movement Delay (s/veh) 17:00 – 18:00		
	A12 S – B1122	B1122 - A12 S	B1122 - A12 N
2023 Reference Case	5	9	26
2023 Early Years	6	24	45

5.2.25. As with the AM period analysis, a more detailed analysis has been performed on the A12 northbound approach (queue counter #401) for the PM period, as shown in Table 27. The table shows that the right turn queue into the B1122 does not reach the A1120 junction in any scenarios or runs.

Table 27 – A12 / B1122 queue spillback analysis – PM period

Scenario	Queuing distance between A12 / A1120 and existing A12 / B1122 (m)	Percentage of runs where queue reaches A1120 junction (%)	Length of time during which queue reaches A1120 junction	Absolute maximum queue (m)
2015 Base Year	150	0	-	23
2023 Reference Case	150	0	-	38
2023 Early Years	150	0	-	38

5.2.26. The AM and PM results for the A12 / B1122 junction indicate that the Sizewell C traffic will have a slight impact on the junction during both peak periods but the existing t-junction is not expected to become over-capacity in 2023. If it is found that the Sizewell C traffic has an impact on the performance of the minor arm in 2023, it may be possible to provide additional bus services to/from Sizewell C prior to the provision of the proposed roundabout mitigation scheme. The Sizewell C related traffic flows using the B1122 at this junction are mainly heading towards the A1120, A144 and B1117.

A12 / A144

5.2.27. Figure 33 shows the queue lengths during the AM period at the A12 / A144 junction. The first graph shows that the queues on the A12 southbound right-turn lane are small in all scenarios. The second graph shows an increasing trend in queue lengths for the A144 approach, with the 07:00-08:15 period experiencing the longest queue lengths. The extra vehicles from the Early Years scenario increase the queue length only during this time period with relatively little impact felt during the rest of the AM period. During the AM peak period, the average queue is 6m (one vehicle) longer than the Reference Case, and an overall maximum queue of 72m (twelve vehicles) compared with 63m (ten vehicles) in the Reference Case. However, this increase does not have a significant effect on the overall junction performance as the maximum queue lengths quoted are not consistently present during each 5-minute interval as queues at this location are quite variable.

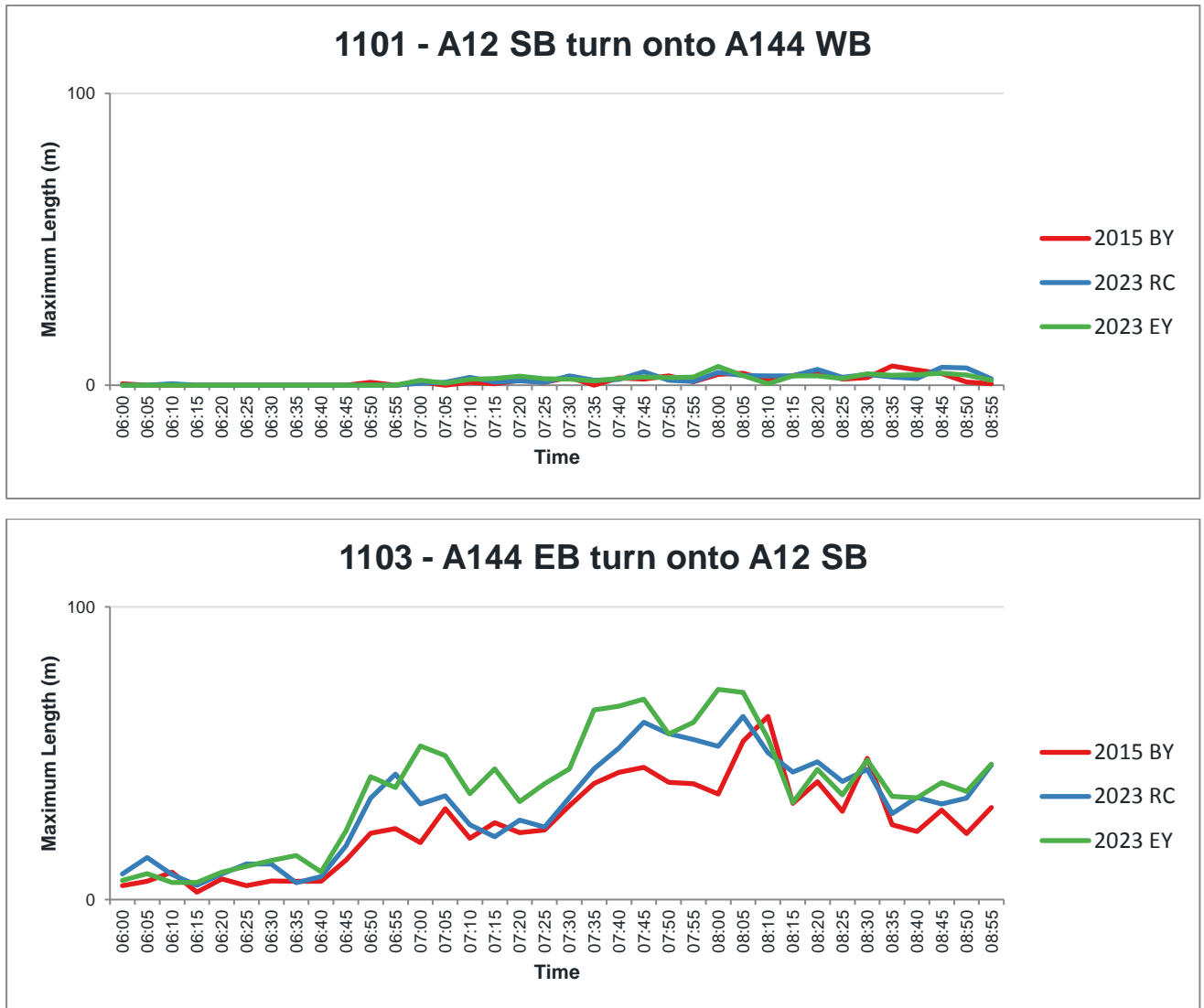


Figure 33 – A12 / A144 AM Queue lengths

5.2.28. Figure 34 shows the queue lengths during the PM period at the A12 / A144 junction. As in the AM period, there is barely any queuing at the A12 southbound right-turn lane during the PM. The queues on the A144 are much shorter in the PM compared to the AM period, with maximum queues of 47m (eight vehicles). There is little difference in queue lengths between the 2023 Reference Case and Early Years scenario.

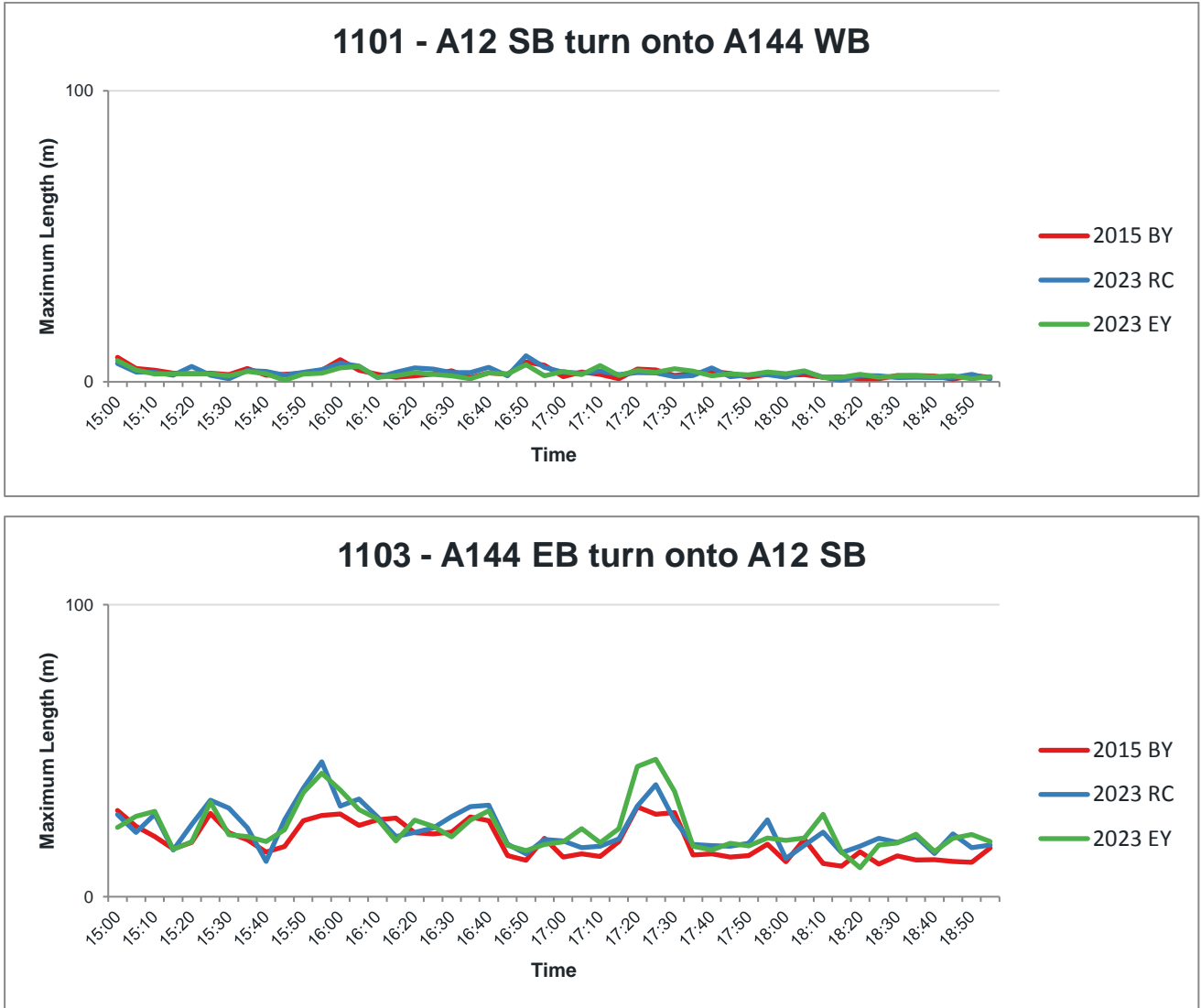


Figure 34 – A12 / A144 PM Queue lengths

PERFORMANCE SUMMARY

- 5.2.29. The Sizewell C construction traffic in 2023 does not have a significant impact in the overall highway network around Yoxford but it does have a small effect in some localised areas.
- 5.2.30. The network performance statistics indicate that the average time, distance and delay that vehicles experience in the network remains virtually unchanged and the journey time for vehicles travelling along the A12 would show very little change.
- 5.2.31. However, the addition of Sizewell C construction traffic does result in some increases in queues and delays on the B1122 approach from 07:30-08:00 and 17:00-18:00 in the 2023 Early Years scenario prior to the park and ride sites and B1122 roundabout being opened. If it is found that the Sizewell C traffic has an impact on the performance of the minor arm in 2023, it may be possible to provide additional bus services to/from Sizewell C prior to the provision of the proposed roundabout mitigation scheme.
- 5.2.32. There is also a small increase in queuing on the A144 during the AM peak from 07:00-08:15, although the queues at all other peak times are similar to the Reference Case.

- 5.2.33. In addition, the right turn queue from the A12 southbound onto the A1120 would occasionally reach back to the upstream junction. However, this situation is only likely to occur for less than five minutes before the queue dissipates and it is therefore unlikely to have a significant impact on delays in this area.

6. FORECAST SCENARIO – 2028 PEAK CONSTRUCTION

6.1. SCENARIO ASSUMPTIONS

- 6.1.1. 2028 represents the peak construction year of Sizewell C. A total of 7,900 workers would be deployed at the Sizewell C construction site, with a further 600 associated development workers. From these, 2,400 workers will reside in the on-site campus, 600 will stay in the 400 caravans on LEEIE and the rest travel from other locations as predicted by the gravity model.
- 6.1.2. By 2028 the Wickham Market and Darsham P&R sites will be fully operational and will have a high-frequency service connecting them to the Sizewell C construction site. In addition, direct bus services will be provided from Lowestoft and Ipswich via the A12.
- 6.1.3. Two mitigation measures are proposed south of the modelled area:
- A Two Village bypass at Farnham and Stratford St Andrew and
 - Sizewell Link Road, joining the A12 south of Yoxford to the B1122 east of Theberton.
- 6.1.4. VISSIM has been used to assess the 2028 Peak Construction busiest day scenario which assumes 500 HGV deliveries per day (each way) will be made to the construction site. The proposed HGV delivery profile across the day is the same as that assumed in 2023, which is shown in Figure 23.
- 6.1.5. All Sizewell C HGVs and buses are assumed to route via the A12, with those from the south using the proposed Sizewell Link Road. Those from the north would use the B1122 and join the Sizewell Link Road west of Middleton Moor.

TRANSPORT NETWORK ASSUMPTIONS

- 6.1.6. The 2028 Peak Construction scenario assumes three main changes in the network within the VISSIM model extent. The first one is the embedded mitigation at the A12 / B1122 junction, which changes from a T junction to a roundabout by 2028. Figure 35 shows how the junction was included in the model both before and after the mitigation implementation. Priority rules were included at each arm to replicate gap acceptance behaviour. Different rules were set up for each lane of the approach, for light and heavy vehicles and for time and distance rules as per the guidance in the VISSIM user manual.



Figure 35 – A12 / B1122 junction before and after embedded mitigation

6.1.7. The second major change in the transport network is the introduction of the northern park and ride site access. The northern park and ride is assumed to be located north of Darsham Railway Station and west of the A12, and will be accessed through a new roundabout on the A12. Willow Marsh Lane will be severed from the A12 at its existing connection point, and will be accessed via a new T-junction accessed via the new roundabout on the A12. Figure 36 shows the modelled northern park and ride site access before and after its construction. Priority rules were included on each arm of the roundabout to replicate gap acceptance behaviour. Different rules were set up for each lane of the approach, for light and heavy vehicles and for time and distance rules as per the guidance in the VISSIM user manual.



Figure 36 – Northern park and ride site access before and after construction

6.1.8. The third major change in the transport network is the embedded mitigation at the A12 / A144 junction, where the T-junction is assumed to be upgraded from a ghost-island T-junction to a single lane dualled t-junction. The junction would be widened to accommodate a central island which would provide more space between the two A12 carriageways for vehicles right turning from the A144. This would allow light vehicles right turning from the A144 to make the movement in two steps, stopping in the central reservoir if necessary. Figure 37 shows the modelled A12/A144 junction before and after its construction.

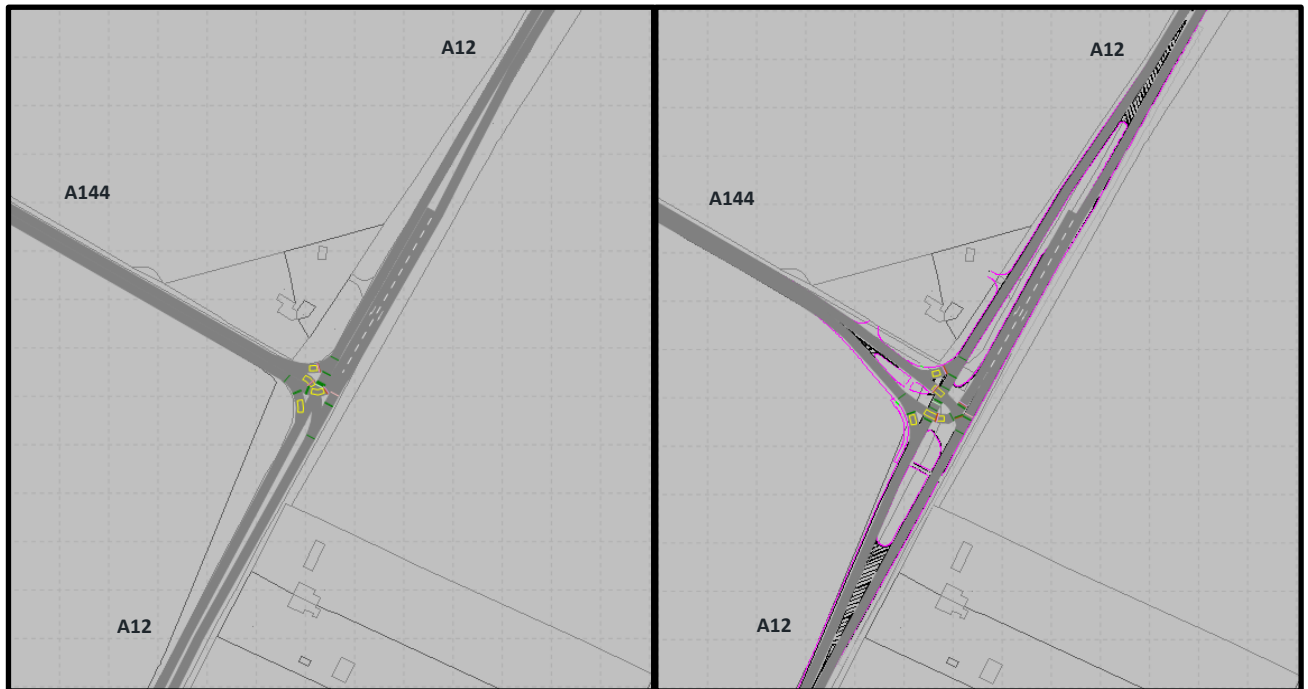


Figure 37 – A12 / A144 junction before and after construction

6.1.9. The detailed drawing of all the mitigations can be found in Appendix F.

TRAFFIC DEMAND ASSUMPTIONS - 2028

VISSIM matrices

- 6.1.10. As in the 2023 forecast scenario, the base, growth and Sizewell C private vehicle traffic was included in the model as dynamically assigned matrices calculated from the VISUM model. The same method of extracting and calculating the forecast matrices for VISSIM has been used.
- 6.1.11. Sizewell C construction traffic was extracted from the 2028 Peak Construction VISUM model which assumed a total peak construction workforce of 7,900 workers with an additional 600 AD workers.
- 6.1.1. Table 28 and Table 29 show the breakdown of total input matrix flows for the whole network by hourly time period for the Reference Case and Early Years scenarios respectively.

Table 28 – 2028 Network Traffic Reference Case (in vehicles per hour)

	6-7 am	7-8 am	8-9 am	3-4 pm	4-5 pm	5-6 pm	6-7 pm
Base 2028	515	1,168	1,374	1,525	1,593	1,465	1,086
Background Growth	203	232	188	227	202	228	265
SPR	-	-	24	-	-	25	-
Sizewell C	-	-	-	-	-	-	-
Total	718	1,400	1,586	1,752	1,795	1,718	1,351

Table 29 – 2028 Network Traffic Peak Construction (in vehicles per hour)

	6–7 am	7–8 am	8–9 am	3-4 pm	4-5 pm	5-6 pm	6-7 pm
Base 2028	503	1,133	1,333	1,474	1,550	1,410	1,056
Background Growth	207	223	176	215	185	200	246
SPR	-	-	27	-	-	28	-
Sizewell C	333	288	64	194	119	164	315
Total	1,043	1,644	1,600	1,883	1,854	1,802	1,618

Sizewell Bus services and HGV Deliveries

6.1.2. In addition to the private worker traffic input as matrices in the model, there are other vehicle movements associated with Sizewell C:

- Buses shuttling workers between:
 - Northern park and ride site and Sizewell C construction site;
 - Lowestoft and Sizewell C construction site.
- HGVs delivering construction materials and plant movements to and from Sizewell C construction site.

6.1.3. Bus services to/from Leiston, Knodishall, Ipswich and Wickham Market Park & Ride and the Sizewell C construction site are included in the VISUM models but are not relevant to the VISSIM model.

6.1.4. Table 30 shows the Sizewell C bus services included in the 2028 Peak Construction scenario. These figures include the shuttle buses from Darsham Park & Rides to Sizewell as well as the direct bus lines to Lowestoft. The bus services were modelled in VISSIM as “Public Transport Lines” on fixed routes.

Table 30 – 2028 Sizewell C Bus services

Service	6-7am	7-8am	8-9am	3-4pm	4-5pm	5-6pm	6-7pm
Darsham Park & Ride - SZC	9	9	5	8	5	9	8
SZC - Darsham Park & Ride	9	9	5	8	5	9	8
Lowestoft - SZC	2	1	0	1	0	2	2
SZC - Lowestoft	2	1	0	1	0	2	2
Total	22	20	10	18	10	22	20

6.1.5. Table 31 shows the HGV deliveries on the busiest day, per hour, to Sizewell C construction site in the 2028 Peak Construction scenario. This table only takes into account the HGV deliveries from the north, as the deliveries coming from the south will use the Sizewell Link Road, which falls outside of

the VISSIM model extent. These HGVs were modelled as vehicle type “202: HGV SZC” and assigned to “Public Transport Lines” with fixed routes and equally spaced departure times.

Table 31 – 2028 Sizewell C HGV deliveries

Delivery Site	Direction	6-7am	7-8am	8-9am	3-4pm	4-5pm	5-6pm	6-7pm
Sizewell C	Inbound	4	11	9	8	5	2	2
	Outbound	0	0	4	5	6	7	7
Total		4	11	13	13	11	9	9

6.2. SCENARIO PERFORMANCE COMPARISON

- 6.2.1. This section presents the performance comparison between the validated base year scenario (“2015”), the Reference Case scenario for 2028 (“2028 RC”), and the 2028 Peak Construction scenario (“2028 PC”) with Sizewell C construction traffic.

NETWORK-WIDE PERFORMANCE

- 6.2.2. Table 32 shows a series of network-wide statistics that were extracted from the outputs of the three different scenarios.

Table 32 – Network Performance Model Results

	AM			PM		
	2015	2028 RC	2028 PC	2015	2028 RC	2028 PC
Total Time Taken (h)	230	285	331	409	487	538
Total Distance (km)	13,622	16,724	18,966	23,941	28,065	30,516
Total Vehicles	3,118	3,745	4,428	5,831	6,751	7,421
Total Delay (h)	23	31	41	43	56	66
Avg. Time (s) / Vehicle	266	274	269	253	260	261
Avg. Time (s) / Mile	98	99	101	99	101	102
Avg. Distance (m) / Vehicle	4,370	4,466	4,284	4,105	4,157	4,112
Avg. Speed (mph)	37	36	36	36	36	35
Avg. Speed (kph)	59	59	57	59	58	57
Avg. Delay / Vehicle (s)	26	29	33	26	30	32

- 6.2.3. During the AM and PM peaks, the network-wide statistics show that time, distance and delay have a linear relationship with the number of vehicles in the network. This means that the addition of the Sizewell C vehicles result in little change to the distance and delay per vehicle when compared to the Reference Case and thus the network is not affected.

- 6.2.4. Reviewing the relative statistics, it is possible to observe that the variation between the different scenarios is low. For example, the VISSIM model predicts that the average driver will experience a delay increase of 4 seconds (+14%) in the 2028 PC AM period scenario compared to the 2028 Reference Case. During the PM peak, the average delay per vehicle is increased by 2 seconds (+6%).
- 6.2.5. This increased level of average delay is relatively low and hence does not have a significant impact in the network. The average speed throughout the network only decreases by 1 mph in the AM period and 2 mph during the PM period in the Peak Construction scenario compared to the 2028 Reference Case.
- 6.2.6. Figure 38 shows the average journey time along the A12 for each scenario.

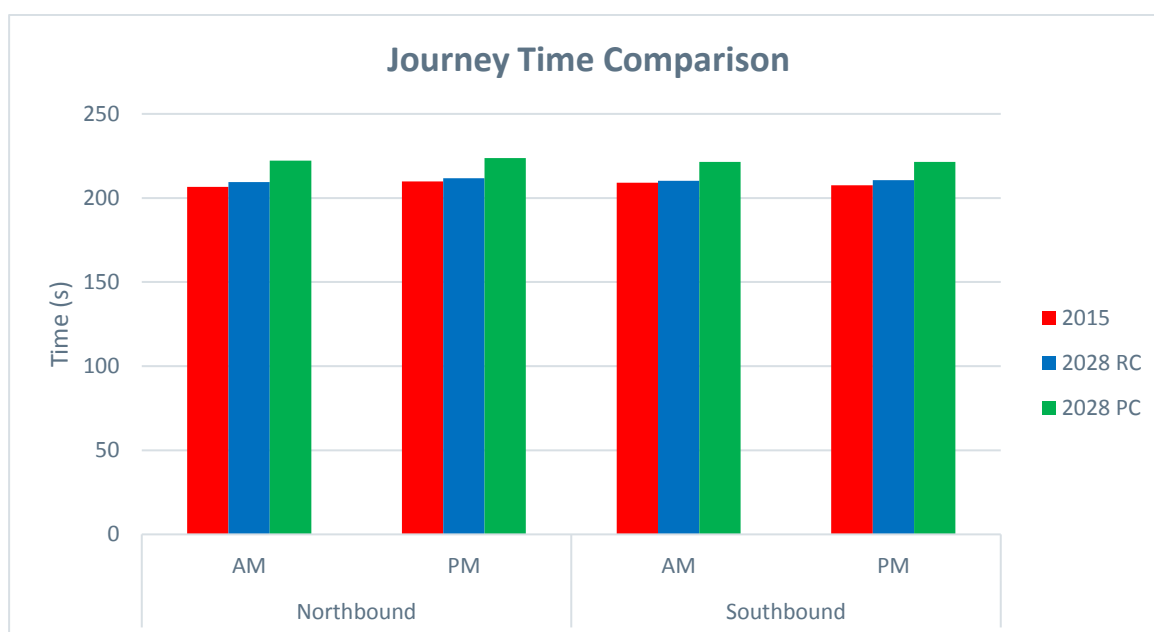


Figure 38 – 2028 Journey Time Comparison

- 6.2.7. The Peak Construction scenario has an average increase in journey time of 12 seconds compared to the Reference Case. This increase is mostly due to the introduction of both roundabouts (Northern park and ride access and B1122) along the A12, which add slight delay to the A12 movements. As the daily variation in travel times is likely to exceed a difference of 12 seconds, it is unlikely that a change of this magnitude would be perceivable to A12 road users.

JUNCTION PERFORMANCE

- 6.2.8. Queue and average delay results have been collected for all junctions in the model in order to assess the performance of each junction.
- 6.2.9. Figure 39 shows the average delay for each junction over the whole AM and PM periods. The values shown below represent the average of all turning movements in the junction.

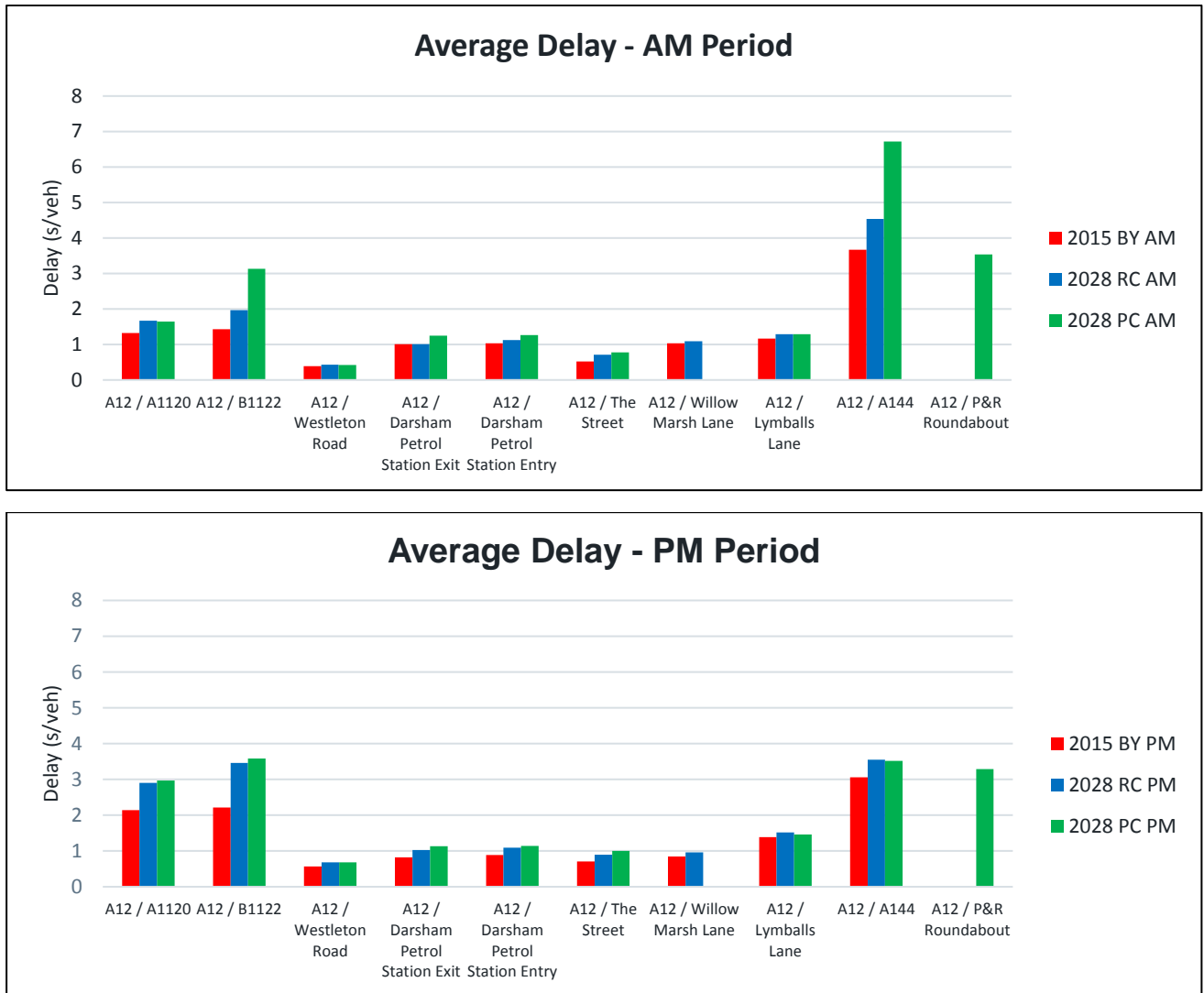


Figure 39 – Junction Average Delay

6.2.10. The graphs show that the level of delay is very low at the A12 junctions with Westleton Road, Darsham Petrol Station, The Street, Willow Marsh Lane and Lymballs Lane. A higher level of delay is observed at the A12 / A1120, A12 / B1122, A12 / A144 and A12 / P&R junctions. The addition of the Sizewell C construction traffic has a moderate impact on the A12 / A144 and A12 / B1122 junctions during the AM Period.

6.2.11. A detailed results analysis is provided below for the main junctions in the network; A12 / A1120, A12 / B1122, A12 / A144 and Darsham Park & Ride roundabout. The graphs shown below represent the maximum queue recorded during each 5-minute period, averaged over each iteration by scenario. A full set of queue graphs can be found in Appendix D.

A12 / A1120

6.2.12. Figure 40 shows the queue lengths during the AM period at the A12 / A1120 junction. The right-turn queues from the A12 southbound approach are similar in the 2028 Peak Construction compared to the Reference Case scenario. The queues on the High Street remain very low during the whole period in all scenarios.

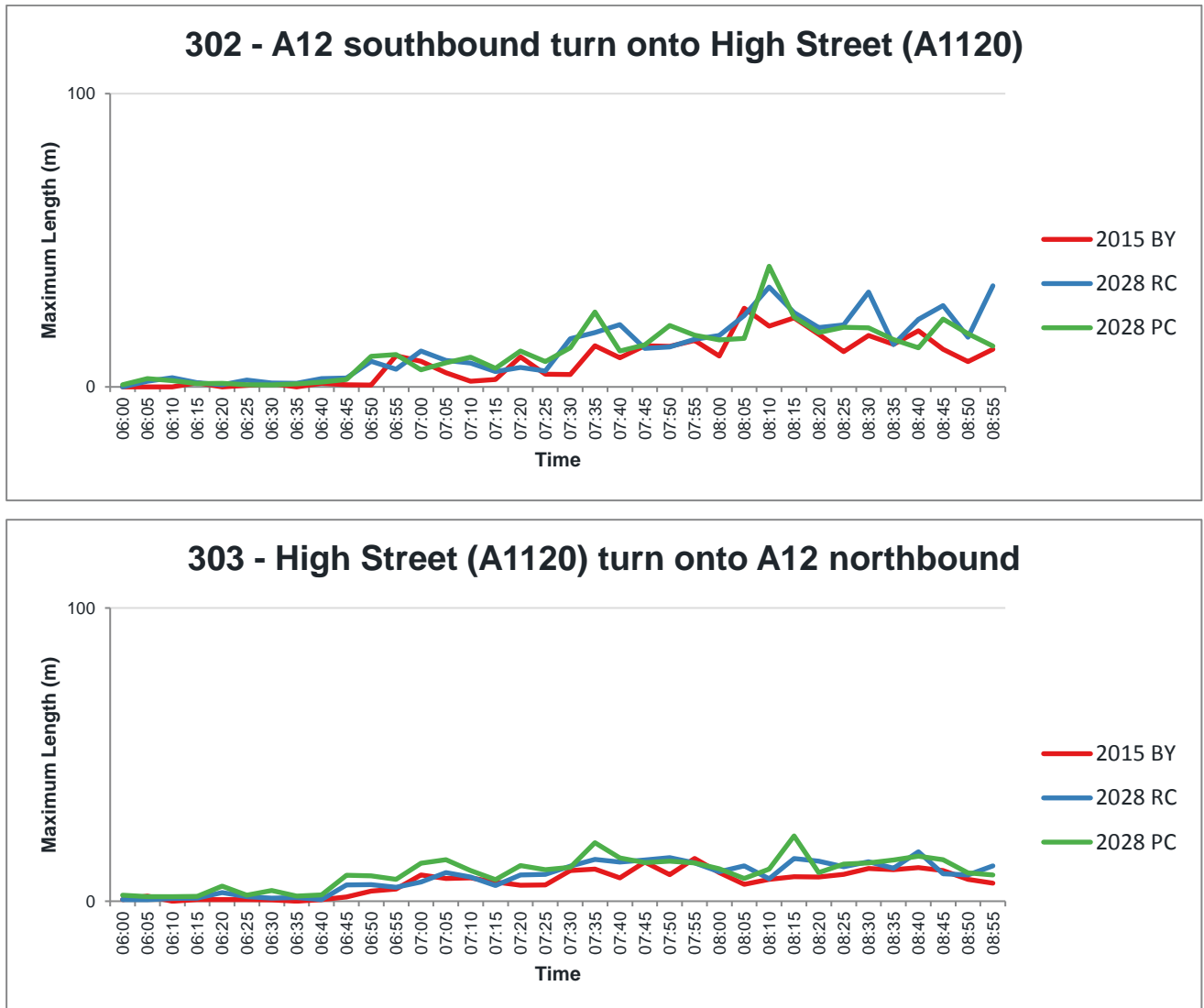


Figure 40 – A12 / A1120 AM Queue lengths

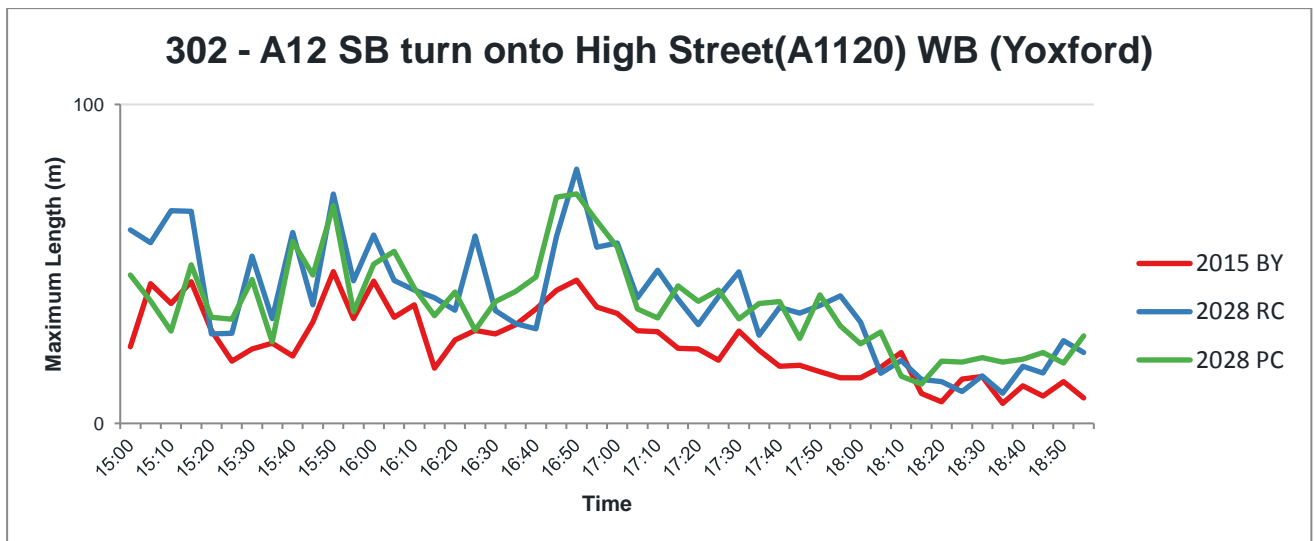
6.2.13. Due to the proximity between the A12 / A1120 and A12 / B1122 junctions, a more detailed analysis has been performed on the A12 southbound approach (queue counter #302) to determine whether the queue reaches the B1122 junction. As a result of the upgrade of the A12 / B1122 junction to a roundabout in the Peak Construction scenario, the stacking distance between the B1122 and A1120 junctions is increased from 150m (current layout) to 230m. Table 33 shows that the queue from the right turn into the A1120 doesn't reach the B1122 junction in any of the scenarios.

Table 33 – A12 / A1120 queue spillback analysis – AM period

Scenario	Distance between A12 / A1120 and A12 / B1122 (m)	Percentage of runs where queue reaches A12/B1122 junction (%)	Length of time during which queue reaches A12/B1122 junction	Absolute maximum queue (m)
2028 Reference Case	150	0	-	101
2028 Peak Construction	230	0	-	115

6.2.14. Figure 41 shows the queue lengths during the PM period at the A12 / A1120 junction. The right-turn queues from the A12 southbound are similar in the Peak Construction scenario compared to the 2028 Reference Case.

6.2.15. Queues on the A1120 High Street approach onto the A12 are largely unaffected in the Peak Construction scenario.



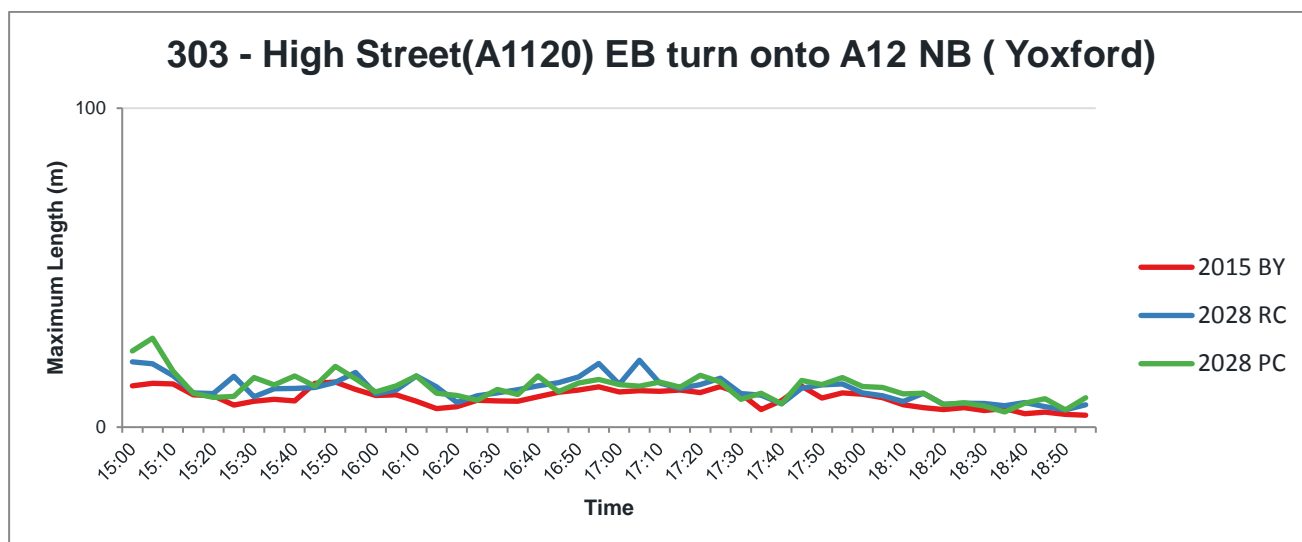


Figure 41 – A12 / A1120 PM Queue lengths

6.2.16. Due to the proximity between the A12 / A1120 and A12 / B1122 junctions, a more detailed analysis has been undertaken on the A12 southbound approach (queue counter #302) to determine the impact on the upstream junction, shown in Table 34. In the Reference Case, the queue reaches the upstream B1122 junction in 30% of the runs. Even though the absolute maximum queue on the A12 southbound approach is longer in the Peak Construction scenario, it never reached the upstream A12 / B1122 junction (due to it being further away), which helps to mitigate any impact that could be created by the Sizewell C traffic.

Table 34 – A12 / A1120 queue spillback analysis – PM period

Scenario	Distance between A12 / A1120 and A12 / B1122 (m)	Percentage of runs where queue reaches A12/B1122 junction (%)	Length of time during which queue reaches A12/B1122 junction	Absolute maximum queue (m)
2028 Reference Case	150	30	< 5 min	159
2028 Peak Construction	230	0	-	216

A12 / B1122

6.2.17. Figure 42 shows the queue lengths during the AM period at the A12 / B1122 junction. This junction was modelled as a t-junction in the 2015 and 2028 RC scenarios and as a roundabout in the 2028 Peak Construction scenario. The graph indicates that the queue lengths on the A12 northbound and B1122 westbound remain low in the Peak Construction scenario. There is likely to be some queuing on A12 southbound approach due to the introduction of the roundabout, with a maximum queue length of 26m (five vehicles). This queue would occur on the approach to Yoxford, rather than in the village itself and dissipates quickly.

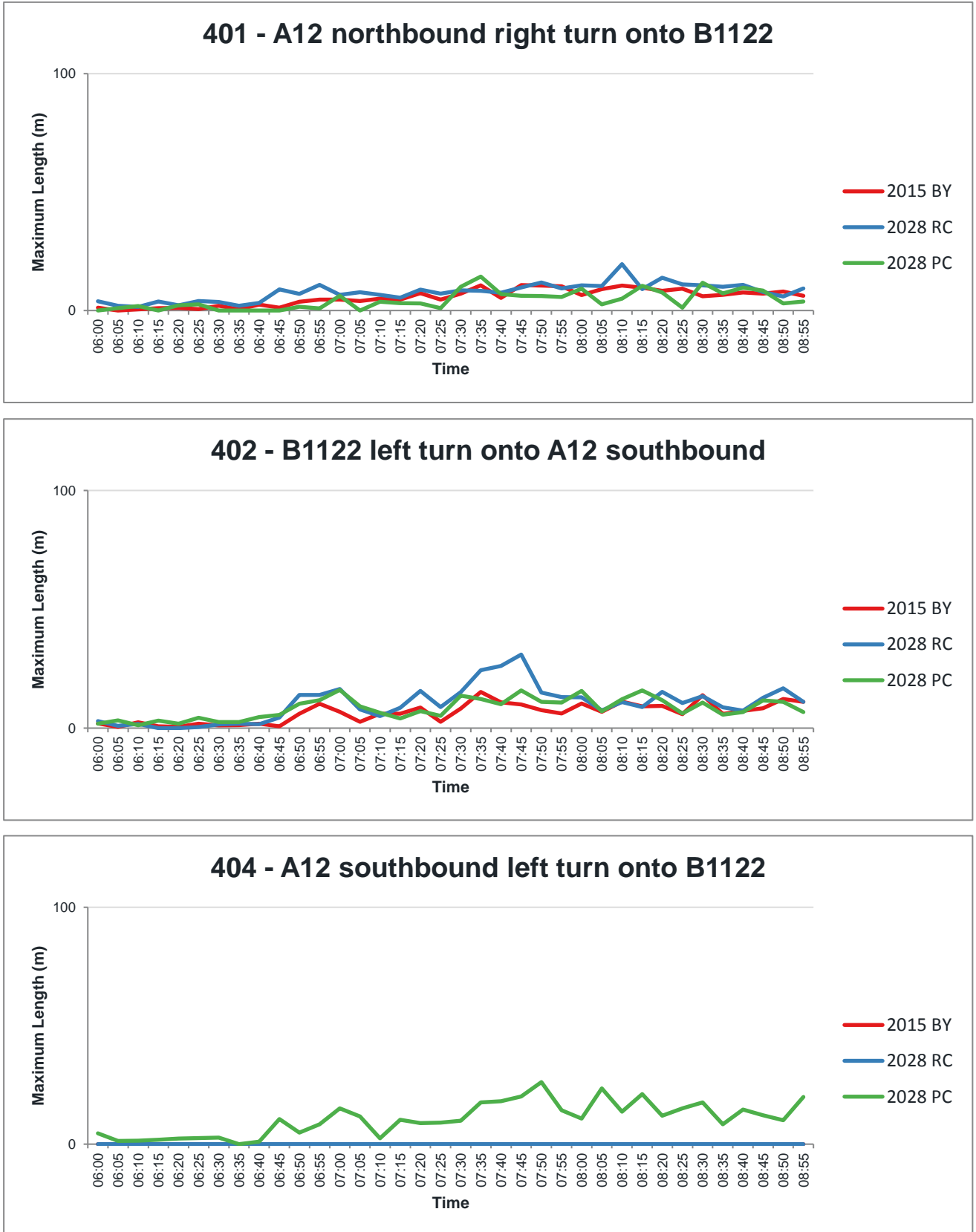


Figure 42 – A12 / B1122 AM Queue lengths

6.2.18. Due to the proximity between the A12 / A1120 and A12 / B1122 junctions, a more detailed analysis has been performed on the A12 northbound approach (queue counter #401) to determine the impact on the upstream A1120 junction, as shown in Table 35. This table shows that the upstream A1120 junction would not be blocked in any of the scenarios and the absolute maximum queue is far from reaching the A1120 junction.

Table 35 – A12 / B1122 AM spillback analysis

Scenario	Distance between A12 / A1120 and A12 / B1122 (m)	Percentage of runs where queue reaches A1120 junction (%)	Length of time during which queue reaches A1120 junction	Absolute maximum queue (m)
2028 Reference Case	150	0	-	70
2028 Peak Construction	230	0	-	64

6.2.19. Due to the change of the A12/B1122 junction from a T-junction to a roundabout, the arms experiencing queues are different to those in the Reference Case. Thus, an additional assessment has been conducted to assess the delay during the most congested hour (08:00 – 09:00) as shown in Table 36.

6.2.20. This shows a reduction in delay on the B1122 approach. Conversely, the delay on the A12 is slightly increased, but remains low.

Table 36 – A12 / B1122 AM delay analysis

	Movement Delay (s/veh) 08:00 – 09:00					
	A12 S – A12 N	A12 S – B1122	A12 N – A12 S	A12 N – B1122	B1122 – A12 S	B1122 – A12 N
2028 Reference Case	0	7	1	1	7	20
2028 Peak Construction	2	3	5	3	4	7

6.2.21. Figure 43 shows the queue lengths during the PM period at the A12 / B1122 junction. In the Peak Construction scenario, the queue lengths remain the same or lower than the Reference Case for the B1122 approach (minor arm, T-junction), but they increase on the A12 approaches, especially southbound due to the introduction of the roundabout.

6.2.22. The new roundabout creates a short-term, intermittent queue on the A12 southbound approach for the Peak Construction scenario, with a maximum queue length of 33m (six vehicles). Queues dissipate quickly and are generally moving rather than stationary so little impact is felt at this location.

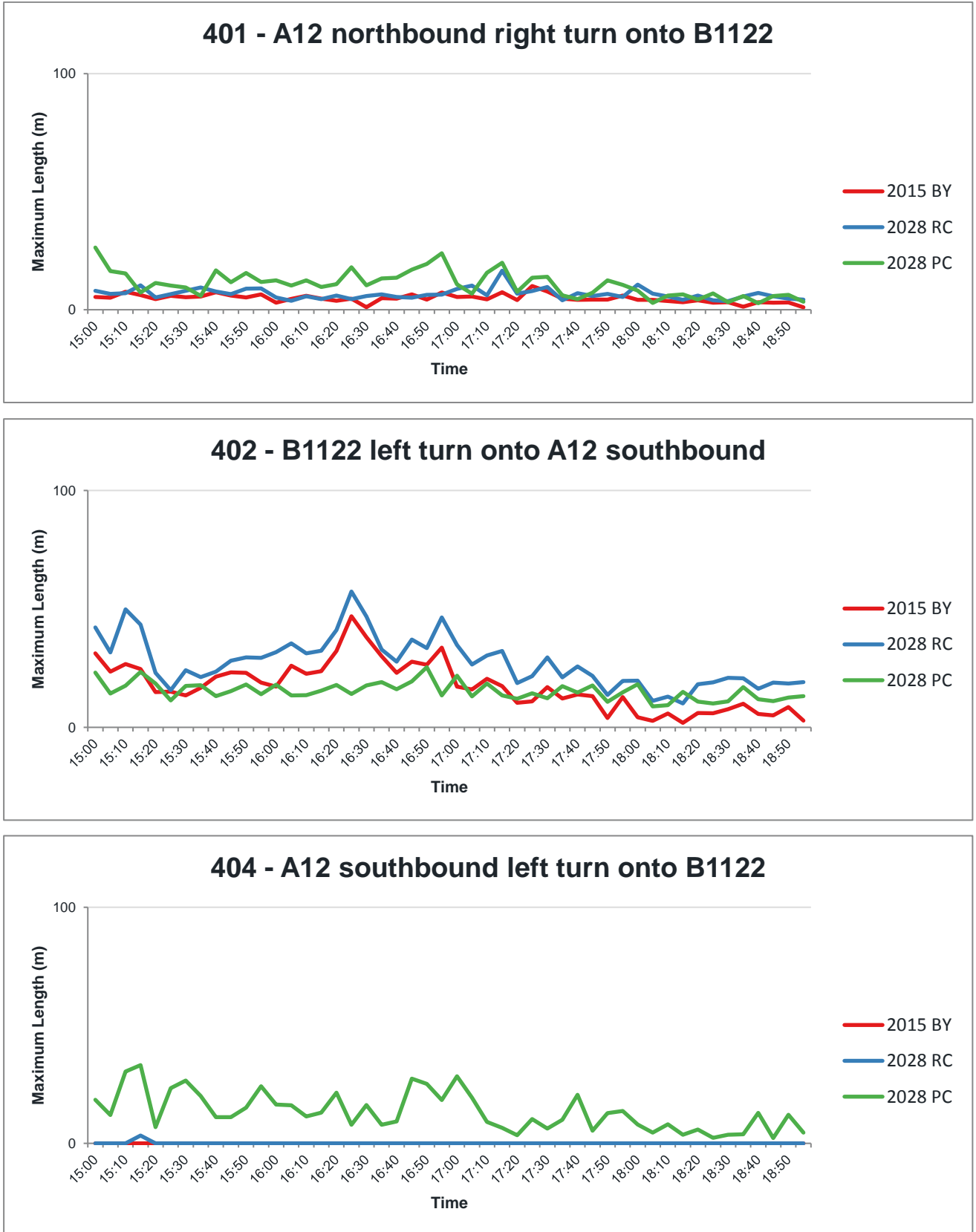


Figure 43 – A12 / B1122 PM Queue lengths

6.2.23. Due to the proximity between the A12 / A1120 and A12 / B1122 junctions, a more detailed analysis has been performed on the A12 northbound approach (queue counter #401) to determine the impact on the upstream A1120 junction, shown in Table 37. The table shows that the A12 northbound queue never reaches the A1120 junction in any of the scenarios and the absolute maximum queue is far from reaching this location.

Table 37 – A12 / B1122 queue spillback analysis – PM period

Scenario	Distance between A12 / A1120 and A12 / B1122 (m)	Percentage of runs where queue reaches A1120 junction (%)	Length of time during which queue reaches A1120 junction	Absolute maximum queue (m)
2028 Reference Case	150	0	-	84
2028 Peak Construction	230	0	-	95

6.2.24. Due to the change of the A12/B1122 junction from a t-junction to a roundabout, the arms experiencing queues are different to those in the Reference Case. Thus, an additional analysis on the delay during the most congested hour (16:00-17:00) is shown in Table 38.

6.2.25. The level of delay experienced on the B1122 approach to the existing A12 junction in the Reference Case scenario during the PM period is significant. As a result of the upgrade to a roundabout, the B1122 traffic delay is reduced from 20s per vehicle for southbound traffic and 36s per vehicle for northbound traffic to 5-7s per vehicle. On the other hand, the delay on the A12 is slightly increased, but still remains low.

Table 38 – A12 / B1122 PM maximum delay analysis

	Movement Delay (s/veh) 16:00 – 17:00					
	A12 S – A12 N	A12 S – B1122	A12 N – A12 S	A12 N – B1122	B1122 – A12 S	B1122 – A12 N
2028 Reference Case	0	6	1	1	20	36
2028 Peak Construction	3	4	5	3	5	7

A12 / A144

6.2.26. Figure 44 shows the queue lengths during the AM period at the A12 / A144 junction. The queue on the A12 southbound right turn remains at a similar level in all scenarios. Although the junction has been upgraded, the queue length on the A144 approach is longer in the Peak Construction scenario than the Reference Case, most noticeably between 07:30 and 08:00. This is due to the much higher flow on the A144 due to the Sizewell C traffic. The maximum queue observed in the Peak Construction scenario is 93m (sixteen vehicles) compared to 67m (eleven vehicles) in the Reference Case.

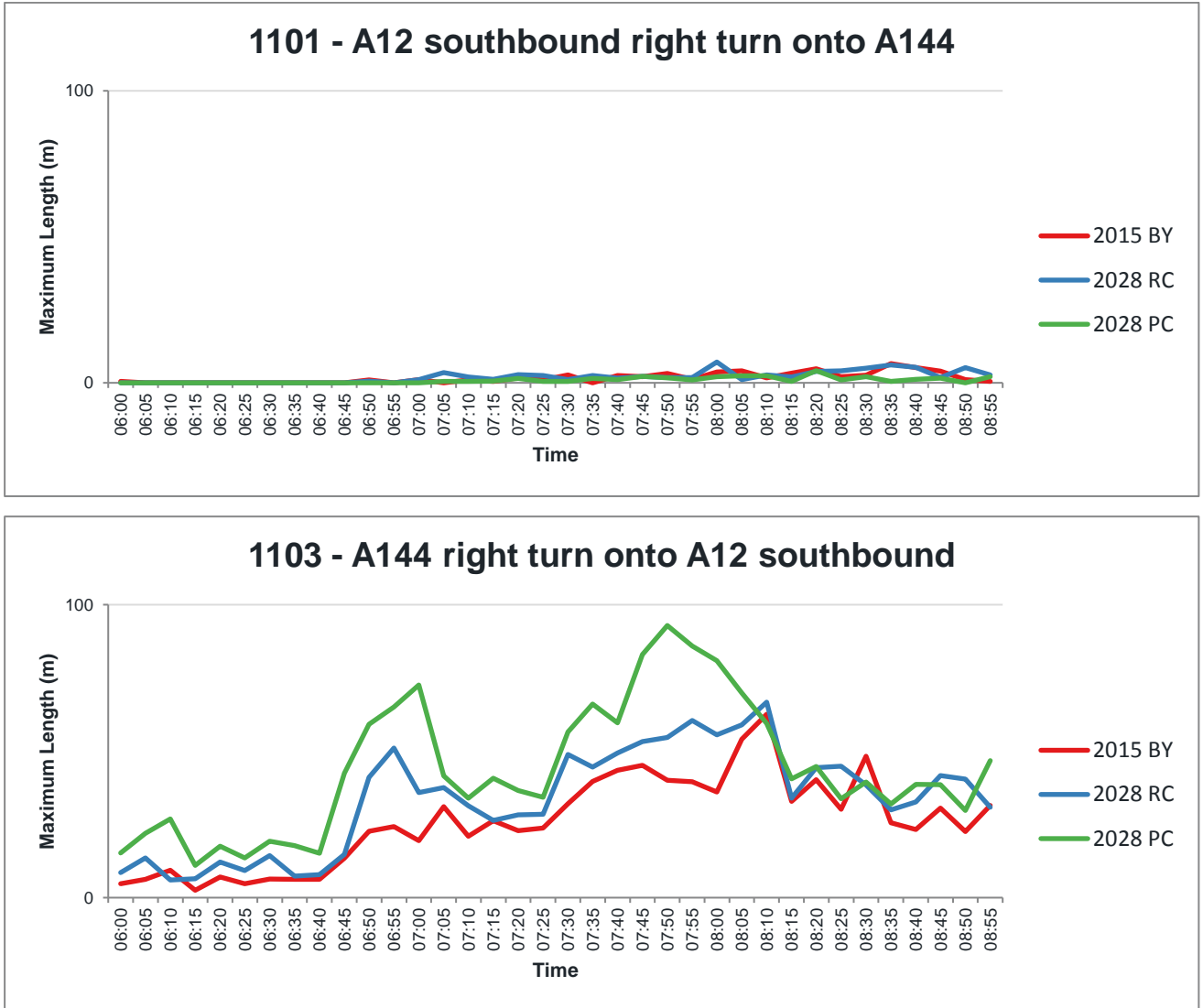


Figure 44 – A12 / A144 AM Queue lengths

6.2.27. Figure 45 shows the queue lengths during the PM period at the A12 / A144 junction. As with the AM period, there is little queuing on the A12 southbound right-turn lane during the PM period. The queues on the A144 are much shorter in the PM compared to the AM period and there is little difference in queue lengths between the Peak Construction and Reference Case scenarios.

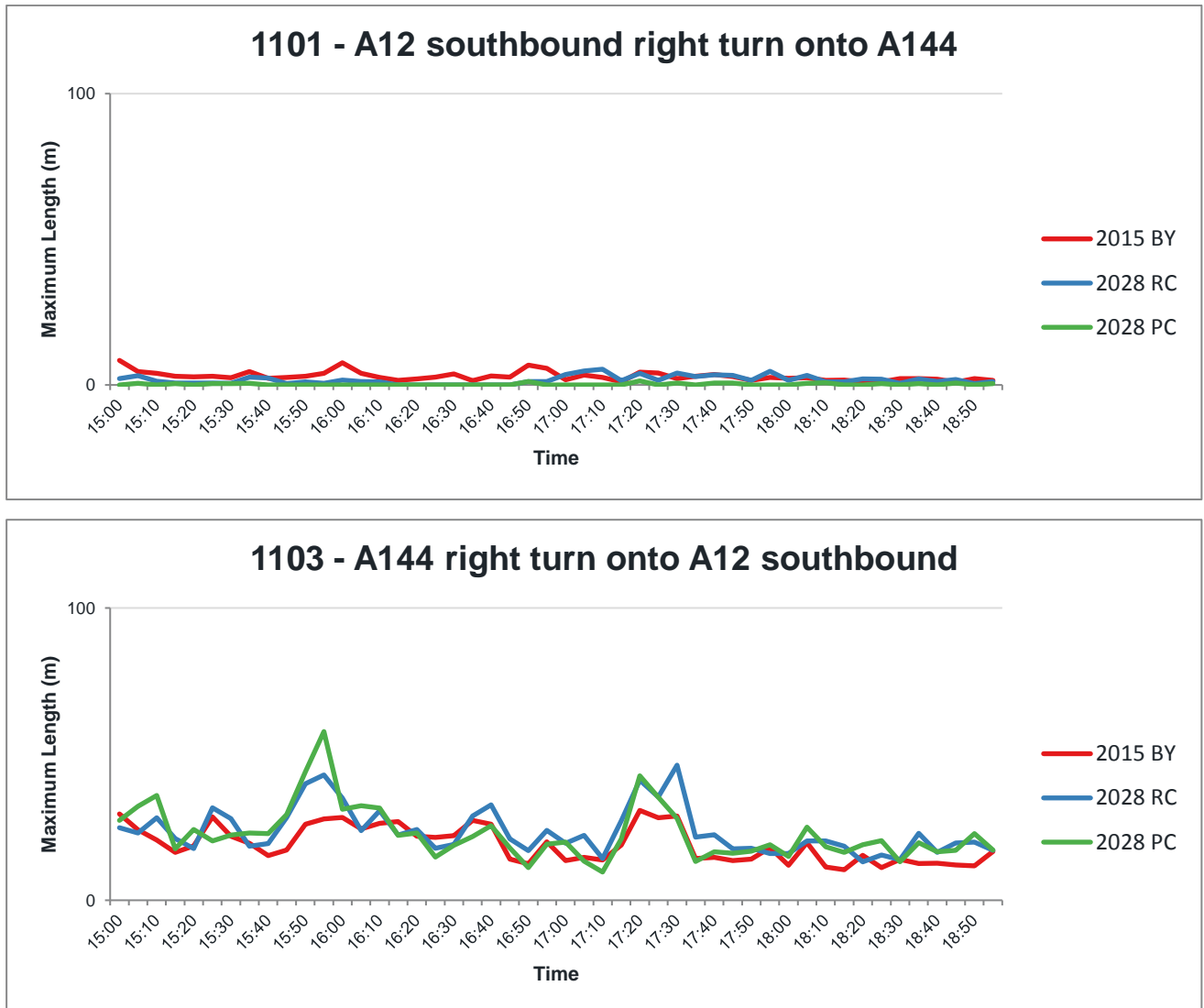


Figure 45 – A12 / A144 PM Queue lengths

Northern park and ride roundabout

6.2.28. Figure 46 shows the queue lengths during the AM period at the proposed northern park and ride roundabout. The maximum queue observed at the A12 northbound approach is 36m (six vehicles). The queues on the other approaches are not significant.

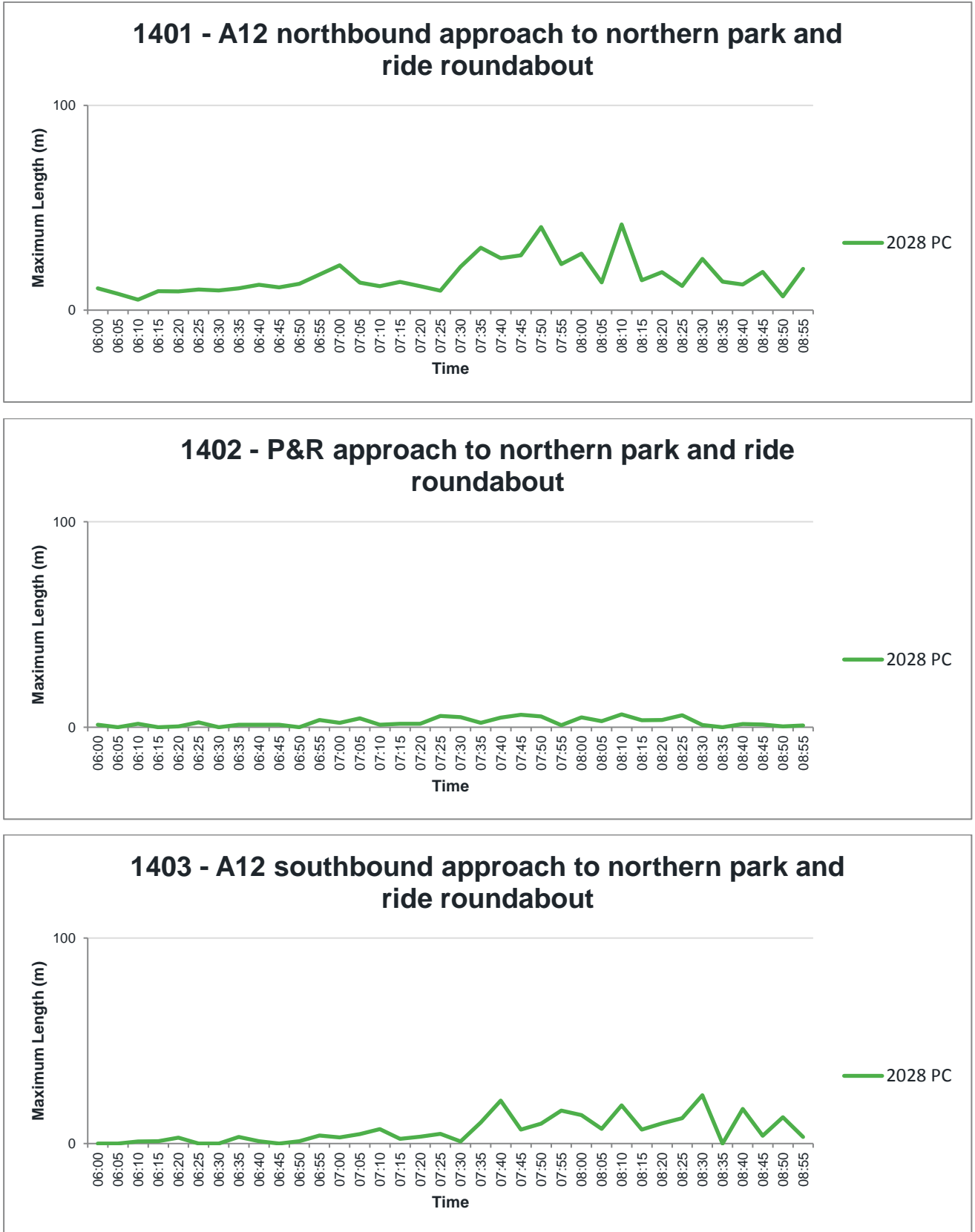
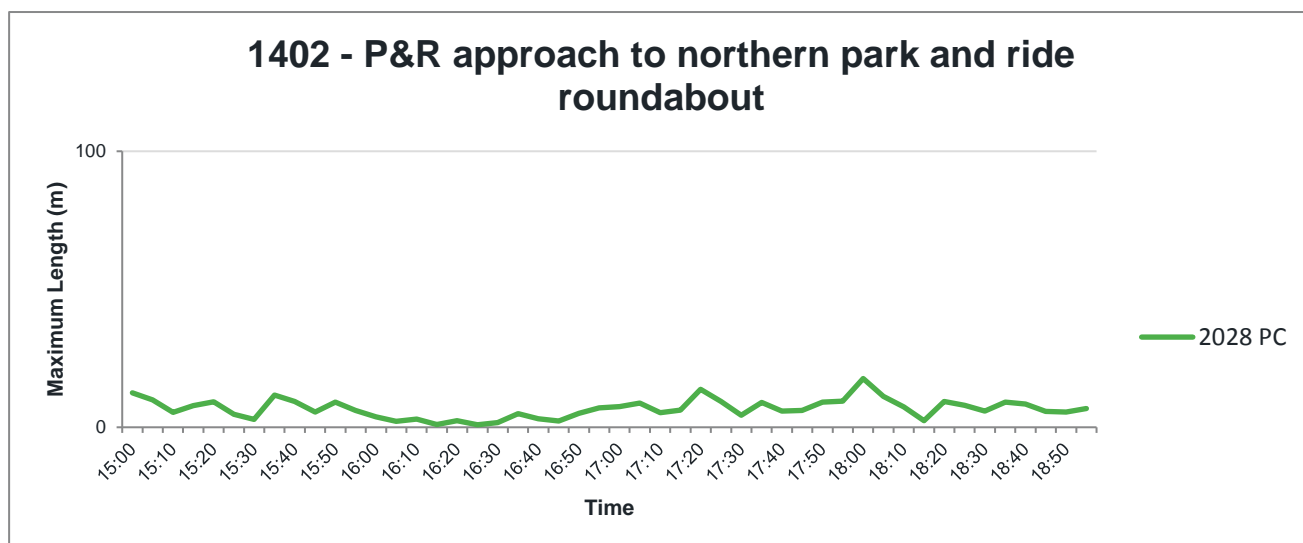
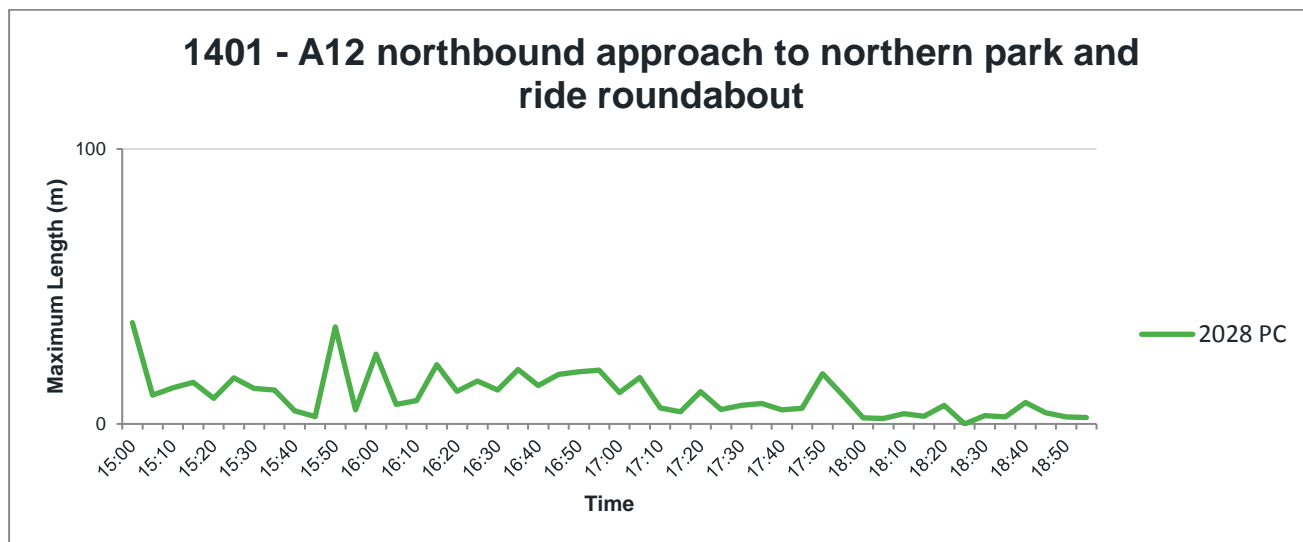


Figure 46 – P&R roundabout AM Queue lengths

- 6.2.29. The implementation of the roundabout results in a delay increase of 4 seconds per vehicle on the A12 northbound and southbound movements. This level of delay is very low and likely to be imperceptible.
- 6.2.30. Figure 47 shows the queue lengths during the PM period at the northern park and ride roundabout. The maximum queue observed is on the A12 northbound approach and is 35m (six vehicles) in the Peak Construction scenario. The queues on the other approaches are insignificant.



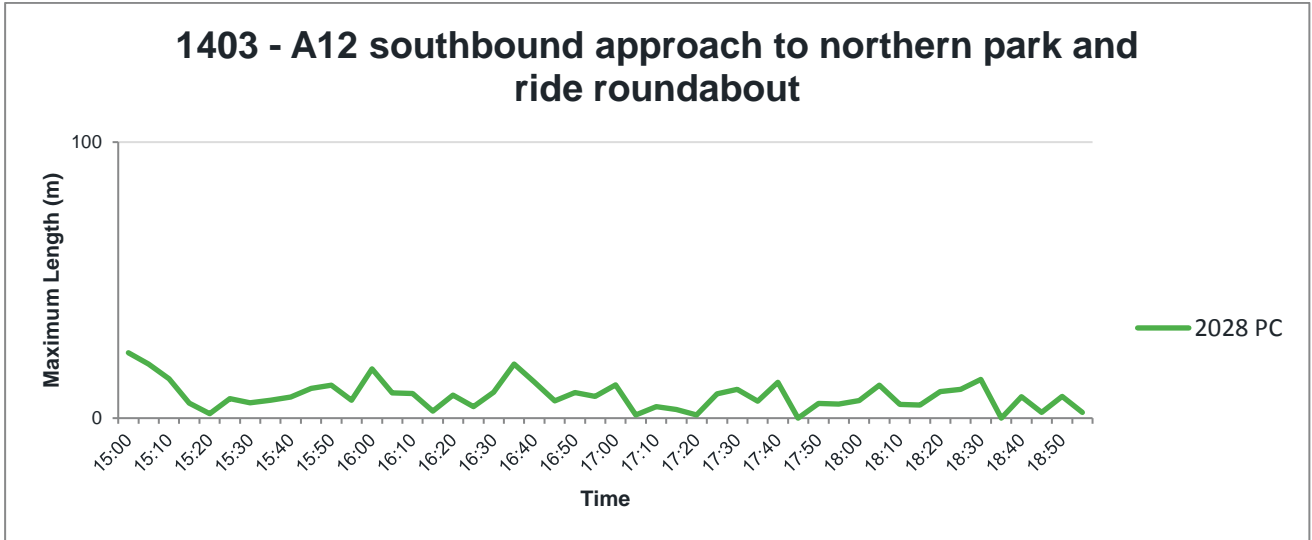


Figure 47 – Northern park and ride roundabout PM Queue lengths

6.2.31. The implementation of the roundabout results in a delay increase of 4 seconds on the A12 northbound and southbound movements in both scenarios. This level of delay is low and likely to be imperceptible.

PERFORMANCE SUMMARY

6.2.32. Journey times along the A12 are expected to increase by 12 seconds due to the extra vehicles on the network and the construction of the A12/B1122 and Darsham Park and Ride roundabouts.

6.2.33. The minor junctions in the study area do not experience a significant impact in their performance due to the addition of Sizewell C construction traffic. However, some impact is observed at the major junctions:

- The upgrade of the A12 / B1122 junction to a roundabout significantly reduces the level of delay at the B1122 approach, especially during the PM period. Even though the upgrade of the junction to a roundabout leads to a slight increase in delay on the A12, this remains low and the roundabout operates efficiently. The queues at the A12 northbound approach to the roundabout remain low in all scenarios and do not reach the upstream A1120 junction;
- The queue length on the A12 southbound approach to the A1120 junction is similar in the 2028 Reference Case and 2028 Peak Construction scenarios. Although the absolute maximum queue is longer in the Peak Construction scenario, the likelihood of the maximum queue reaching the upstream A12/B1122 junction is reduced compared to the Reference Case due to the increased stacking distance between the A1120 and B1122 because of the upgraded A12 / B1122 junction;
- The implementation of a roundabout for the northern park and ride site has a slight impact on queues and delays on the A12 approaches. However, these delays are minimal and the roundabout operates efficiently in the Peak Construction scenario.
- The maximum average queue on the A144 approach to the A12 increases from 67m in the Reference Case to 93m in Peak Construction scenario during the AM period. This is due to the large increase in flow on the A144 approach due to Sizewell C. Queues in the PM peak are lower than the AM and are similar in the Reference Case and Peak Construction scenarios.

7. FORECAST SCENARIO – 2034 OPERATIONAL PHASE

7.1. SCENARIO ASSUMPTIONS

- 7.1.1. 2034 represents the normal operation of Sizewell C following construction. A total of 900 workers would be deployed at Sizewell C, all travelling from locations as predicted by the gravity model.
- 7.1.2. Following the completion of the construction of Sizewell C, the northern park and ride site would be removed and the original A12 T-junction with Willow Marsh Lane would be restored.
- 7.1.3. The proposed roundabout at the junction of the A12/B1122 would remain in place as would the upgraded A12/A144 junction.
- 7.1.4. The two mitigation measures proposed south of the modelled area would remain in place:
 - A Two Village bypass at Farnham and Stratford St Andrew and
 - Sizewell Link Road, joining the A12 south of Yoxford to the B1122 east of Theberton.
- 7.1.5. The following daily HGV deliveries associated with Sizewell C will be made, on a typical day:
 - To/from Sizewell C: 10 HGVs each way; and
 - To/from MasterLord Industrial Estate: 5 HGVs each way.
- 7.1.6. All SZC HGVs and buses will route via the A12, with those from the south using the proposed Sizewell Link Road. Those from the north would use the B1122 and join the Sizewell Link Road west of Middleton Moor.

TRANSPORT NETWORK ASSUMPTIONS

- 7.1.7. The 2034 Operational Phase scenario assumes two main changes in the network within the VISSIM model extent, compared to the Reference Case. The first one is the embedded mitigation at the A12 / B1122 junction, which is changed from a T-junction to a roundabout. Figure 35 shows how the junction was included in the model both before and after the mitigation implementation.
- 7.1.8. The second change in the transport network is the embedded mitigation at the A12 / A144 junction, where the T-junction has been upgraded from a ghost-island to a single lane dualling type of T-junction. Figure 37 shows the modelled A12 / A144 junction before and after its construction.
- 7.1.9. The detailed drawing of the mitigation measures can be found in Appendix F.

TRAFFIC DEMAND ASSUMPTIONS - 2034

VISSIM matrices

- 7.1.10. As in the 2023 and 2028 forecast scenarios, the base, growth and Sizewell C private vehicle traffic was included in the model as dynamically assigned matrices calculated from the VISUM model. The same method of extracting and calculating the forecast matrices for VISSIM has been used.
- 7.1.11. Sizewell C construction traffic was extracted from the 2034 Operational Phase VISUM model which assumed a total workforce of 900 workers.
- 7.1.12. The Scottish Power Development that was included as explicit matrices in the 2023 and 2028 forecast scenarios has assumed to be completed by 2034 so is not included in the 2034 VISUM models.

7.1.13. Table 39 and Table 40 show the breakdown of total input matrix flows for the whole network by hourly time period for the Reference Case and Early Years scenarios respectively.

Table 39 – 2034 Network Traffic Reference Case (in vehicles per hour)

	6-7 am	7-8 am	8-9 am	3-4 pm	4-5 pm	5-6 pm	6-7 pm
Base 2034	515	1,149	1,365	1,525	1,593	1,449	1,086
Background Growth	237	309	318	394	299	364	334
SPR	-	-	-	-	-	-	-
Sizewell C	-	-	-	-	-	-	-
Total	752	1,458	1,683	1,920	1,892	1,813	1,420

Table 40 – 2034 Network Traffic Operational Phase (in vehicles per hour)

	6-7 am	7-8 am	8-9 am	3-4 pm	4-5 pm	5-6 pm	6-7 pm
Base 2034	503	1,122	1,310	1,485	1,562	1,407	1,055
Background Growth	238	311	318	382	288	350	322
SPR	-	-	-	-	-	-	-
Sizewell C	1	2	9	1	9	1	1
Total	742	1,434	1,638	1,869	1,859	1,758	1,379

Sizewell C HGV Deliveries

7.1.14. Table 41 shows the HGV deliveries per hour to the Sizewell C Master Lord Industrial Estate in the 2034 Operational Phase scenario. These HGVs were modelled as vehicle type “202: HGV SZC” and assigned to “Public Transport Lines” with fixed routes and equally spaced departure times.

Table 41 – 2034 Sizewell C HGV deliveries

Delivery Site	Direction	6-7am	7-8am	8-9am	3-4pm	4-5pm	5-6pm	6-7pm
Master Lord Industrial Estate	Inbound	0	1	0	0	0	0	0
	Outbound	0	0	1	0	0	0	0
Total		0	1	1	0	0	0	0

7.2. SCENARIO PERFORMANCE COMPARISON

7.2.1. This section presents the performance comparison between the validated base year scenario (“2015”), the Reference Case scenario for 2034 (“2034 RC”), and the 2034 Operational Phase scenario (“2034 OP”) with Sizewell C construction traffic.

NETWORK-WIDE PERFORMANCE

7.2.2. Table 42 shows a series of network-wide statistics that were extracted from the outputs of the four different scenarios.

Table 42 – Network Performance Model Results

	AM			PM		
	2015	2034 RC	2034 OP	2015	2034 RC	2034 OP
Total Time Taken (h)	230	302	302	409	526	517
Total Distance (km)	13,622	17,579	17,501	23,941	29,992	29,604
Total Vehicles	3,118	3,936	3,862	5,831	7,207	7,021
Total Delay (h)	23	34	35	43	66	62
Avg. Time (s) / Vehicle	266	276	282	253	263	265
Avg. Time (s) / Mile	98	99	100	99	102	101
Avg. Distance (m) / Vehicle	4,370	4,467	4,532	4,105	4,162	4,217
Avg. Speed (mph)	37	36	36	36	35	36
Avg. Speed (kph)	59	58	58	59	57	57
Avg. Delay / Vehicle (s)	26	31	33	26	33	32

7.2.3. During the AM and PM peaks, the network-wide statistics show that time, distance and delay have a linear relationship with the number of vehicles in the network. This means that the Sizewell C extra vehicles experience a similar time, distance and delay as the vehicles from the Reference Case and thus the network is not impacted.

7.2.4. Reviewing the relative statistics, it can be seen that the variation between the different scenarios is low. For example, the VISSIM model predicts that the average driver will experience a delay increase of 2 seconds (+6%) in the 2034 OP AM period scenario compared to the Reference Case whilst during the PM peak, the average delay per vehicle is decreased by 1 seconds (-3%).

7.2.5. This change in average delay is relatively low and hence does not have a significant impact in the network. The average speed throughout the network stays the same during both peak periods in the Operational Phase scenario compared to the Reference Case.

7.2.6. Figure 48 shows the average journey time along the A12 for each scenario.

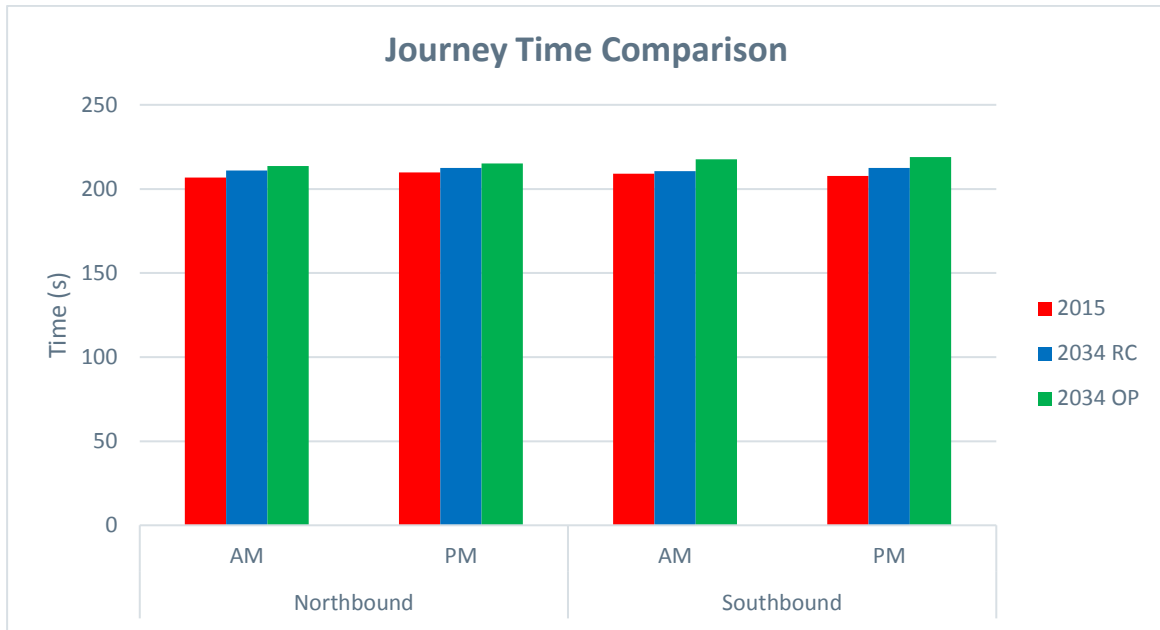


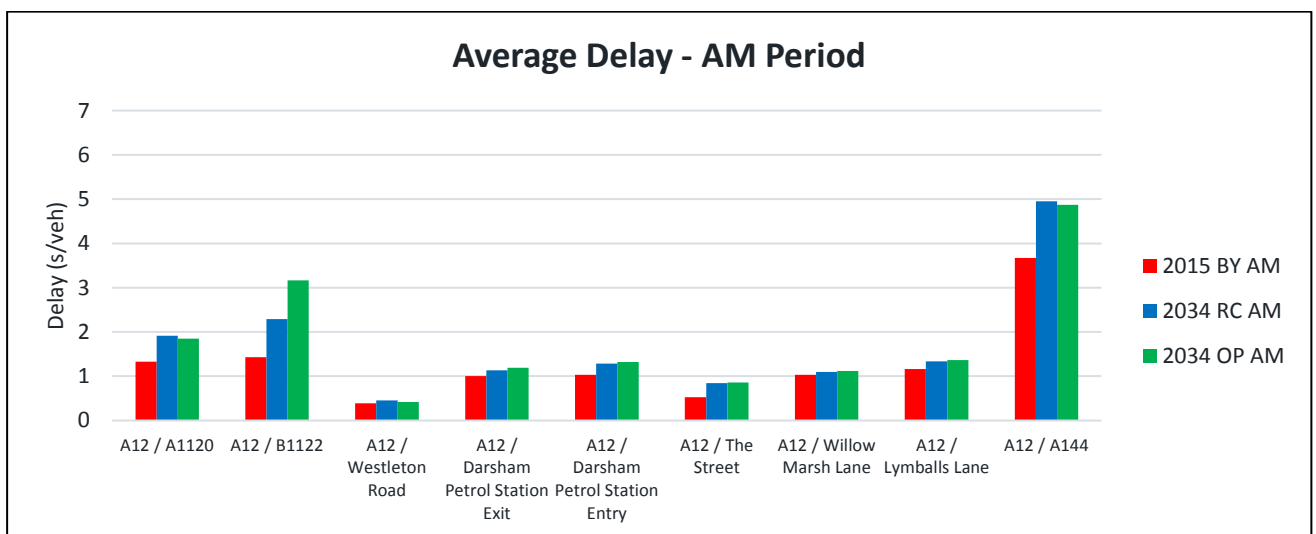
Figure 48 – 2034 Journey Time Comparison

7.2.7. The Operational Phase scenario has an average increase in journey time of 4 seconds compared to the Reference Case. This increase is mostly due to the introduction of both roundabouts (Northern park and ride site access and B1122 roundabout) along the A12, which add slight delay to the A12 movements. As the daily variation in travel times is likely to exceed a difference of 4 seconds per vehicle, it is unlikely that a change of this magnitude would be perceptible to A12 road users.

JUNCTION PERFORMANCE

7.2.8. Queue and average delay results have been collected for all junctions in the model in order to assess the performance of each junction.

7.2.9. Figure 49 shows the average delay for each junction over the whole AM and PM periods. The values shown below represent the average of all turning movements in the junction.



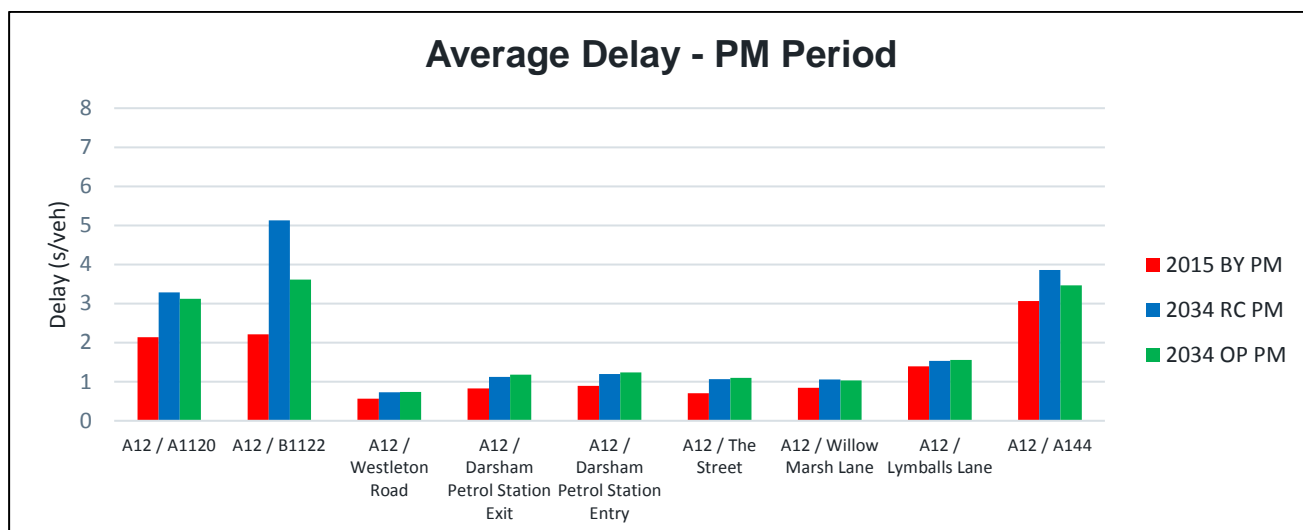


Figure 49 – Junction Average Delay

- 7.2.10. The graphs show that the level of delay is low at the A12 junctions with Westleton Road, Darsham Petrol Station, The Street, Willow Marsh Lane and Lymballs Lane. A higher level of delay is observed at the A12 / A1120, A12 / B1122 and A12 / A144 junctions. The addition of Sizewell construction traffic does not have a significant impact on any of the junctions. The A12 / B1122 junction upgrade to a roundabout leads to improvements in delay during the PM period.
- 7.2.11. Detailed results analysis is provided below for the main junctions in the network; A12 / A1120, A12 / B1122 and A12 / A144. The graphs shown below represent the maximum queue recorded during each 5-minute period, averaged over each iteration by scenario. A full set of queue graphs can be found in Appendix E.

A12 / A1120

- 7.2.12. Figure 50 shows the queue lengths during the AM period at the A12 / A1120 junction. The right-turn queues from the A12 southbound approach are predicted to be slightly shorter in the Operational Phase scenarios compared to the Reference Case, with a maximum queue length of 51m (nine vehicles) compared to 62m (ten vehicles). The queues on the High Street remain low during the entire modelled period in all scenarios.

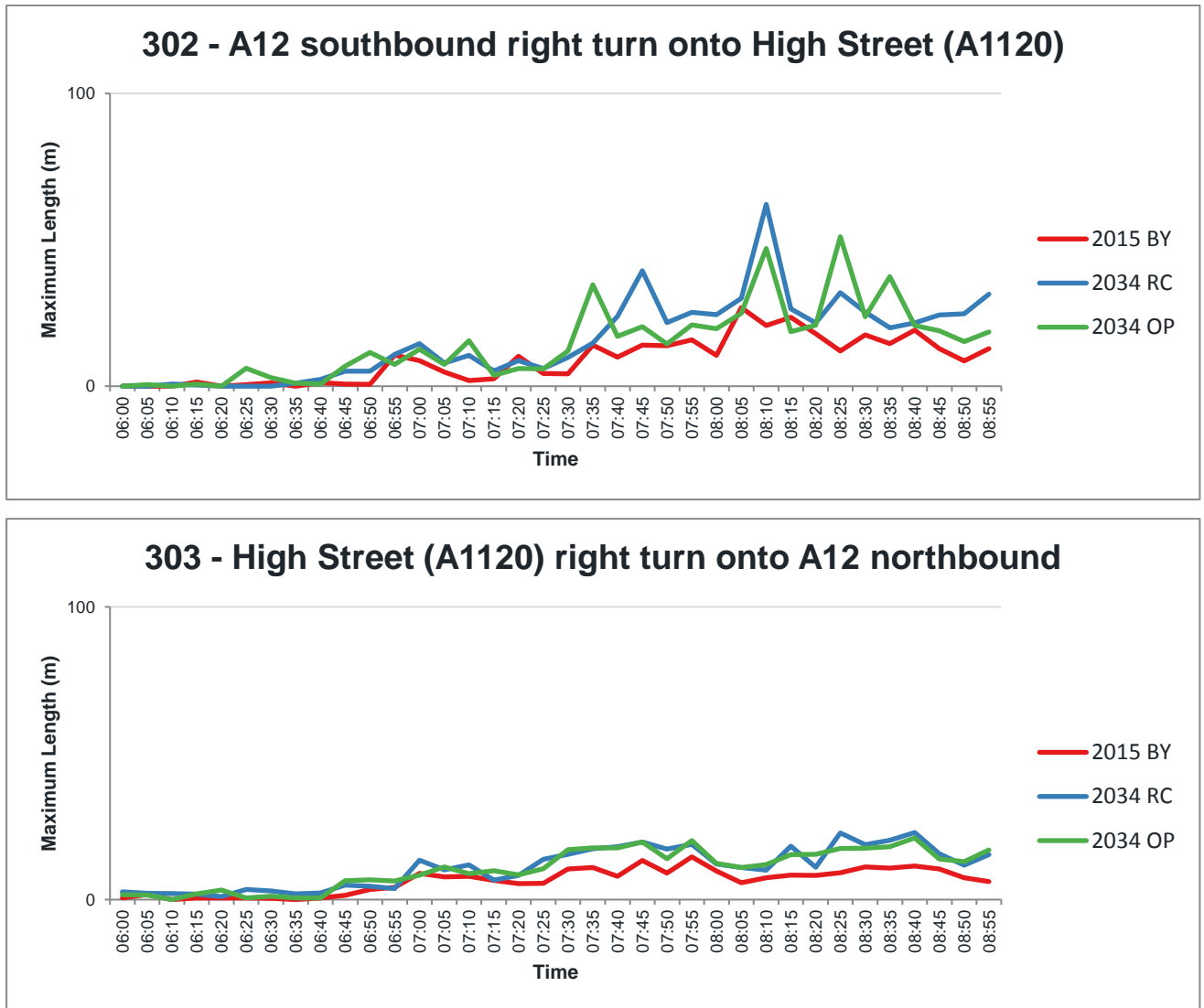


Figure 50 – A12 / A1120 AM Queue lengths

7.2.13. Due to the proximity between the A12 / A1120 and A12 / B1122 junctions, a more detailed analysis has been performed on the A12 southbound approach (queue counter #302) to determine whether the queue reaches the B1122 junction. As a result of the upgrade of the A12 / B1122 junction to a roundabout in the Operational Phase scenario, the stacking distance between the B1122 and A1120 junctions is increased from 150m (current layout) to 230m. Table 43 shows that the queue from the right turn into the A1120 doesn't reach the B1122 junction in the Operational Phase scenario.

Table 43 – A12 / A1120 queue spillback analysis – AM period

Scenario	Distance between A12 / A1120 and A12 / B1122 (m)	Percentage of runs where queue reaches A12/B1122 junction (%)	Length of time during which queue reaches A12/B1122 junction	Absolute maximum queue (m)
2034 Reference Case	150	1	< 5 min	188
2034 Operational Phase	230	0	-	139

7.2.14. Figure 51 shows the queue lengths during the PM period at the A12 / A1120 junction. The queue lengths are similar or slightly shorter in the Operational Phase compared to the Reference Case.

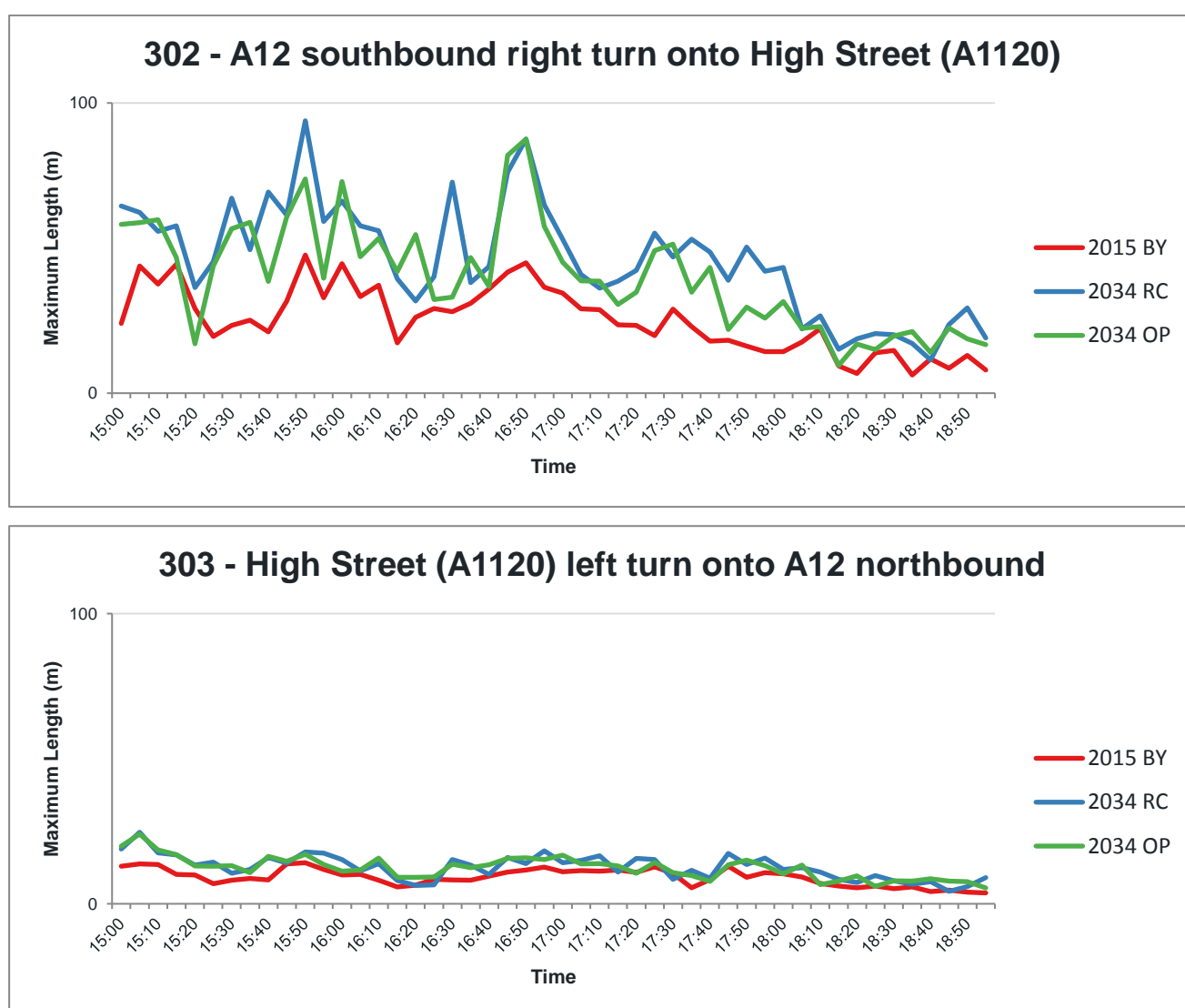


Figure 51 – A12 / A1120 PM Queue lengths

7.2.15. Due to the proximity between the A12 / A1120 and A12 / B1122 junctions, a more detailed analysis has been undertaken on the A12 southbound approach (queue counter #302) to determine the

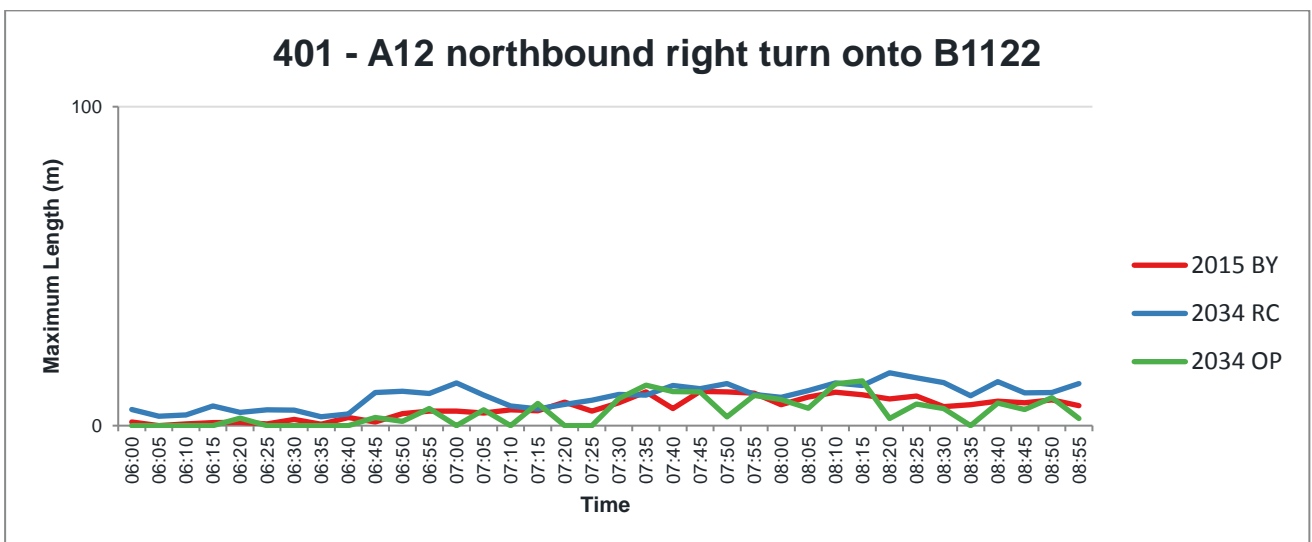
impact on the upstream junction, shown in Table 44. Even though the queue on the A12 southbound approach is sometimes longer in the Operational Phase scenario, the queue only reaches the upstream B1122 junction in 10% of runs, compared to 70% of the runs in the Reference Case. This is due to the increased stacking capacity provided by the introduction of the B1122 roundabout which is located further north than the existing junction. The queues that do form are only present briefly and quickly dissipate.

Table 44 – A12 / A1120 queue spillback analysis – PM period

Scenario	Distance between A12 / A1120 and A12 / B1122 (m)	Percentage of runs where queue reaches A12/B1122 junction (%)	Length of time during which queue reaches A12/B1122 junction	Absolute maximum queue (m)
2034 Reference Case	150	70	< 5 min	197
2034 Operational Phase	230	10	< 5 min	238

A12 / B1122

7.2.16. Figure 52 shows the queue lengths during the AM period at the A12 / B1122 junction. This junction was modelled as a T junction in the 2015 and 2034 RC scenarios and as a roundabout in the 2034 Operational Phase scenario. The graph indicates that the queue lengths in the Operational Phase scenario remains very low on the A12 northbound approach. There would be some queuing on A12 southbound approach due to the introduction of the roundabout but the maximum queue length is only 41m (seven vehicles). This queuing would occur on the approach to Yoxford, rather than in the village itself. On the B1122 the queue length is smaller in the Operational Phase scenario due to the introduction of the roundabout.



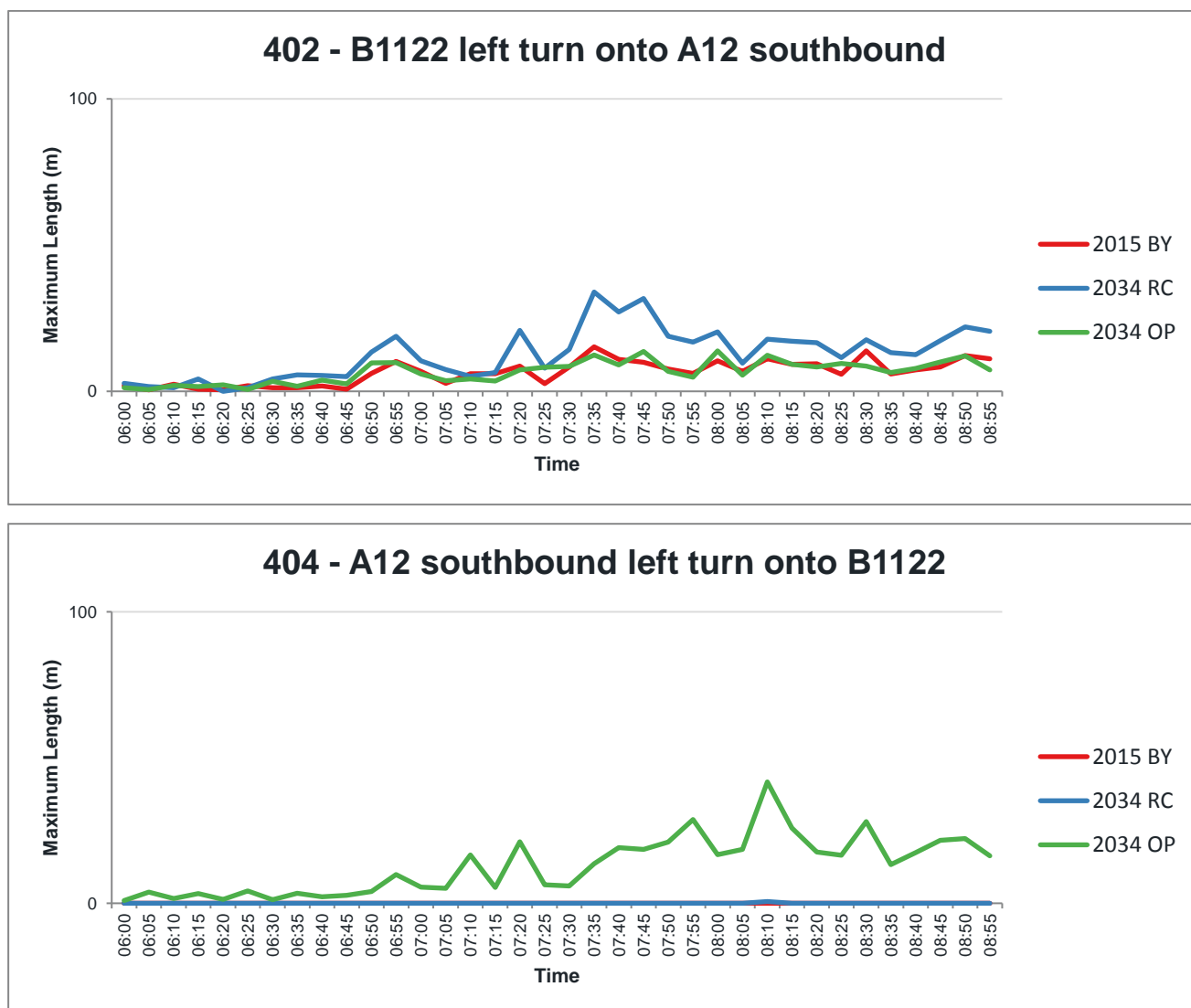


Figure 52 – A12 / B1122 AM Queue lengths

7.2.17. Due to the proximity between the A12 / A1120 and A12 / B1122 junctions, a more detailed analysis has been performed on the A12 northbound approach (queue counter #401) to determine the impact on the upstream A1120 junction, shown in Table 45. This table shows that the upstream A1120 junction would not be blocked in any of the scenarios and the absolute maximum queue is far from reaching the A1120 junction.

Table 45 – A12 / B1122 AM spillback analysis

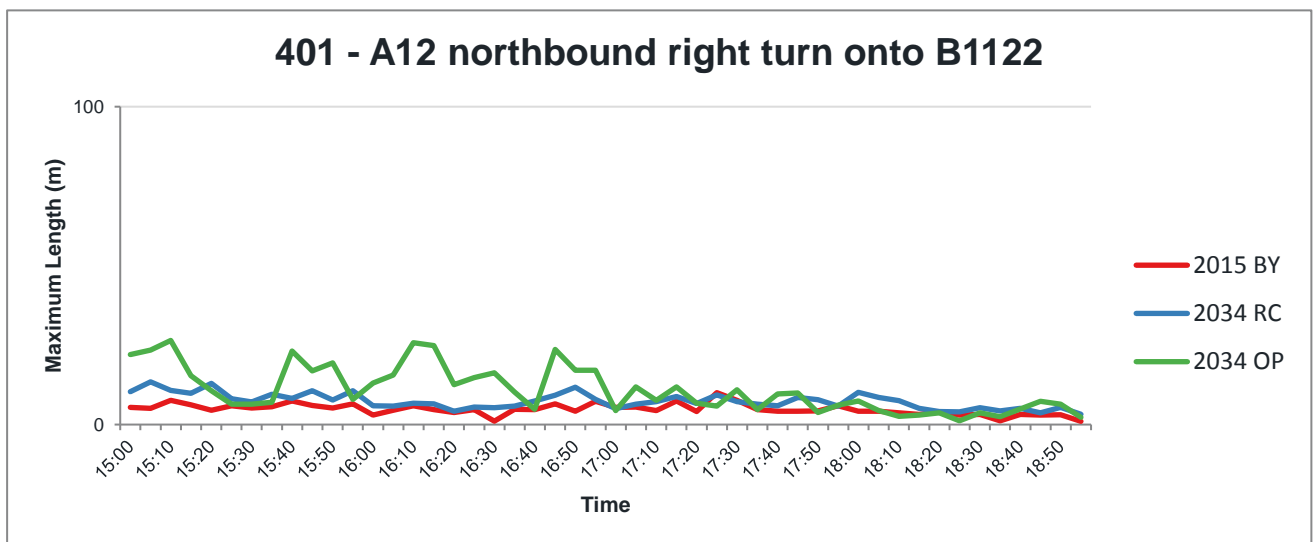
Scenario	Distance between A12 / A1120 and A12 / B1122 (m)	Percentage of runs where queue reaches A1120 junction (%)	Length of time during which queue reaches A1120 junction	Absolute maximum queue (m)
2034 Reference Case	150	0	-	40
2034 Operational Phase	230	0	-	61

- 7.2.18. Due to the change of the A12/B1122 junction from a T-junction to a roundabout, the arms experiencing queues are different to those in the Reference Case. Thus, additional analysis on the delay during the most congested hour (08:00-09:00) is shown in Table 46.
- 7.2.19. There is a reduction in delay at the junction, most significantly on the B1122 approach. The slight increase in delay on the A12 southbound remains low and is not significant.

Table 46 – A12 / B1122 AM maximum delay analysis

	Movement Delay (s/veh) 08:00 – 09:00					
	A12 S – A12 N	A12 S – B1122	A12 N – A12 S	A12 N – B1122	B1122 – A12 S	B1122 – A12 N
2034 Reference Case	0	8	1	1	9	26
2034 Operational Phase	2	3	5	3	4	6

- 7.2.20. Figure 53 shows the queue lengths during the PM period at the A12 / B1122 junction. Due to the introduction of the roundabout in the Operational Phase scenario, the queue lengths are significantly lower than the Reference Case on the B1122 approach. They do however increase on the A12 approaches, with a maximum queue on the northbound approach of 48m (eight vehicles). Despite this queue, the junction does operate effectively in all scenarios. Queues dissipate quickly and are generally moving rather than stationary so little impact is felt at this location.



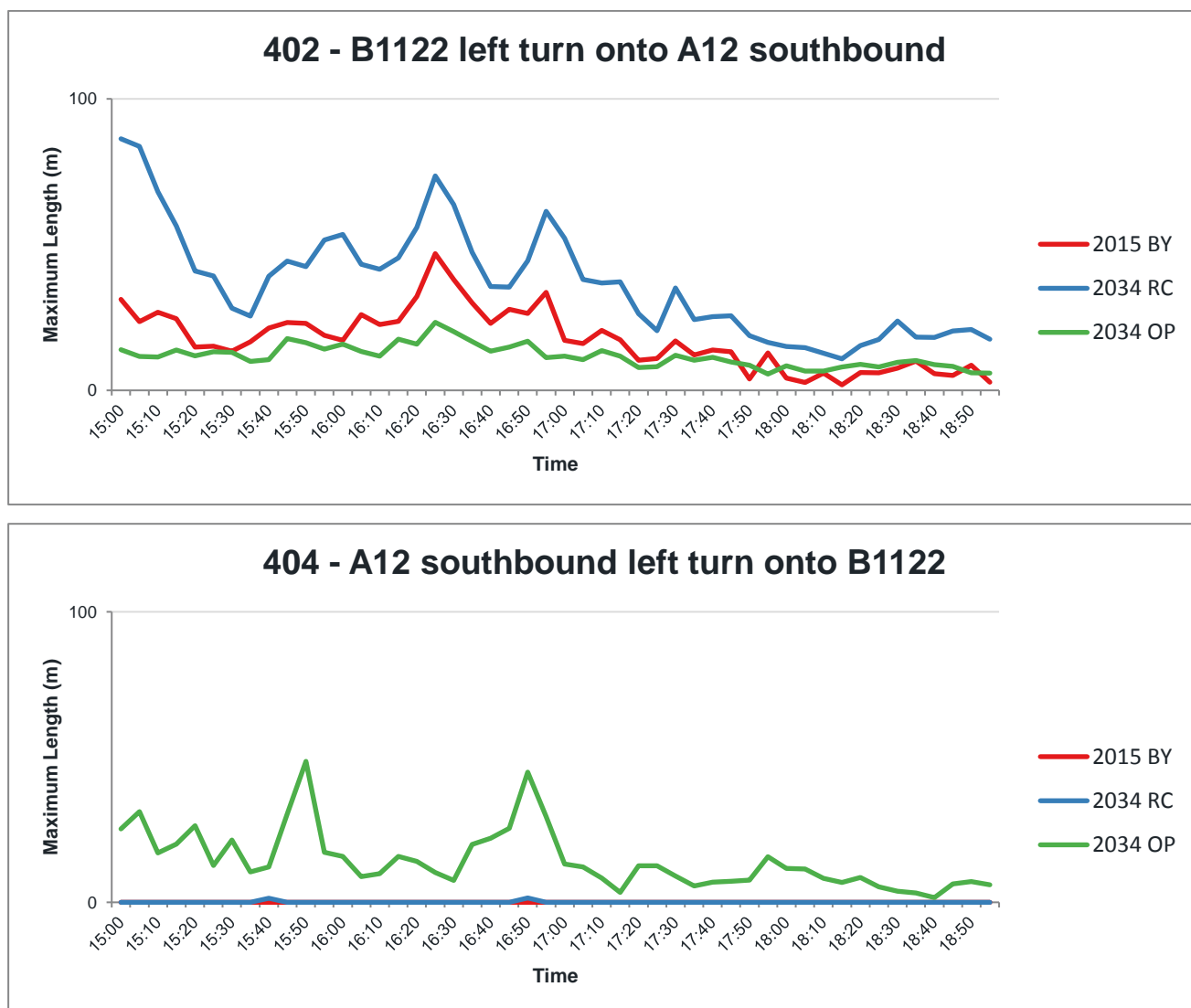


Figure 53 – A12 / B1122 PM Queue lengths

7.2.21. Due to the proximity between the A12 / A1120 and A12 / B1122 junctions, a more detailed analysis has been performed on the A12 northbound approach (queue counter #401) to determine the impact on the upstream A1120 junction, shown in Table 47. The table shows that the A12 northbound queue doesn't reach the A1120 junction in any of the scenarios and the absolute maximum queue does not reach this location.

Table 47 – A12 / B1122 queue spillback analysis – PM period

Scenario	Distance between A12 / A1120 and A12 / B1122 (m)	Percentage of runs where queue reaches A1120 junction (%)	Length of time during which queue reaches A1120 junction	Absolute maximum queue (m)
2034 Reference Case	150	0	-	64
2034 Operational Phase	230	0	-	113

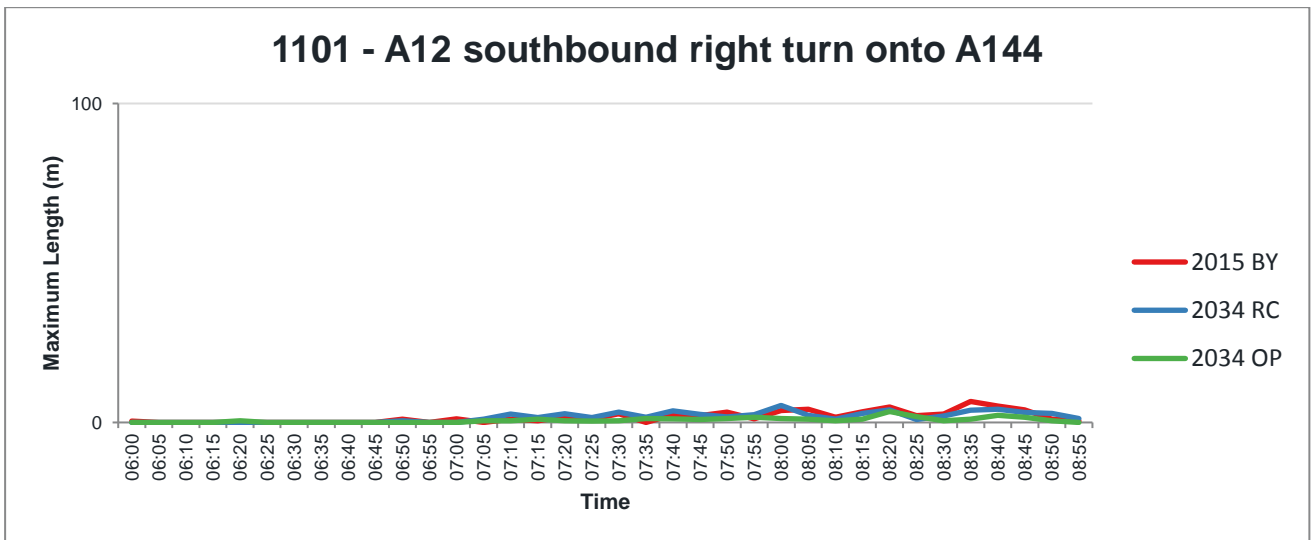
- 7.2.22. Due to the change of the A12/B1122 junction from a T-junction to a roundabout, the location of the queues at the approaches have changed. Thus, an additional analysis on the delay during the most congested hour (16:00 – 17:00) is shown in Table 48.
- 7.2.23. The level of delay experienced on the B1122 approach to the existing A12 junction in the Reference Case scenario during the PM period is significant. As a result of the upgrade to a roundabout, the B1122 traffic delay is reduced from 31s for southbound traffic and 49s for northbound traffic to 5-8s per vehicle. On the other hand, the delay on the A12 is slightly increased, but still remains low.

Table 48 – A12 / B1122 PM maximum delay analysis

	Movement Delay (s/veh) 16:00 – 17:00					
	A12 S – A12 N	A12 S – B1122	A12 N – A12 S	A12 N – B1122	B1122 – A12 S	B1122 – A12 N
2034 Reference Case	0	7	1	1	31	49
2034 Operational Phase	3	4	5	3	5	8

A12 / A144

- 7.2.24. Figure 54 shows the queue lengths during the AM period at the A12 / A144 junction. The second graph shows that the queue length at the A144 approach has similar queues in the Operational Phase when compared to the Reference Case. On the A12 southbound approach the queues are small in all scenarios.



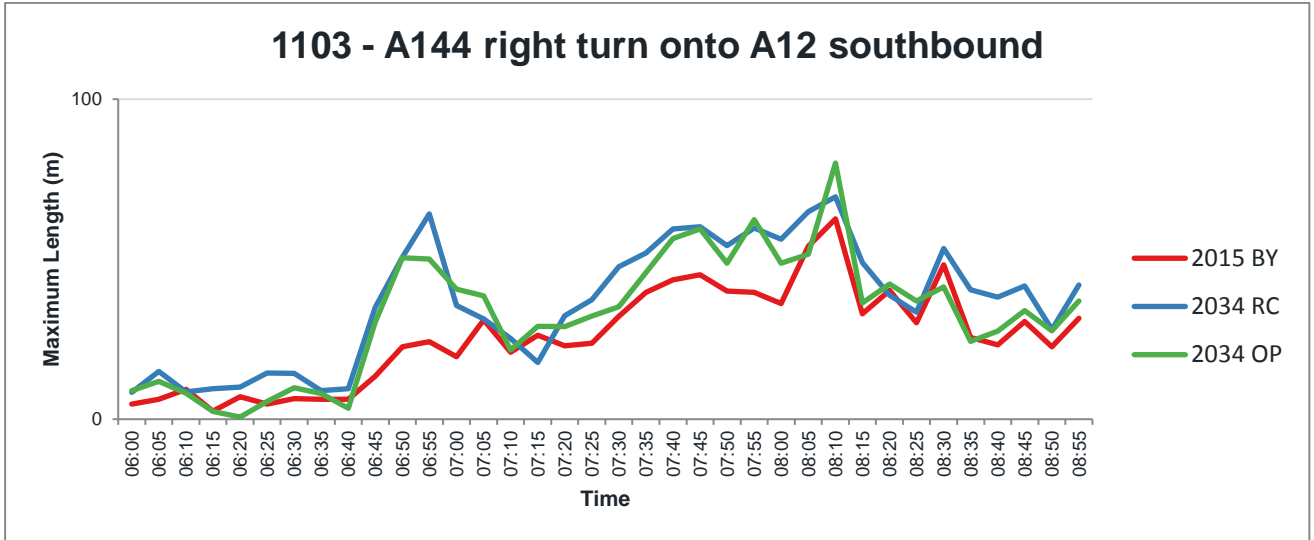
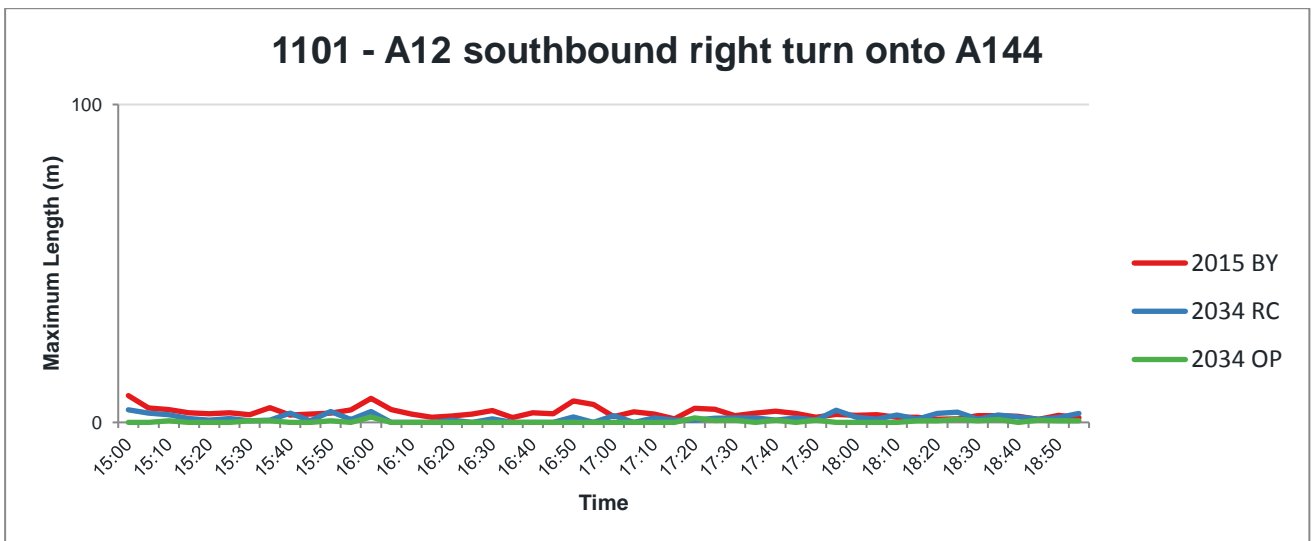


Figure 54 – A12 / A144 AM Queue lengths

7.2.25. Figure 55 shows the queue lengths during the PM period at the A12 / A144 junction. As in the AM period, there is little queuing on the A12 southbound right-turn lane during the PM period. The queues on the A144 are slightly shorter in the Operational Phase scenario compared to the Reference Case and are shorter overall in the PM compared to the AM period.



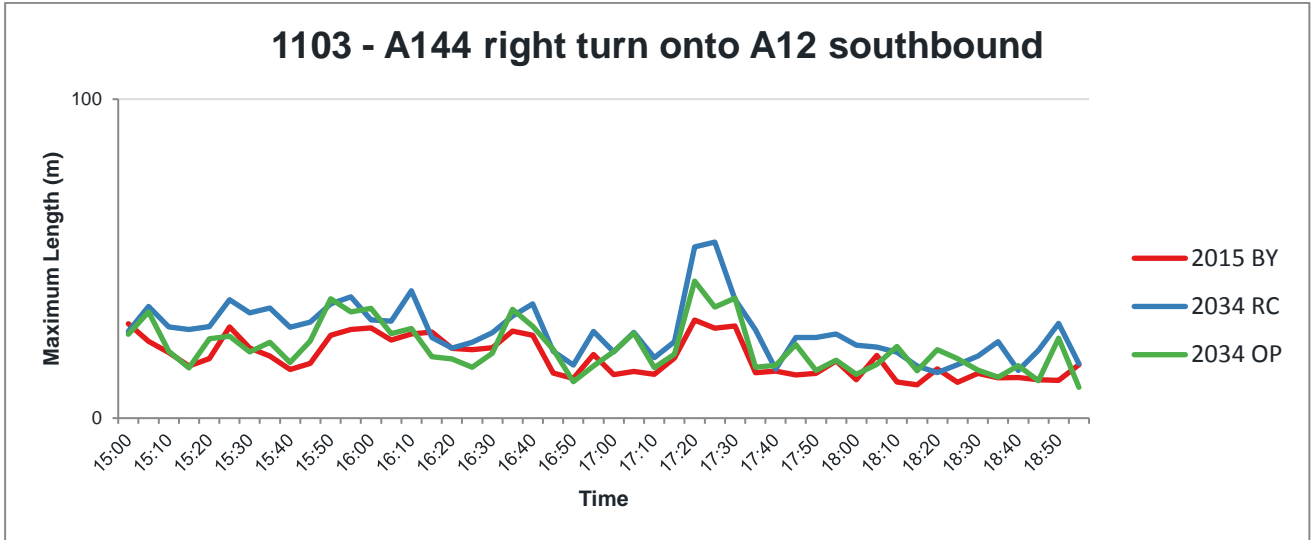


Figure 55 – A12 / A144 PM Queue lengths

PERFORMANCE SUMMARY

- 7.2.26. The impact of the Sizewell C construction traffic in the Operational Phase scenario on the network around Yoxford in 2034 is reasonably low.
- 7.2.27. The minor junctions in the study area do not experience a significant impact in their performance due to the addition of Sizewell C construction traffic. However, a small amount of impact is observed at the major junctions:
 - The upgrade of the A12 / B1122 junction to a roundabout significantly reduces the level of delay at the B1122 approach, especially during the PM period. Even though the upgrade of the junction to a roundabout results in slight increases in delay on the A12, these remain low and the roundabout operates efficiently. The queues at the A12 northbound approach to the roundabout remain low in all scenarios and never reach the upstream A1120 junction;
 - The average queues on the A12 southbound approach to A1120 are similar in the Reference Case and Operational Phase. Although the average maximum queue length is longer in the Operational Phase compared to the Reference Case, the likelihood of this queue reaching the upstream A12/B1122 junction is reduced from 70% in the Reference Case to 10% in the Operation Phase scenarios as the new roundabout would be placed further north;
 - The average queues on the A144 approach to the A12 show a similar or small decrease in the Operational Phase compared to the Reference Case.

8. CONCLUSIONS

- 8.1.1. The VISSIM model provides a robust evidence base which has been used to assess the operational performance of the network in 2023, 2028 and 2034 with and without the Sizewell C construction traffic. Key conclusions from the study are set out below.

2023 Early Years

- 8.1.2. The addition of Sizewell C vehicle trips in the 2023 Early Years scenario during the AM and PM period on the local road network in Yoxford does result in some temporary localised impacts.
- 8.1.3. The right turn queue from the A12 southbound onto the A1120 during the PM peak is predicted to occasionally reach back to the upstream B1122 junction. However, any queues reaching the B1122 are predicted to be present for no more than five minutes before dissipating and are therefore unlikely to have a significant impact on delays.
- 8.1.4. Relative to the Reference Case, queues and delay on the B1122 approach to the A12 during the AM and PM periods increase for short periods, although the junction still operates within capacity as queues do not continue to propagate during the modelled period. If it is found that the Sizewell C traffic has an impact on the performance of the B1122 minor arm in 2023, it may be possible to provide additional bus services to/from Sizewell C prior to the provision of the proposed roundabout scheme by 2028.
- 8.1.5. Relative to the Reference Case, queues on the A144 approach to the A12 increase slightly during parts of the AM period, but do not impact the overall junction performance.

2028 Peak Construction

- 8.1.6. The Sizewell C additional vehicle trips in the 2028 Peak Construction scenario have some impact on the local road network around Yoxford. Journey times along the A12 and congestion levels are increased, but the increase is unlikely to be outside of daily variation and therefore not perceptible.
- 8.1.7. The maximum queue on the A12 southbound approach to the A1120 junction increases due to the additional Sizewell C traffic. However, the likelihood of this queue reaching the upstream B1122 junction is lower because of the presence of the provision of the B1122 roundabout which provides an increased stacking distance between the A11220 and B1122.
- 8.1.8. Due to the proposed A12 / B1122 roundabout, delays are significantly reduced on the B1122 approach relative to the Reference Case, especially during the PM period. Even though the junction upgrade is predicted to result in slight increases in delay on the A12, delay per vehicle is predicted to remain low and the roundabout is forecast to operate efficiently with minimal queues. Queues on the A12 northbound approach to the B1122 remain low in all scenarios and are unlikely to reach the upstream A1120 junction.
- 8.1.9. The proposed new roundabout for the northern park and ride site has a slight impact on queues and delays on the A12 approaches in the Peak Construction scenario, however these delays are low and the roundabout is predicted to operate efficiently.
- 8.1.10. Queue lengths and delays are expected to increase on the A144 approach to the A12 in the AM peak during the Peak Construction scenario due to an increase in flows on this approach. The maximum queue on the minor arm (A144) is expected to occur from 06:30 - 08:30 and is likely to reach approximately 11 vehicles in length in the 2028 Reference Case and up to 16 vehicles in

length in the Peak Construction scenario. During the other morning periods and throughout the afternoon periods the queues in the Peak Construction scenario are broadly similar to the 2028 Reference Case scenario.

- 8.1.11. The average delay per vehicle on the A144 approach increases during the morning periods in the 2028 Peak Construction scenario compared to the 2028 Reference Case due to the increase in flows. The largest increase in delay is found from 07:00-08:00, resulting in an average delay of 33s (Level of Service D) in the 2028 Peak Construction scenario compared to 16s (Level of Service C) in the 2028 Reference Case scenario. This is an increase of 17 seconds per vehicle on average which is likely to be within daily variation.
- 8.1.12. Whilst VISSIM suggests that the proposed mitigation scheme does not mitigate all of the impact caused by the additional Sizewell C traffic it is likely to improve throughput and safety at this location. Due to the additional complexity of the give-way behaviour between those waiting to use the central reservation and those already using it, the single lane dualled layout is more difficult to represent in VISSIM. The VISSIM model setup for the single lane dualled layout is considered to be more conservative in the way that the give-way behaviour rules are applied compared to the ghost island layout. The Peak Construction results are therefore felt to be a worst case and the A144 minor arm is likely to perform better than predicted by VISSIM.

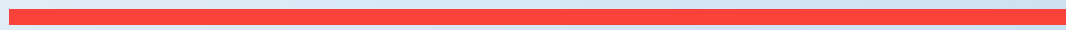
2034 Operational Phase

- 8.1.13. The impact of the Sizewell C traffic in the 2034 Operational Phase is relatively low. Journey times along the A12 are predicted to increase slightly but not outside of daily variation and are therefore unlikely to be noticeable.
- 8.1.14. The junction improvements at the A12 / B1122 and A12 / A144 reduce queues at these locations in the Operational Phase compared to the Reference Case. At the A12 / A1120 junction, queues are similar to the Reference Case.

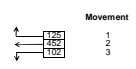
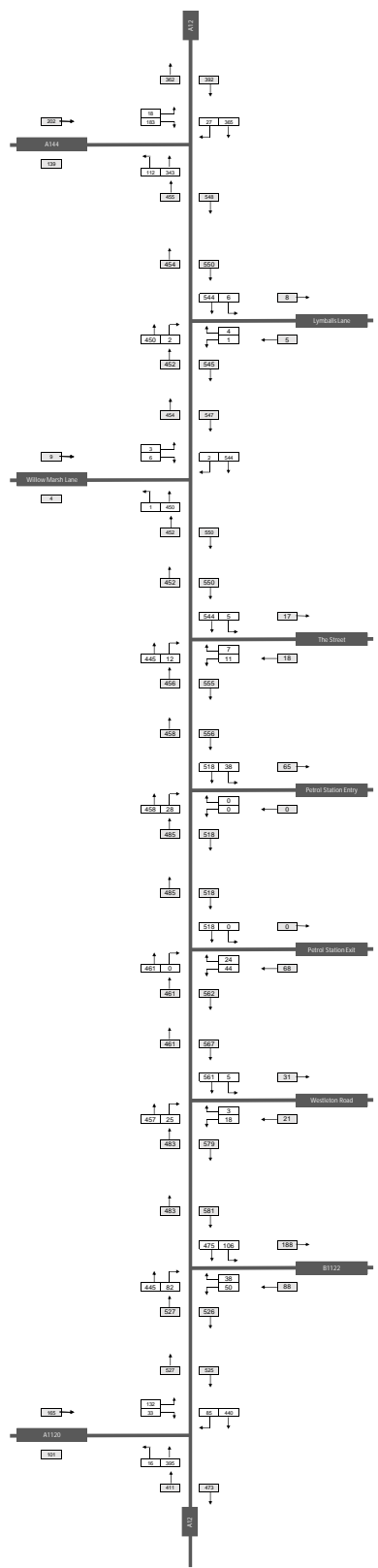
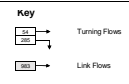
9. LIMITATIONS

- 9.1.1. The VISSIM modelling carried out for this assessment is based on traffic count and queue length data collected on a single day. It aims to represent a typical day through its validation against journey time data that has been collected over a number of days. It does not reflect unusual or periodic fluctuations in traffic demand or traffic conditions.
- 9.1.2. The VISSIM model has been developed for the purposes of assessing the impacts of additional traffic demand generated by the Sizewell C project, as well as associated proposed highway improvements. The level of detail within the model is proportionate to its purpose.

Appendix A

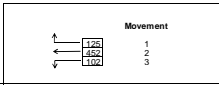
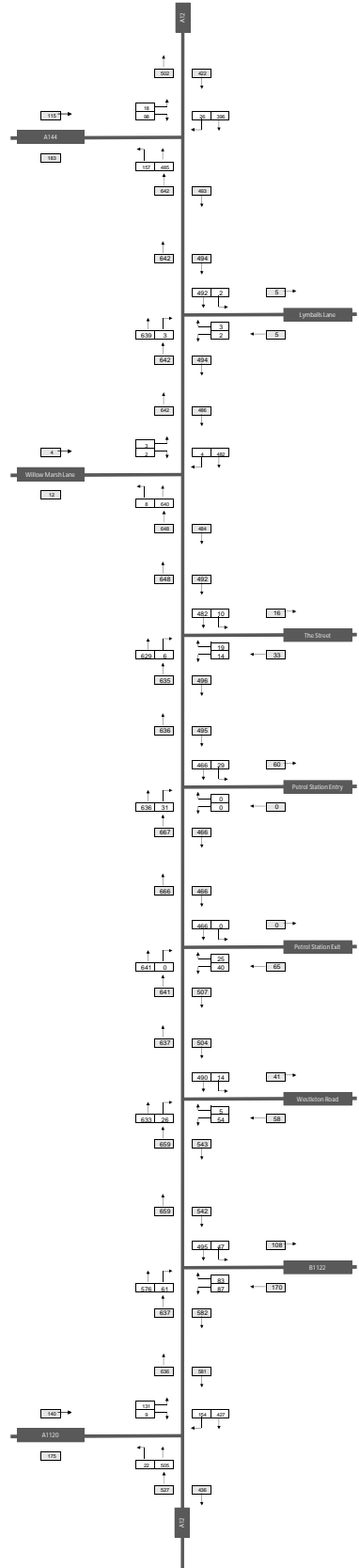


NETWORK TRAFFIC FLOW DIAGRAMS

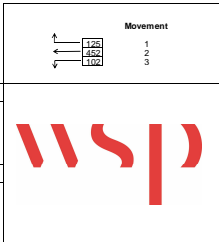


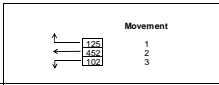
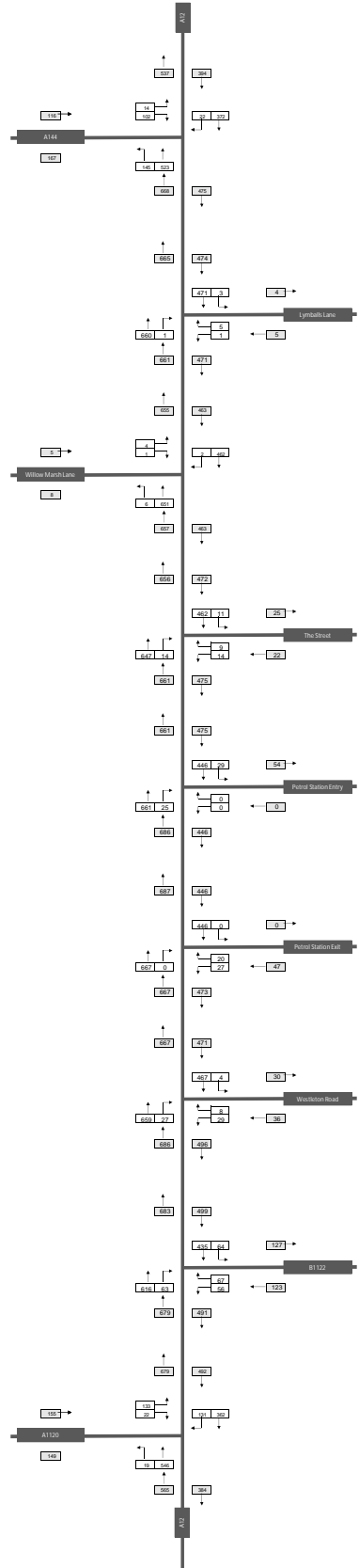
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Time Period: 08:00 - 09:00	Project: Sizewell C	Reference: 50400326





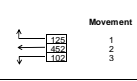
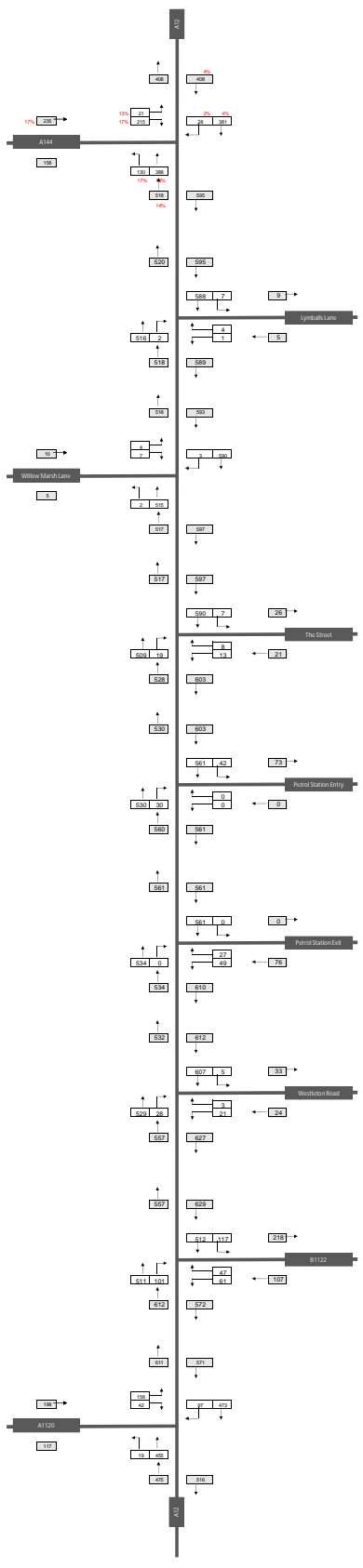
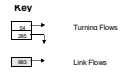
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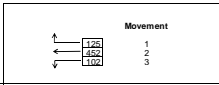
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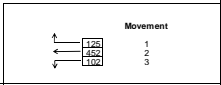
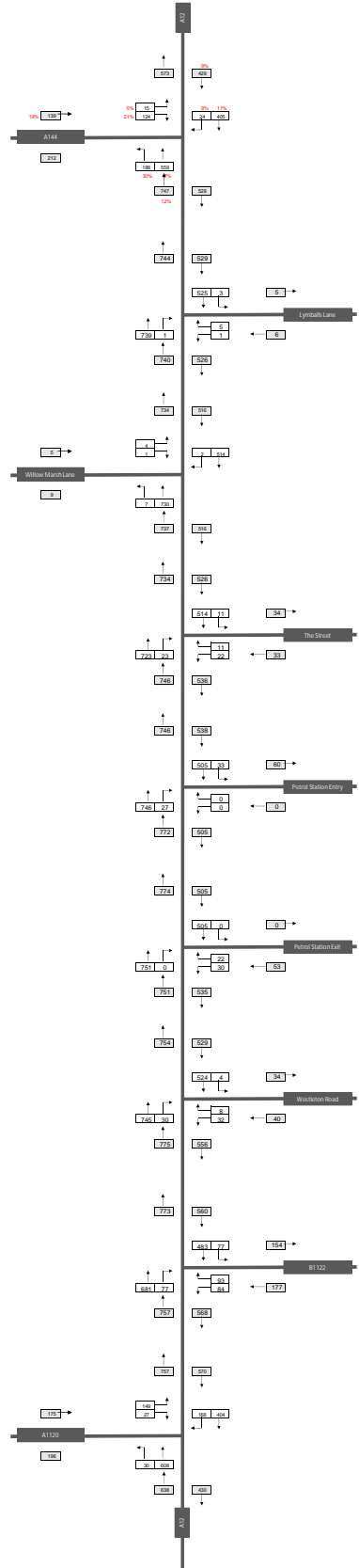
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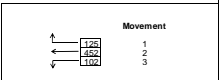
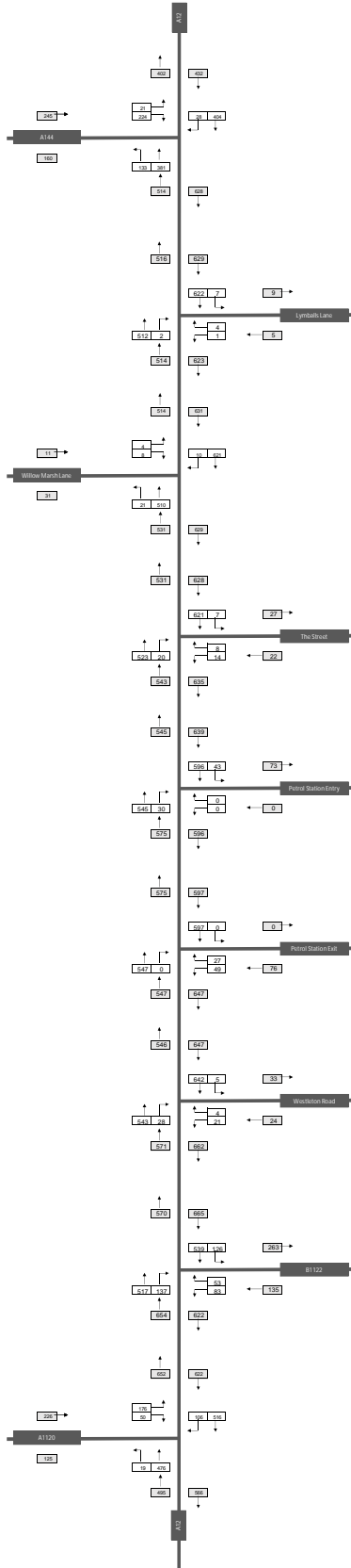
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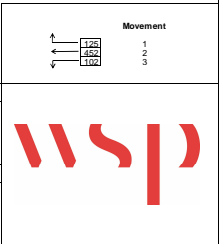


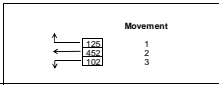
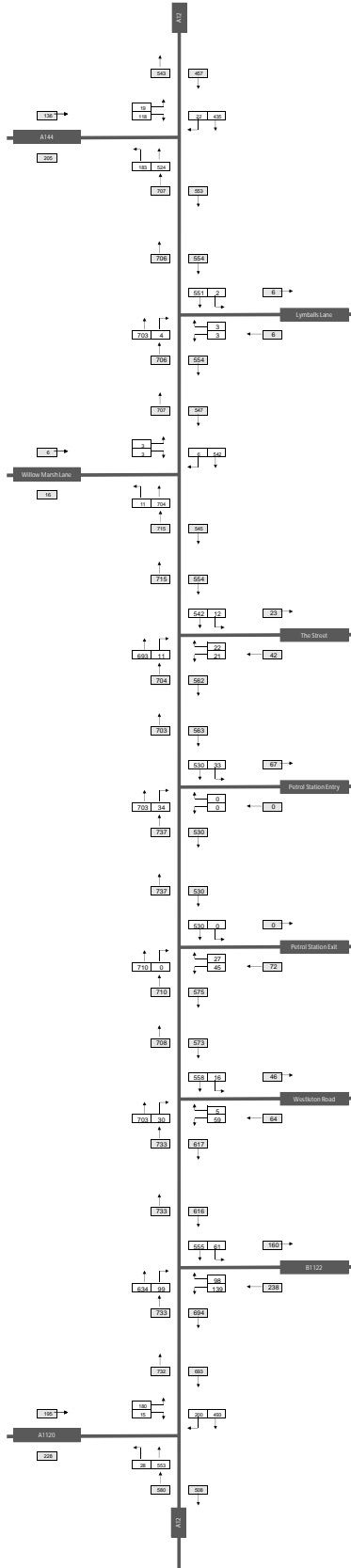
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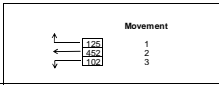
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Date Period: 08:00 - 09:00	Project: Sizewell C	Reference: 50400326





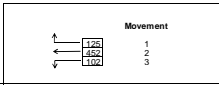
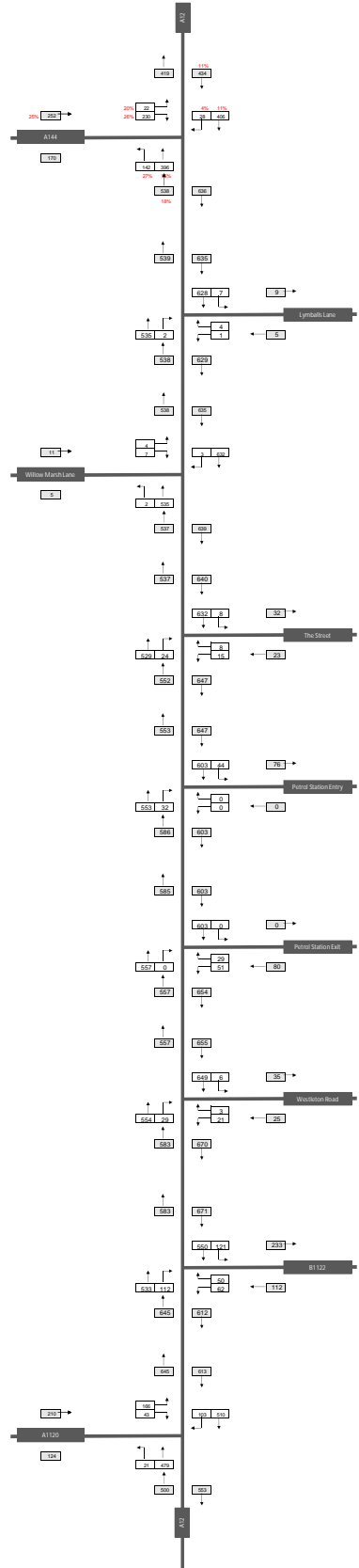
Title: 2023 EY IP	Client: EDF	Date: 24/09/2019
Title Period: 15:00 - 16:00	Project: Sizewell C	Reference: 50400326





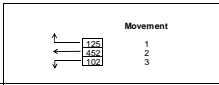
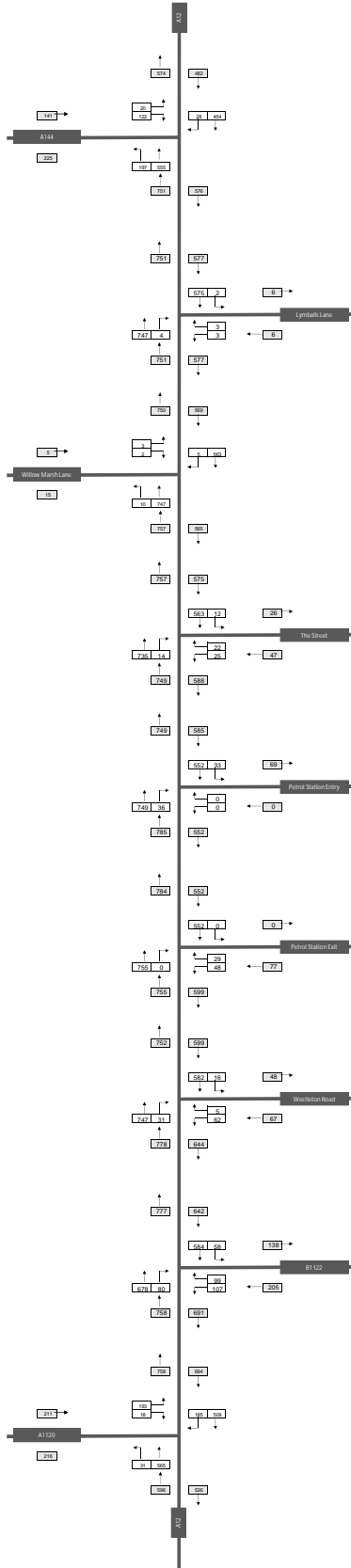
Date: 2023 EY PM	Client: EDF	Date: 24/09/2019
Date Period: 17:00 - 18:00	Project: Sizewell C	Reference: 50400326



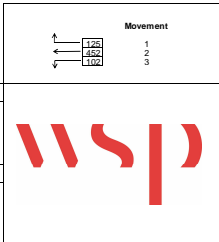


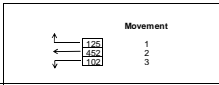
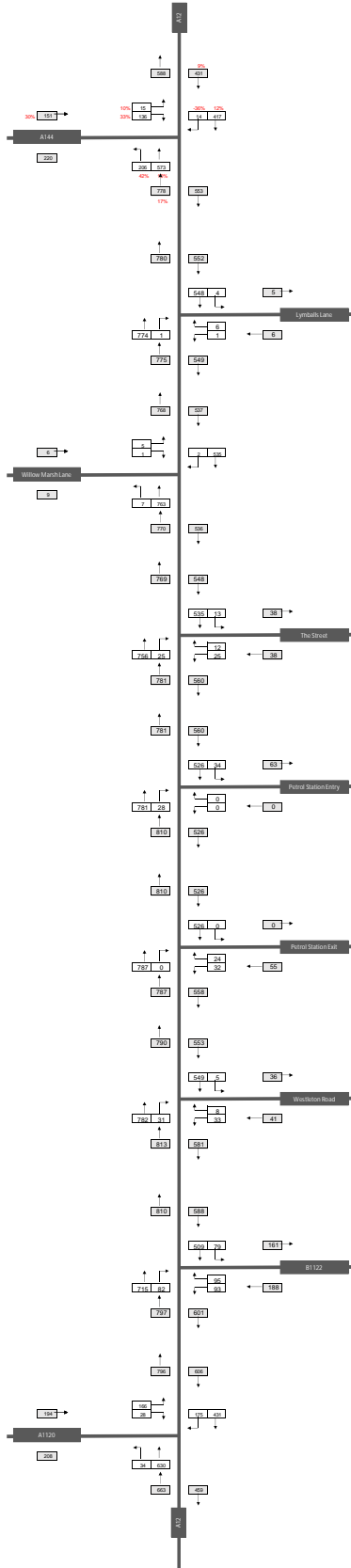
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2028 RC AM	EDF	24/09/2019
Time Period:	Project:	Reference:
08:00 - 09:00	Sizewell C	50400326





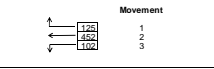
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Title Period 15:00 - 16:00	Project Sizewell C	Reference 50400326





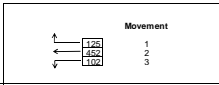
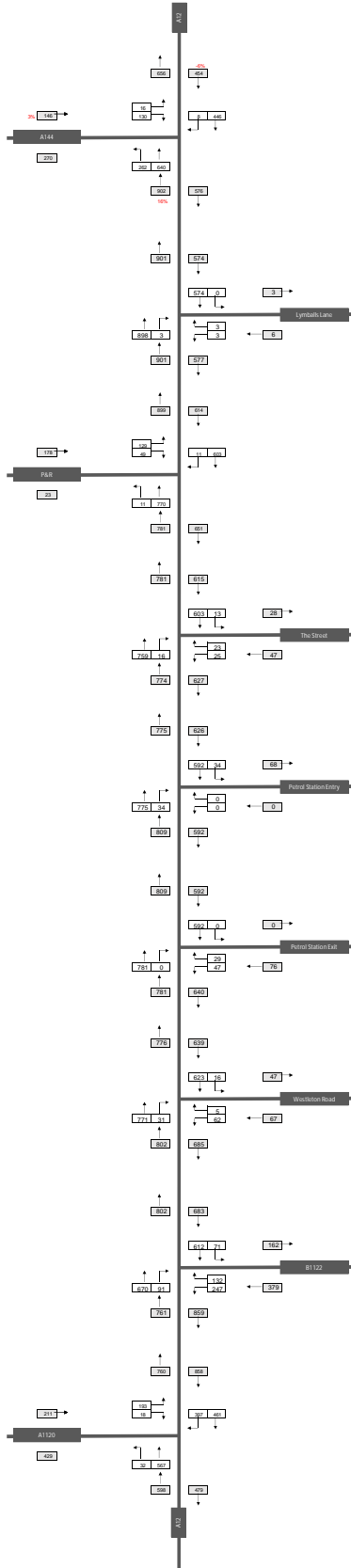
Title	Client	Date
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Time Period	Project	Reference
17:00 - 18:00	Sizewell C	50400326





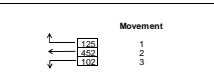
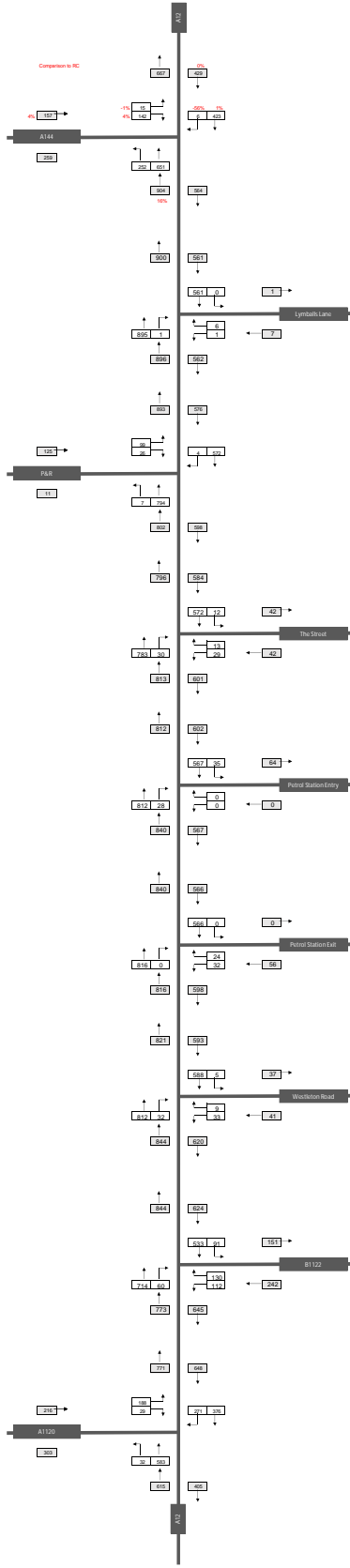
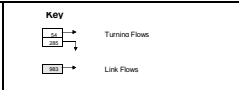
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Time Period: 08:00 - 09:00	Project: Sizewell C	Reference: 50400326





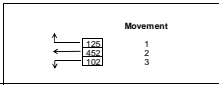
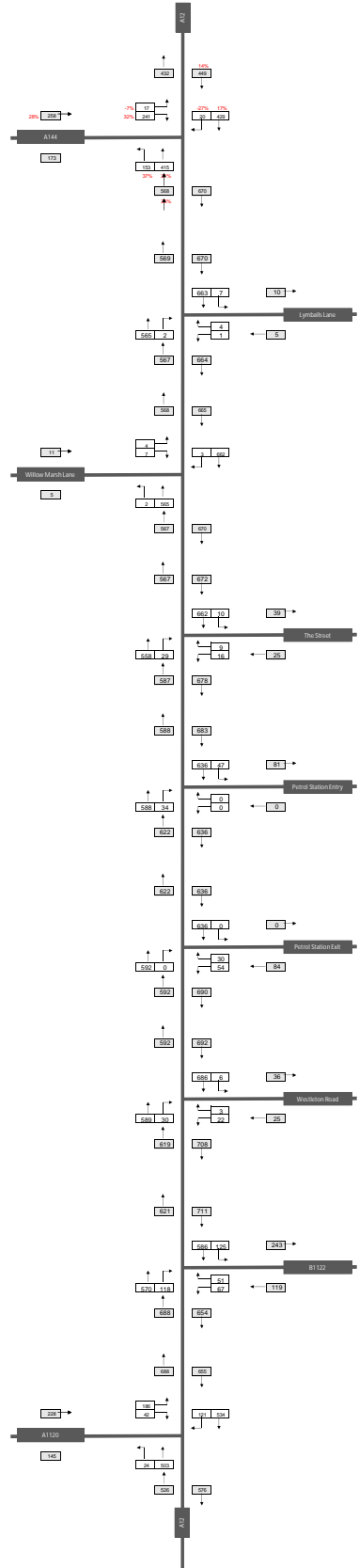
Title 2028 PC IP	Client EDF	Date 24/09/2019
Title Period 15:00 - 16:00	Project Sizewell C	Reference 50400326





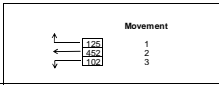
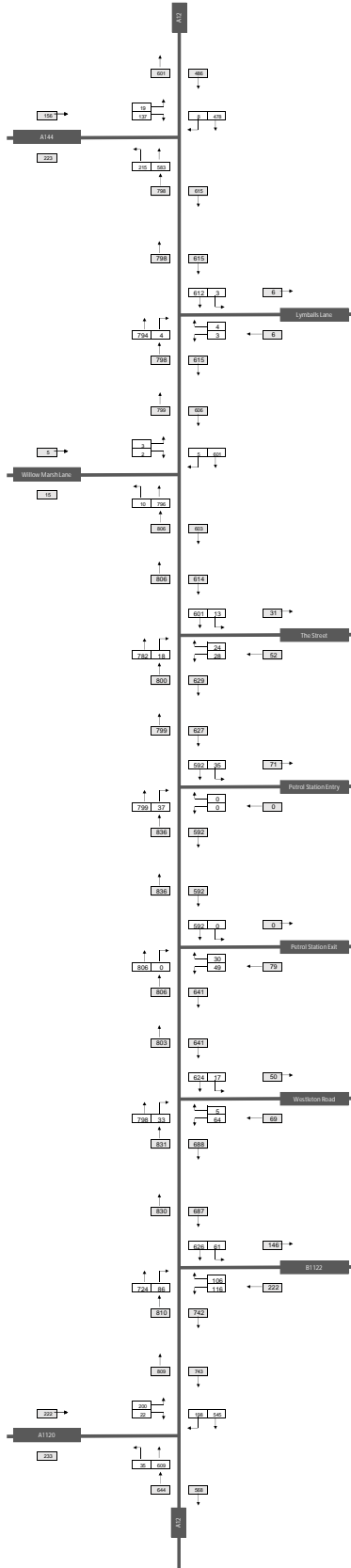
Title: 2028 PC PM	Client: EDF	Date: 24/09/2019
Title Period: 17:00 - 18:00	Project: Sizewell C	Reference: 50400326





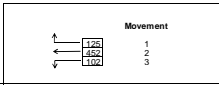
Title	Client	Date
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Time Period	Project	Reference
08:00 - 09:00	Sizewell C	50400326





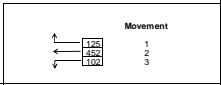
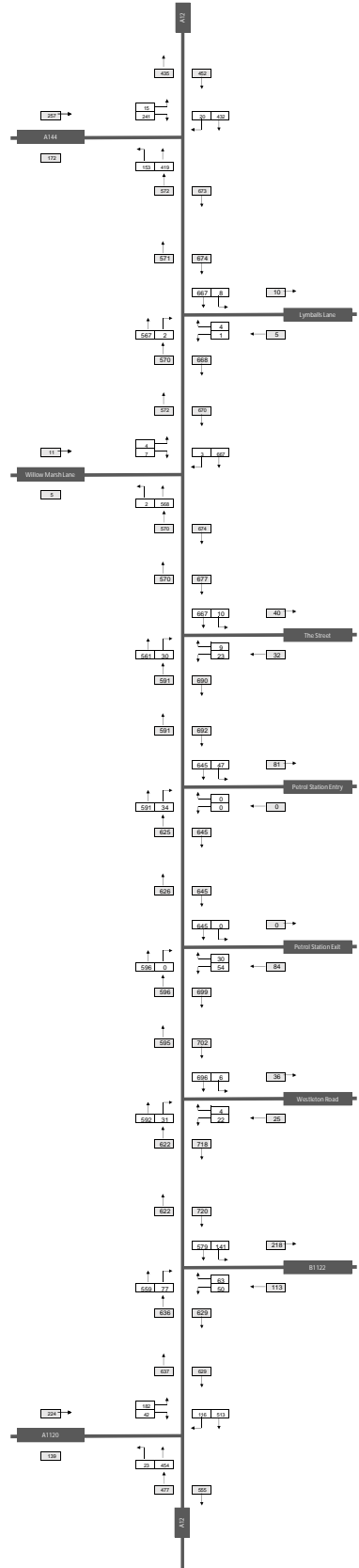
Title	Client	Date
2034 RC IP	EDF	24/09/2019
Time Period	Project	Reference
15:00 - 16:00	Sizewell C	50400326



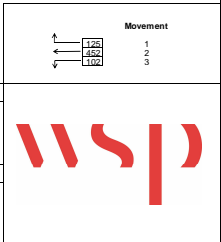


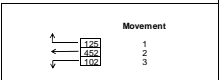
Title	Client	Date
2034 RC PM	EDF	24/09/2019
Time Period	Project	Reference
17:00 - 18:00	Sizewell C	50400326



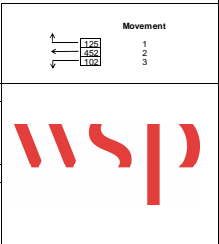


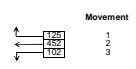
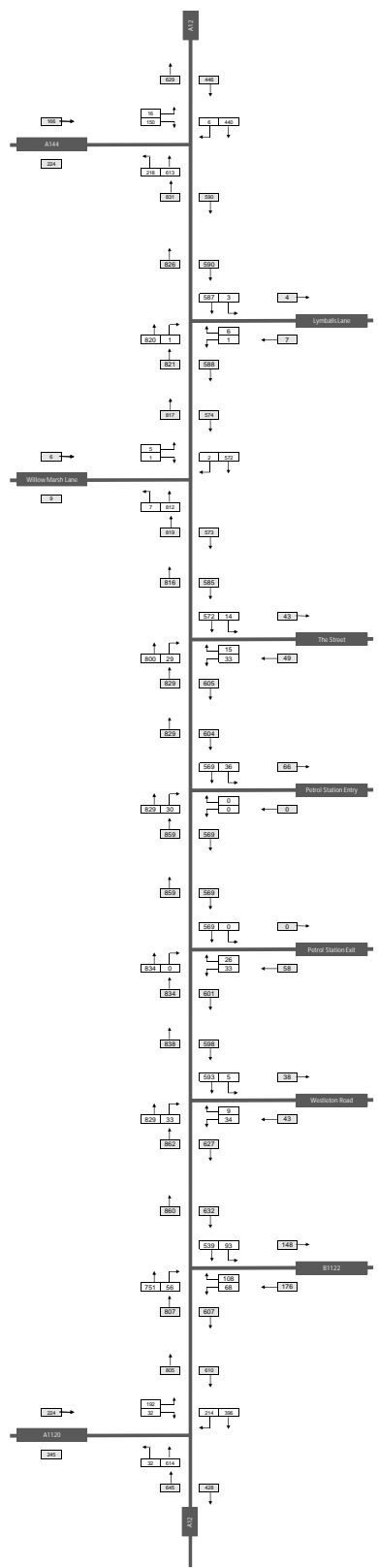
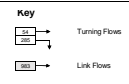
Date: 2024 09 AM	Client: EDF	Date: 24/09/2019
Date Period: 08:00 - 09:00	Project: Sizewell C	Reference: 50400326





Date: 2024 OP IP	Client: EDF	Date: 24/09/2019
Time Period: 15:00 - 16:00	Project: Sizewell C	Reference: 50400326





Title: 2034 OP PM	Client: EDF	Date: 24/09/2019
Time Period: 17:00 - 18:00	Project: Sizewell C	Reference: 50400326



Appendix B

BASE MODEL VALIDATION FIGURES





**Vehicle Flow Information
Calibration Statistics
All Vehicles
AM Peak**

Index	Junction	Name	Origin	Destination	Reference	Observed Flow	Modelled Flow	Difference	% Difference	G.E.H. Value (using hourly flows)	Flow Test (using hourly flows)
1	3	A1120 / A12	N	E	3:1:4	131	132	1	0.5%	0.1	Pass Low
2	3	A1120 / A12	N	W	3:1:5	34	33	-1	-2.6%	0.2	Pass Low
3	3	A1120 / A12	W	N	3:4:3	16	16	0	-0.6%	0.0	Pass Low
4	3	A1120 / A12	W	E	3:4:4	396	395	-1	-0.2%	0.0	Pass Low
5	3	A1120 / A12	E	N	3:5:3	83	85	2	2.4%	0.2	Pass Low
6	3	A1120 / A12	E	W	3:5:5	438	439	1	0.2%	0.0	Pass Low
7	4	A12 / B1122	W	E	4:8:9	445	445	0	0.0%	0.0	Pass Low
8	4	A12 / B1122	W	S	4:8:10	82	82	0	0.1%	0.0	Pass Low
9	4	A12 / B1122	S	E	4:11:9	38	38	0	-0.3%	0.0	Pass Low
10	4	A12 / B1122	S	W	4:11:12	53	50	-3	-5.1%	0.4	Pass Low
11	4	A12 / B1122	E	S	4:13:10	100	106	6	5.9%	0.6	Pass Low
12	4	A12 / B1122	E	W	4:13:12	468	475	7	1.5%	0.3	Pass Low
13	5	A12 / Westleton Rd	S	N	5:16:17	457	457	0	0.1%	0.0	Pass Low
14	5	A12 / Westleton Rd	S	E	5:16:19	26	25	-1	-3.1%	0.2	Pass Low
15	5	A12 / Westleton Rd	N	S	5:55:13	550	562	12	2.1%	0.5	Pass Low
16	5	A12 / Westleton Rd	N	E	5:55:19	4	5	1	32.5%	0.6	Pass Low
17	5	A12 / Westleton Rd	E	S	5:20:13	18	18	0	0.6%	0.0	Pass Low
18	5	A12 / Westleton Rd	E	N	5:20:17	3	3	0	10.0%	0.2	Pass Low
19	6	A12 / Petrol Station Exit	S	N	6:17:17	442	461	19	4.3%	0.9	Pass Low
20	6	A12 / Petrol Station Exit	N	S	6:55:55	510	518	8	1.6%	0.4	Pass Low
21	6	A12 / Petrol Station Exit	E	N	6:28:17	24	24	0	0.8%	0.0	Pass Low
22	6	A12 / Petrol Station Exit	E	S	6:28:55	44	44	0	0.2%	0.0	Pass Low
23	7	A12 / Petrol Station Entrance	S	N	7:17:17	433	458	25	5.7%	1.2	Pass Low
24	7	A12 / Petrol Station Entrance	S	E	7:17:47	27	28	1	1.9%	0.1	Pass Low
25	7	A12 / Petrol Station Entrance	N	S	7:55:55	510	518	8	1.5%	0.3	Pass Low
26	7	A12 / Petrol Station Entrance	N	E	7:55:47	37	38	1	1.9%	0.1	Pass Low
27	8	A12 / The St	S	N	8:33:33	445	445	0	-0.1%	0.0	Pass Low
28	8	A12 / The St	S	E	8:33:35	12	12	0	-2.5%	0.1	Pass Low
29	8	A12 / The St	N	S	8:34:34	536	544	8	1.5%	0.4	Pass Low
30	8	A12 / The St	N	E	8:34:35	6	5	-1	-10.0%	0.3	Pass Low
31	8	A12 / The St	E	N	8:36:33	7	7	0	1.4%	0.0	Pass Low
32	8	A12 / The St	E	S	8:36:34	11	11	0	0.9%	0.0	Pass Low
33	9	A12 / Willow Marsh Ln	S	N	9:33:37	450	450	0	0.1%	0.0	Pass Low
34	9	A12 / Willow Marsh Ln	S	W	9:33:43	2	1	-1	-30.0%	0.5	Pass Low
35	9	A12 / Willow Marsh Ln	N	S	9:42:34	536	543	7	1.3%	0.3	Pass Low
36	9	A12 / Willow Marsh Ln	N	W	9:42:43	3	2	-1	-20.0%	0.4	Pass Low
37	9	A12 / Willow Marsh Ln	W	S	9:44:34	6	6	0	-3.3%	0.1	Pass Low
38	9	A12 / Willow Marsh Ln	W	N	9:44:37	3	3	0	3.3%	0.1	Pass Low
39	10	A12 / Lymballs Ln	S	N	10:37:37	451	450	-1	-0.2%	0.0	Pass Low
40	10	A12 / Lymballs Ln	S	E	10:37:45	2	2	0	-10.0%	0.1	Pass Low
41	10	A12 / Lymballs Ln	N	S	10:42:42	538	544	6	1.1%	0.2	Pass Low
42	10	A12 / Lymballs Ln	N	E	10:42:45	6	6	0	-1.7%	0.0	Pass Low
43	10	A12 / Lymballs Ln	E	N	10:46:37	3	4	1	23.3%	0.4	Pass Low
44	10	A12 / Lymballs Ln	E	S	10:46:42	1	1	0	-20.0%	0.2	Pass Low
45	11	A12 / A144	S	N	11:37:38	341	343	2	0.6%	0.1	Pass Low
46	11	A12 / A144	S	W	11:37:40	113	112	-1	-1.2%	0.1	Pass Low
47	11	A12 / A144	W	N	11:41:38	19	18	-1	-3.2%	0.1	Pass Low
48	11	A12 / A144	W	S	11:41:42	178	182	4	2.4%	0.3	Pass Low
49	11	A12 / A144	N	W	11:49:40	27	27	0	0.0%	0.0	Pass Low
50	11	A12 / A144	N	S	11:49:42	366	365	-1	-0.2%	0.0	Pass Low

	Sum Obs.	Sum Mod.	Diff	% Diff	Ave. GEH
Overall Stats	9431	9539	108	1.1%	0.2



**Vehicle Flow Information
Calibration Statistics
Car Vehicles
AM Peak**

Index	Junction	Name	Origin	Destination	Reference	Observed Flow	Modelled Flow	Difference	% Difference	G.E.H. Value (using hourly flows)	Flow Test (using hourly flows)
1	3	A1120 / A12	N	E	3:1:4	97	97	0	-0.2%	0.0	Pass Low
2	3	A1120 / A12	N	W	3:1:5	27	27	0	-0.7%	0.0	Pass Low
3	3	A1120 / A12	W	N	3:4:3	13	13	0	-3.1%	0.1	Pass Low
4	3	A1120 / A12	W	E	3:4:4	273	273	0	-0.1%	0.0	Pass Low
5	3	A1120 / A12	E	N	3:5:3	68	70	2	2.6%	0.2	Pass Low
6	3	A1120 / A12	E	W	3:5:5	333	335	2	0.5%	0.1	Pass Low
7	4	A12 / B1122	W	E	4:8:9	307	307	0	0.0%	0.0	Pass Low
8	4	A12 / B1122	W	S	4:8:10	63	63	0	-0.2%	0.0	Pass Low
9	4	A12 / B1122	S	E	4:11:9	24	24	0	-0.4%	0.0	Pass Low
10	4	A12 / B1122	S	W	4:11:12	46	44	-2	-4.1%	0.3	Pass Low
11	4	A12 / B1122	E	S	4:13:10	75	80	5	6.0%	0.5	Pass Low
12	4	A12 / B1122	E	W	4:13:12	355	361	6	1.8%	0.3	Pass Low
13	5	A12 / Westleton Rd	S	N	5:16:17	312	312	0	0.1%	0.0	Pass Low
14	5	A12 / Westleton Rd	S	E	5:16:19	19	19	0	-2.1%	0.1	Pass Low
15	5	A12 / Westleton Rd	N	S	5:55:13	413	422	9	2.2%	0.4	Pass Low
16	5	A12 / Westleton Rd	N	E	5:55:19	3	4	1	23.3%	0.4	Pass Low
17	5	A12 / Westleton Rd	E	S	5:20:13	17	18	0	2.9%	0.1	Pass Low
18	5	A12 / Westleton Rd	E	N	5:20:17	2	2	0	15.0%	0.2	Pass Low
19	6	A12 / Petrol Station Exit	S	N	6:17:17	314	314	0	0.1%	0.0	Pass Low
20	6	A12 / Petrol Station Exit	N	S	6:55:55	390	397	7	1.8%	0.3	Pass Low
21	6	A12 / Petrol Station Exit	E	N	6:28:17	18	18	0	0.0%	0.0	Pass Low
22	6	A12 / Petrol Station Exit	E	S	6:28:55	26	26	0	-0.8%	0.0	Pass Low
23	7	A12 / Petrol Station Entrance	S	N	7:17:17	296	314	18	6.1%	1.0	Pass Low
24	7	A12 / Petrol Station Entrance	S	E	7:17:47	18	18	0	2.2%	0.1	Pass Low
25	7	A12 / Petrol Station Entrance	N	S	7:55:55	390	397	7	1.7%	0.3	Pass Low
26	7	A12 / Petrol Station Entrance	N	E	7:55:47	23	24	1	2.2%	0.1	Pass Low
27	8	A12 / The St	S	N	8:33:33	305	305	0	-0.1%	0.0	Pass Low
28	8	A12 / The St	S	E	8:33:35	9	9	0	-3.3%	0.1	Pass Low
29	8	A12 / The St	N	S	8:34:34	403	410	7	1.7%	0.3	Pass Low
30	8	A12 / The St	N	E	8:34:35	4	4	0	-10.0%	0.2	Pass Low
31	8	A12 / The St	E	N	8:36:33	3	3	0	-3.3%	0.1	Pass Low
32	8	A12 / The St	E	S	8:36:34	10	10	0	1.0%	0.0	Pass Low
33	9	A12 / Willow Marsh Ln	S	N	9:33:37	307	307	0	0.0%	0.0	Pass Low
34	9	A12 / Willow Marsh Ln	S	W	9:33:43	1	1	0	-10.0%	0.1	Pass Low
35	9	A12 / Willow Marsh Ln	N	S	9:42:34	404	410	6	1.4%	0.3	Pass Low
36	9	A12 / Willow Marsh Ln	N	W	9:42:43	3	2	-1	-20.0%	0.4	Pass Low
37	9	A12 / Willow Marsh Ln	W	S	9:44:34	3	3	0	10.0%	0.2	Pass Low
38	9	A12 / Willow Marsh Ln	W	N	9:44:37	1	1	0	20.0%	0.2	Pass Low
39	10	A12 / Lymballs Ln	S	N	10:37:37	306	305	-1	-0.3%	0.0	Pass Low
40	10	A12 / Lymballs Ln	S	E	10:37:45	2	2	0	-10.0%	0.1	Pass Low
41	10	A12 / Lymballs Ln	N	S	10:42:42	406	411	5	1.2%	0.2	Pass Low
42	10	A12 / Lymballs Ln	N	E	10:42:45	5	5	0	-6.0%	0.1	Pass Low
43	10	A12 / Lymballs Ln	E	N	10:46:37	2	2	0	10.0%	0.1	Pass Low
44	10	A12 / Lymballs Ln	E	S	10:46:42	1	1	0	-20.0%	0.2	Pass Low
45	11	A12 / A144	S	N	11:37:38	225	226	1	0.6%	0.1	Pass Low
46	11	A12 / A144	S	W	11:37:40	83	81	-2	-2.0%	0.2	Pass Low
47	11	A12 / A144	W	N	11:41:38	14	13	-1	-5.0%	0.2	Pass Low
48	11	A12 / A144	W	S	11:41:42	132	136	4	2.9%	0.3	Pass Low
49	11	A12 / A144	N	W	11:49:40	20	20	0	-1.0%	0.0	Pass Low
50	11	A12 / A144	N	S	11:49:42	279	278	-1	-0.5%	0.1	Pass Low

	Sum Obs.	Sum Mod.	Diff	% Diff	Ave. GEH
Overall Stats	6850	6921	71	1.0%	0.2



**Vehicle Flow Information
Calibration Statistics
HGV Vehicles
AM Peak**

Index	Junction	Name	Origin	Destination	Reference	Observed Flow	Modelled Flow	Difference	% Difference	G.E.H. Value (using hourly flows)	Flow Test (using hourly flows)
1	3	A1120 / A12	N	E	3:1:4	2	2	0	20.0%	0.3	Pass Low
2	3	A1120 / A12	N	W	3:1:5	1	0	-1	-70.0%	0.9	Pass Low
3	3	A1120 / A12	W	N	3:4:3	1	1	0	-10.0%	0.1	Pass Low
4	3	A1120 / A12	W	E	3:4:4	48	48	0	0.2%	0.0	Pass Low
5	3	A1120 / A12	E	N	3:5:3	4	4	0	-7.5%	0.2	Pass Low
6	3	A1120 / A12	E	W	3:5:5	25	25	0	1.2%	0.1	Pass Low
7	4	A12 / B1122	W	E	4:8:9	49	50	0	1.0%	0.1	Pass Low
8	4	A12 / B1122	W	S	4:8:10	1	1	0	0.0%	0.0	Pass Low
9	4	A12 / B1122	S	E	4:11:9	2	2	0	5.0%	0.1	Pass Low
10	4	A12 / B1122	S	W	4:11:12	1	0	-1	-90.0%	1.2	Pass Low
11	4	A12 / B1122	E	S	4:13:10	3	3	0	3.3%	0.1	Pass Low
12	4	A12 / B1122	E	W	4:13:12	28	29	1	2.5%	0.1	Pass Low
13	5	A12 / Westleton Rd	S	N	5:16:17	48	49	1	2.1%	0.1	Pass Low
14	5	A12 / Westleton Rd	S	E	5:16:19	3	3	0	-3.3%	0.1	Pass Low
15	5	A12 / Westleton Rd	N	S	5:55:13	31	32	1	2.6%	0.1	Pass Low
16	5	A12 / Westleton Rd	N	E	5:55:19	0	0	0		0.0	Pass Low
17	5	A12 / Westleton Rd	E	S	5:20:13	0	0	0		0.0	Pass Low
18	5	A12 / Westleton Rd	E	N	5:20:17	0	0	0		0.0	Pass Low
19	6	A12 / Petrol Station Exit	S	N	6:17:17	36	49	13	36.4%	2.0	Pass Low
20	6	A12 / Petrol Station Exit	N	S	6:55:55	30	30	0	1.0%	0.1	Pass Low
21	6	A12 / Petrol Station Exit	E	N	6:28:17	0	0	0		0.0	Pass Low
22	6	A12 / Petrol Station Exit	E	S	6:28:55	1	1	0	-10.0%	0.1	Pass Low
23	7	A12 / Petrol Station Entrance	S	N	7:17:17	48	49	1	2.3%	0.2	Pass Low
24	7	A12 / Petrol Station Entrance	S	E	7:17:47	0	0	0		0.0	Pass Low
25	7	A12 / Petrol Station Entrance	N	S	7:55:55	30	30	0	0.7%	0.0	Pass Low
26	7	A12 / Petrol Station Entrance	N	E	7:55:47	1	1	0	20.0%	0.2	Pass Low
27	8	A12 / The St	S	N	8:33:33	48	49	1	1.5%	0.1	Pass Low
28	8	A12 / The St	S	E	8:33:35	0	0	0		0.4	Pass Low
29	8	A12 / The St	N	S	8:34:34	31	32	1	1.6%	0.1	Pass Low
30	8	A12 / The St	N	E	8:34:35	2	2	0	-15.0%	0.2	Pass Low
31	8	A12 / The St	E	N	8:36:33	3	3	0	-3.3%	0.1	Pass Low
32	8	A12 / The St	E	S	8:36:34	0	0	0		0.0	Pass Low
33	9	A12 / Willow Marsh Ln	S	N	9:33:37	51	51	0	0.6%	0.0	Pass Low
34	9	A12 / Willow Marsh Ln	S	W	9:33:43	0	0	0		0.0	Pass Low
35	9	A12 / Willow Marsh Ln	N	S	9:42:34	31	31	0	1.3%	0.1	Pass Low
36	9	A12 / Willow Marsh Ln	N	W	9:42:43	0	0	0		0.0	Pass Low
37	9	A12 / Willow Marsh Ln	W	S	9:44:34	2	2	0	-15.0%	0.2	Pass Low
38	9	A12 / Willow Marsh Ln	W	N	9:44:37	0	0	0		0.0	Pass Low
39	10	A12 / Lymballs Ln	S	N	10:37:37	51	51	0	0.2%	0.0	Pass Low
40	10	A12 / Lymballs Ln	S	E	10:37:45	0	0	0		0.0	Pass Low
41	10	A12 / Lymballs Ln	N	S	10:42:42	31	31	0	0.0%	0.0	Pass Low
42	10	A12 / Lymballs Ln	N	E	10:42:45	0	0	0		0.0	Pass Low
43	10	A12 / Lymballs Ln	E	N	10:46:37	0	0	0		0.0	Pass Low
44	10	A12 / Lymballs Ln	E	S	10:46:42	0	0	0		0.0	Pass Low
45	11	A12 / A144	S	N	11:37:38	44	44	0	-0.9%	0.1	Pass Low
46	11	A12 / A144	S	W	11:37:40	7	8	1	11.4%	0.3	Pass Low
47	11	A12 / A144	W	N	11:41:38	4	4	0	2.5%	0.0	Pass Low
48	11	A12 / A144	W	S	11:41:42	8	8	0	-1.3%	0.0	Pass Low
49	11	A12 / A144	N	W	11:49:40	3	3	0	0.0%	0.0	Pass Low
50	11	A12 / A144	N	S	11:49:42	23	23	0	0.4%	0.0	Pass Low

	Sum Obs.	Sum Mod.	Diff	% Diff	Ave. GEH
Overall Stats	732	751	19	2.5%	0.2



**Vehicle Flow Information
Calibration Statistics
LGV Vehicles
AM Peak**

Index	Junction	Name	Origin	Destination	Reference	Observed Flow	Modelled Flow	Difference	% Difference	G.E.H. Value (using hourly flows)	Flow Test (using hourly flows)
1	3	A1120 / A12	N	E	3:1:4	32	33	1	1.6%	0.1	Pass Low
2	3	A1120 / A12	N	W	3:1:5	6	6	0	0.0%	0.0	Pass Low
3	3	A1120 / A12	W	N	3:4:3	2	2	0	20.0%	0.3	Pass Low
4	3	A1120 / A12	W	E	3:4:4	75	74	-1	-0.9%	0.1	Pass Low
5	3	A1120 / A12	E	N	3:5:3	11	12	1	4.5%	0.1	Pass Low
6	3	A1120 / A12	E	W	3:5:5	80	79	-1	-1.5%	0.1	Pass Low
7	4	A12 / B1122	W	E	4:8:9	89	89	0	-0.3%	0.0	Pass Low
8	4	A12 / B1122	W	S	4:8:10	18	18	0	1.1%	0.0	Pass Low
9	4	A12 / B1122	S	E	4:11:9	12	12	0	-0.8%	0.0	Pass Low
10	4	A12 / B1122	S	W	4:11:12	6	6	0	1.7%	0.0	Pass Low
11	4	A12 / B1122	E	S	4:13:10	22	23	1	5.9%	0.3	Pass Low
12	4	A12 / B1122	E	W	4:13:12	85	85	0	0.1%	0.0	Pass Low
13	5	A12 / Westleton Rd	S	N	5:16:17	97	96	-1	-0.9%	0.1	Pass Low
14	5	A12 / Westleton Rd	S	E	5:16:19	4	4	0	-7.5%	0.2	Pass Low
15	5	A12 / Westleton Rd	N	S	5:55:13	106	108	2	1.7%	0.2	Pass Low
16	5	A12 / Westleton Rd	N	E	5:55:19	1	2	1	60.0%	0.5	Pass Low
17	5	A12 / Westleton Rd	E	S	5:20:13	1	1	0	-40.0%	0.4	Pass Low
18	5	A12 / Westleton Rd	E	N	5:20:17	1	1	0	0.0%	0.0	Pass Low
19	6	A12 / Petrol Station Exit	S	N	6:17:17	92	98	6	6.0%	0.6	Pass Low
20	6	A12 / Petrol Station Exit	N	S	6:55:55	90	91	1	1.1%	0.1	Pass Low
21	6	A12 / Petrol Station Exit	E	N	6:28:17	6	6	0	3.3%	0.1	Pass Low
22	6	A12 / Petrol Station Exit	E	S	6:28:55	17	17	0	2.4%	0.1	Pass Low
23	7	A12 / Petrol Station Entrance	S	N	7:17:17	89	95	5	6.2%	0.6	Pass Low
24	7	A12 / Petrol Station Entrance	S	E	7:17:47	9	9	0	1.1%	0.0	Pass Low
25	7	A12 / Petrol Station Entrance	N	S	7:55:55	90	91	1	1.0%	0.1	Pass Low
26	7	A12 / Petrol Station Entrance	N	E	7:55:47	13	13	0	0.0%	0.0	Pass Low
27	8	A12 / The St	S	N	8:33:33	92	91	-1	-0.9%	0.1	Pass Low
28	8	A12 / The St	S	E	8:33:35	3	3	0	-3.3%	0.1	Pass Low
29	8	A12 / The St	N	S	8:34:34	102	103	1	0.8%	0.1	Pass Low
30	8	A12 / The St	N	E	8:34:35	0	0	0		0.4	Pass Low
31	8	A12 / The St	E	N	8:36:33	1	1	0	30.0%	0.3	Pass Low
32	8	A12 / The St	E	S	8:36:34	1	1	0	0.0%	0.0	Pass Low
33	9	A12 / Willow Marsh Ln	S	N	9:33:37	92	92	0	-0.1%	0.0	Pass Low
34	9	A12 / Willow Marsh Ln	S	W	9:33:43	1	1	-1	-50.0%	0.6	Pass Low
35	9	A12 / Willow Marsh Ln	N	S	9:42:34	101	102	1	0.9%	0.1	Pass Low
36	9	A12 / Willow Marsh Ln	N	W	9:42:43	0	0	0		0.0	Pass Low
37	9	A12 / Willow Marsh Ln	W	S	9:44:34	1	1	0	-20.0%	0.2	Pass Low
38	9	A12 / Willow Marsh Ln	W	N	9:44:37	2	2	0	-5.0%	0.1	Pass Low
39	10	A12 / Lymballs Ln	S	N	10:37:37	94	94	0	-0.1%	0.0	Pass Low
40	10	A12 / Lymballs Ln	S	E	10:37:45	0	0	0		0.0	Pass Low
41	10	A12 / Lymballs Ln	N	S	10:42:42	101	102	1	1.0%	0.1	Pass Low
42	10	A12 / Lymballs Ln	N	E	10:42:45	1	1	0	20.0%	0.2	Pass Low
43	10	A12 / Lymballs Ln	E	N	10:46:37	1	2	1	50.0%	0.4	Pass Low
44	10	A12 / Lymballs Ln	E	S	10:46:42	0	0	0		0.0	Pass Low
45	11	A12 / A144	S	N	11:37:38	72	73	1	1.4%	0.1	Pass Low
46	11	A12 / A144	S	W	11:37:40	23	23	-1	-2.2%	0.1	Pass Low
47	11	A12 / A144	W	N	11:41:38	1	1	0	0.0%	0.0	Pass Low
48	11	A12 / A144	W	S	11:41:42	38	39	1	1.6%	0.1	Pass Low
49	11	A12 / A144	N	W	11:49:40	4	4	0	5.0%	0.1	Pass Low
50	11	A12 / A144	N	S	11:49:42	64	64	0	0.6%	0.0	Pass Low

	Sum Obs.	Sum Mod.	Diff	% Diff	Ave. GEH
Overall Stats	1849	1868	19	1.0%	0.1



**Vehicle Flow Information
Calibration Statistics
All Vehicles
IP Peak**

Index	Junction	Name	Origin	Destination	Reference	Observed Flow	Modelled Flow	Difference	% Difference	G.E.H. Value (using hourly flows)	Flow Test (using hourly flows)
1	3	A1120 / A12	N	E	3:1:4	132	131	-1	-0.7%	0.1	Pass Low
2	3	A1120 / A12	N	W	3:1:5	9	9	0	-1.1%	0.0	Pass Low
3	3	A1120 / A12	W	N	3:4:3	22	22	0	-1.8%	0.1	Pass Low
4	3	A1120 / A12	W	E	3:4:4	508	505	-3	-0.6%	0.1	Pass Low
5	3	A1120 / A12	E	N	3:5:3	155	154	-1	-0.9%	0.1	Pass Low
6	3	A1120 / A12	E	W	3:5:5	430	427	-3	-0.6%	0.1	Pass Low
7	4	A12 / B1122	W	E	4:8:9	579	576	-3	-0.6%	0.1	Pass Low
8	4	A12 / B1122	W	S	4:8:10	61	61	0	0.0%	0.0	Pass Low
9	4	A12 / B1122	S	E	4:11:9	83	83	0	-0.1%	0.0	Pass Low
10	4	A12 / B1122	S	W	4:11:12	87	87	0	-0.2%	0.0	Pass Low
11	4	A12 / B1122	E	S	4:13:10	47	47	0	-0.4%	0.0	Pass Low
12	4	A12 / B1122	E	W	4:13:12	498	495	-3	-0.6%	0.1	Pass Low
13	5	A12 / Westleton Rd	S	N	5:16:17	634	633	-1	-0.2%	0.1	Pass Low
14	5	A12 / Westleton Rd	S	E	5:16:19	28	26	-2	-5.7%	0.3	Pass Low
15	5	A12 / Westleton Rd	N	S	5:55:13	492	490	-2	-0.5%	0.1	Pass Low
16	5	A12 / Westleton Rd	N	E	5:55:19	15	14	-1	-5.3%	0.2	Pass Low
17	5	A12 / Westleton Rd	E	S	5:20:13	53	54	1	1.1%	0.1	Pass Low
18	5	A12 / Westleton Rd	E	N	5:20:17	5	5	0	-6.0%	0.1	Pass Low
19	6	A12 / Petrol Station Exit	S	N	6:17:17	639	641	2	0.3%	0.1	Pass Low
20	6	A12 / Petrol Station Exit	N	S	6:55:55	467	467	-1	-0.1%	0.0	Pass Low
21	6	A12 / Petrol Station Exit	E	N	6:28:17	24	25	1	2.1%	0.1	Pass Low
22	6	A12 / Petrol Station Exit	E	S	6:28:55	40	40	0	0.2%	0.0	Pass Low
23	7	A12 / Petrol Station Entrance	S	N	7:17:17	609	636	27	4.4%	1.1	Pass Low
24	7	A12 / Petrol Station Entrance	S	E	7:17:47	30	31	1	3.7%	0.2	Pass Low
25	7	A12 / Petrol Station Entrance	N	S	7:55:55	467	466	-1	-0.2%	0.0	Pass Low
26	7	A12 / Petrol Station Entrance	N	E	7:55:47	29	29	0	-1.4%	0.1	Pass Low
27	8	A12 / The St	S	N	8:33:33	626	629	3	0.5%	0.1	Pass Low
28	8	A12 / The St	S	E	8:33:35	7	6	-1	-11.4%	0.3	Pass Low
29	8	A12 / The St	N	S	8:34:34	483	482	-1	-0.3%	0.1	Pass Low
30	8	A12 / The St	N	E	8:34:35	11	10	-1	-6.4%	0.2	Pass Low
31	8	A12 / The St	E	N	8:36:33	19	19	0	0.0%	0.0	Pass Low
32	8	A12 / The St	E	S	8:36:34	13	14	1	4.6%	0.2	Pass Low
33	9	A12 / Willow Marsh Ln	S	N	9:33:37	637	640	3	0.4%	0.1	Pass Low
34	9	A12 / Willow Marsh Ln	S	W	9:33:43	8	8	0	2.5%	0.1	Pass Low
35	9	A12 / Willow Marsh Ln	N	S	9:42:34	492	492	0	-0.1%	0.0	Pass Low
36	9	A12 / Willow Marsh Ln	N	W	9:42:43	4	4	0	2.5%	0.0	Pass Low
37	9	A12 / Willow Marsh Ln	W	S	9:44:34	2	2	0	-20.0%	0.3	Pass Low
38	9	A12 / Willow Marsh Ln	W	N	9:44:37	2	3	1	30.0%	0.4	Pass Low
39	10	A12 / Lymballs Ln	S	N	10:37:37	636	639	3	0.4%	0.1	Pass Low
40	10	A12 / Lymballs Ln	S	E	10:37:45	3	3	0	-6.7%	0.1	Pass Low
41	10	A12 / Lymballs Ln	N	S	10:42:42	493	492	-1	-0.2%	0.0	Pass Low
42	10	A12 / Lymballs Ln	N	E	10:42:45	2	2	0	0.0%	0.0	Pass Low
43	10	A12 / Lymballs Ln	E	N	10:46:37	3	3	0	-6.7%	0.1	Pass Low
44	10	A12 / Lymballs Ln	E	S	10:46:42	3	2	-1	-23.3%	0.4	Pass Low
45	11	A12 / A144	S	N	11:37:38	482	485	3	0.6%	0.1	Pass Low
46	11	A12 / A144	S	W	11:37:40	157	157	0	0.2%	0.0	Pass Low
47	11	A12 / A144	W	N	11:41:38	17	18	0	2.9%	0.1	Pass Low
48	11	A12 / A144	W	S	11:41:42	100	98	-2	-2.5%	0.3	Pass Low
49	11	A12 / A144	N	W	11:49:40	26	26	0	-0.8%	0.0	Pass Low
50	11	A12 / A144	N	S	11:49:42	395	396	1	0.2%	0.0	Pass Low

	Sum Obs.	Sum Mod.	Diff	% Diff	Ave. GEH
Overall Stats	10764	10778	14	0.1%	0.1



**Vehicle Flow Information
Calibration Statistics
Car Vehicles
IP Peak**

Index	Junction	Name	Origin	Destination	Reference	Observed Flow	Modelled Flow	Difference	% Difference	G.E.H. Value (using hourly flows)	Flow Test (using hourly flows)
1	3	A1120 / A12	N	E	3:1:4	114	113	-1	-1.2%	0.1	Pass Low
2	3	A1120 / A12	N	W	3:1:5	7	7	0	-1.4%	0.0	Pass Low
3	3	A1120 / A12	W	N	3:4:3	20	20	0	-1.0%	0.0	Pass Low
4	3	A1120 / A12	W	E	3:4:4	417	416	-2	-0.4%	0.1	Pass Low
5	3	A1120 / A12	E	N	3:5:3	126	124	-3	-2.0%	0.2	Pass Low
6	3	A1120 / A12	E	W	3:5:5	342	340	-2	-0.6%	0.1	Pass Low
7	4	A12 / B1122	W	E	4:8:9	482	480	-2	-0.5%	0.1	Pass Low
8	4	A12 / B1122	W	S	4:8:10	49	49	0	-0.2%	0.0	Pass Low
9	4	A12 / B1122	S	E	4:11:9	70	70	0	0.6%	0.0	Pass Low
10	4	A12 / B1122	S	W	4:11:12	66	65	-1	-0.9%	0.1	Pass Low
11	4	A12 / B1122	E	S	4:13:10	36	36	0	-1.1%	0.1	Pass Low
12	4	A12 / B1122	E	W	4:13:12	402	399	-3	-0.8%	0.2	Pass Low
13	5	A12 / Westleton Rd	S	N	5:16:17	526	525	-1	-0.2%	0.0	Pass Low
14	5	A12 / Westleton Rd	S	E	5:16:19	26	25	-1	-4.2%	0.2	Pass Low
15	5	A12 / Westleton Rd	N	S	5:55:13	387	385	-2	-0.5%	0.1	Pass Low
16	5	A12 / Westleton Rd	N	E	5:55:19	14	14	0	-3.6%	0.1	Pass Low
17	5	A12 / Westleton Rd	E	S	5:20:13	51	51	0	-0.8%	0.1	Pass Low
18	5	A12 / Westleton Rd	E	N	5:20:17	5	5	0	-6.0%	0.1	Pass Low
19	6	A12 / Petrol Station Exit	S	N	6:17:17	531	532	1	0.2%	0.1	Pass Low
20	6	A12 / Petrol Station Exit	N	S	6:55:55	367	366	-1	-0.2%	0.0	Pass Low
21	6	A12 / Petrol Station Exit	E	N	6:28:17	21	21	0	1.4%	0.1	Pass Low
22	6	A12 / Petrol Station Exit	E	S	6:28:55	34	34	0	0.3%	0.0	Pass Low
23	7	A12 / Petrol Station Entrance	S	N	7:17:17	506	529	23	4.6%	1.0	Pass Low
24	7	A12 / Petrol Station Entrance	S	E	7:17:47	25	26	1	2.4%	0.1	Pass Low
25	7	A12 / Petrol Station Entrance	N	S	7:55:55	367	366	-1	-0.3%	0.1	Pass Low
26	7	A12 / Petrol Station Entrance	N	E	7:55:47	23	23	0	0.4%	0.0	Pass Low
27	8	A12 / The St	S	N	8:33:33	520	523	3	0.5%	0.1	Pass Low
28	8	A12 / The St	S	E	8:33:35	7	6	-1	-11.4%	0.3	Pass Low
29	8	A12 / The St	N	S	8:34:34	379	378	-1	-0.2%	0.0	Pass Low
30	8	A12 / The St	N	E	8:34:35	10	9	-1	-6.0%	0.2	Pass Low
31	8	A12 / The St	E	N	8:36:33	14	13	-1	-4.3%	0.2	Pass Low
32	8	A12 / The St	E	S	8:36:34	11	11	0	0.9%	0.0	Pass Low
33	9	A12 / Willow Marsh Ln	S	N	9:33:37	529	531	2	0.4%	0.1	Pass Low
34	9	A12 / Willow Marsh Ln	S	W	9:33:43	5	5	0	-2.0%	0.0	Pass Low
35	9	A12 / Willow Marsh Ln	N	S	9:42:34	388	388	0	-0.1%	0.0	Pass Low
36	9	A12 / Willow Marsh Ln	N	W	9:42:43	4	4	0	2.5%	0.0	Pass Low
37	9	A12 / Willow Marsh Ln	W	S	9:44:34	1	1	0	-30.0%	0.3	Pass Low
38	9	A12 / Willow Marsh Ln	W	N	9:44:37	1	2	1	50.0%	0.4	Pass Low
39	10	A12 / Lymballs Ln	S	N	10:37:37	530	532	2	0.4%	0.1	Pass Low
40	10	A12 / Lymballs Ln	S	E	10:37:45	0	0	0		0.0	Pass Low
41	10	A12 / Lymballs Ln	N	S	10:42:42	390	389	-1	-0.4%	0.1	Pass Low
42	10	A12 / Lymballs Ln	N	E	10:42:45	2	2	0	0.0%	0.0	Pass Low
43	10	A12 / Lymballs Ln	E	N	10:46:37	3	3	0	-6.7%	0.1	Pass Low
44	10	A12 / Lymballs Ln	E	S	10:46:42	2	1	-1	-30.0%	0.5	Pass Low
45	11	A12 / A144	S	N	11:37:38	400	402	2	0.4%	0.1	Pass Low
46	11	A12 / A144	S	W	11:37:40	133	134	1	0.8%	0.1	Pass Low
47	11	A12 / A144	W	N	11:41:38	14	14	0	2.1%	0.1	Pass Low
48	11	A12 / A144	W	S	11:41:42	75	73	-2	-3.3%	0.3	Pass Low
49	11	A12 / A144	N	W	11:49:40	23	23	0	-0.4%	0.0	Pass Low
50	11	A12 / A144	N	S	11:49:42	317	318	1	0.2%	0.0	Pass Low

	Sum Obs.	Sum Mod.	Diff	% Diff	Ave. GEH
Overall Stats	8772	8778	6	0.1%	0.1



**Vehicle Flow Information
Calibration Statistics
HGV Vehicles
IP Peak**

Index	Junction	Name	Origin	Destination	Reference	Observed Flow	Modelled Flow	Difference	% Difference	G.E.H. Value (using hourly flows)	Flow Test (using hourly flows)
1	3	A1120 / A12	N	E	3:1:4	5	6	1	14.0%	0.3	Pass Low
2	3	A1120 / A12	N	W	3:1:5	0	0	0		0.0	Pass Low
3	3	A1120 / A12	W	N	3:4:3	0	0	0		0.0	Pass Low
4	3	A1120 / A12	W	E	3:4:4	19	19	-1	-2.6%	0.1	Pass Low
5	3	A1120 / A12	E	N	3:5:3	8	8	0	5.0%	0.1	Pass Low
6	3	A1120 / A12	E	W	3:5:5	26	25	-1	-3.8%	0.2	Pass Low
7	4	A12 / B1122	W	E	4:8:9	22	22	0	0.9%	0.0	Pass Low
8	4	A12 / B1122	W	S	4:8:10	2	2	0	-5.0%	0.1	Pass Low
9	4	A12 / B1122	S	E	4:11:9	5	4	-1	-18.0%	0.4	Pass Low
10	4	A12 / B1122	S	W	4:11:12	5	5	0	0.0%	0.0	Pass Low
11	4	A12 / B1122	E	S	4:13:10	0	0	0		0.0	Pass Low
12	4	A12 / B1122	E	W	4:13:12	29	28	-1	-2.8%	0.1	Pass Low
13	5	A12 / Westleton Rd	S	N	5:16:17	27	26	-1	-3.0%	0.2	Pass Low
14	5	A12 / Westleton Rd	S	E	5:16:19	0	0	0		0.0	Pass Low
15	5	A12 / Westleton Rd	N	S	5:55:13	28	28	0	-1.4%	0.1	Pass Low
16	5	A12 / Westleton Rd	N	E	5:55:19	0	0	0		0.0	Pass Low
17	5	A12 / Westleton Rd	E	S	5:20:13	1	1	0	0.0%	0.0	Pass Low
18	5	A12 / Westleton Rd	E	N	5:20:17	0	0	0		0.0	Pass Low
19	6	A12 / Petrol Station Exit	S	N	6:17:17	27	27	0	-1.5%	0.1	Pass Low
20	6	A12 / Petrol Station Exit	N	S	6:55:55	28	28	0	1.1%	0.1	Pass Low
21	6	A12 / Petrol Station Exit	E	N	6:28:17	0	0	0		0.0	Pass Low
22	6	A12 / Petrol Station Exit	E	S	6:28:55	0	0	0		0.0	Pass Low
23	7	A12 / Petrol Station Entrance	S	N	7:17:17	27	27	0	-1.1%	0.1	Pass Low
24	7	A12 / Petrol Station Entrance	S	E	7:17:47	0	0	0		0.0	Pass Low
25	7	A12 / Petrol Station Entrance	N	S	7:55:55	28	28	0	1.1%	0.1	Pass Low
26	7	A12 / Petrol Station Entrance	N	E	7:55:47	0	0	0		0.0	Pass Low
27	8	A12 / The St	S	N	8:33:33	27	27	0	-1.5%	0.1	Pass Low
28	8	A12 / The St	S	E	8:33:35	0	0	0		0.0	Pass Low
29	8	A12 / The St	N	S	8:34:34	27	27	0	0.0%	0.0	Pass Low
30	8	A12 / The St	N	E	8:34:35	1	1	0	-10.0%	0.1	Pass Low
31	8	A12 / The St	E	N	8:36:33	2	2	0	-15.0%	0.2	Pass Low
32	8	A12 / The St	E	S	8:36:34	1	2	1	50.0%	0.4	Pass Low
33	9	A12 / Willow Marsh Ln	S	N	9:33:37	27	26	-1	-3.3%	0.2	Pass Low
34	9	A12 / Willow Marsh Ln	S	W	9:33:43	2	2	0	5.0%	0.1	Pass Low
35	9	A12 / Willow Marsh Ln	N	S	9:42:34	27	27	0	0.0%	0.0	Pass Low
36	9	A12 / Willow Marsh Ln	N	W	9:42:43	0	0	0		0.0	Pass Low
37	9	A12 / Willow Marsh Ln	W	S	9:44:34	1	1	0	-10.0%	0.1	Pass Low
38	9	A12 / Willow Marsh Ln	W	N	9:44:37	0	0	0		0.0	Pass Low
39	10	A12 / Lymballs Ln	S	N	10:37:37	24	23	-1	-3.3%	0.2	Pass Low
40	10	A12 / Lymballs Ln	S	E	10:37:45	3	3	0	-6.7%	0.1	Pass Low
41	10	A12 / Lymballs Ln	N	S	10:42:42	26	27	1	2.3%	0.1	Pass Low
42	10	A12 / Lymballs Ln	N	E	10:42:45	0	0	0		0.0	Pass Low
43	10	A12 / Lymballs Ln	E	N	10:46:37	0	0	0		0.0	Pass Low
44	10	A12 / Lymballs Ln	E	S	10:46:42	1	1	0	-10.0%	0.1	Pass Low
45	11	A12 / A144	S	N	11:37:38	18	18	0	-1.1%	0.0	Pass Low
46	11	A12 / A144	S	W	11:37:40	6	6	-1	-8.3%	0.2	Pass Low
47	11	A12 / A144	W	N	11:41:38	0	0	0		0.0	Pass Low
48	11	A12 / A144	W	S	11:41:42	8	9	1	10.0%	0.3	Pass Low
49	11	A12 / A144	N	W	11:49:40	1	1	0	-30.0%	0.3	Pass Low
50	11	A12 / A144	N	S	11:49:42	18	18	-1	-2.8%	0.1	Pass Low

	Sum Obs.	Sum Mod.	Diff	% Diff	Ave. GEH
Overall Stats	507	501	-6	-1.1%	0.1



**Vehicle Flow Information
Calibration Statistics
LGV Vehicles
IP Peak**

Index	Junction	Name	Origin	Destination	Reference	Observed Flow	Modelled Flow	Difference	% Difference	G.E.H. Value (using hourly flows)	Flow Test (using hourly flows)
1	3	A1120 / A12	N	E	3:1:4	13	13	0	-1.5%	0.1	Pass Low
2	3	A1120 / A12	N	W	3:1:5	2	2	0	0.0%	0.0	Pass Low
3	3	A1120 / A12	W	N	3:4:3	2	2	0	-10.0%	0.1	Pass Low
4	3	A1120 / A12	W	E	3:4:4	72	71	-1	-1.2%	0.1	Pass Low
5	3	A1120 / A12	E	N	3:5:3	21	22	1	3.3%	0.2	Pass Low
6	3	A1120 / A12	E	W	3:5:5	62	63	1	0.8%	0.1	Pass Low
7	4	A12 / B1122	W	E	4:8:9	75	74	-1	-1.5%	0.1	Pass Low
8	4	A12 / B1122	W	S	4:8:10	10	10	0	2.0%	0.1	Pass Low
9	4	A12 / B1122	S	E	4:11:9	8	8	0	5.0%	0.1	Pass Low
10	4	A12 / B1122	S	W	4:11:12	16	16	0	2.5%	0.1	Pass Low
11	4	A12 / B1122	E	S	4:13:10	11	11	0	1.8%	0.1	Pass Low
12	4	A12 / B1122	E	W	4:13:12	67	68	1	1.3%	0.1	Pass Low
13	5	A12 / Westleton Rd	S	N	5:16:17	81	81	0	0.2%	0.0	Pass Low
14	5	A12 / Westleton Rd	S	E	5:16:19	2	2	-1	-25.0%	0.4	Pass Low
15	5	A12 / Westleton Rd	N	S	5:55:13	77	77	0	0.1%	0.0	Pass Low
16	5	A12 / Westleton Rd	N	E	5:55:19	1	1	0	-30.0%	0.3	Pass Low
17	5	A12 / Westleton Rd	E	S	5:20:13	1	2	1	100.0%	0.8	Pass Low
18	5	A12 / Westleton Rd	E	N	5:20:17	0	0	0		0.0	Pass Low
19	6	A12 / Petrol Station Exit	S	N	6:17:17	81	82	1	1.1%	0.1	Pass Low
20	6	A12 / Petrol Station Exit	N	S	6:55:55	72	72	0	0.1%	0.0	Pass Low
21	6	A12 / Petrol Station Exit	E	N	6:28:17	3	3	0	6.7%	0.1	Pass Low
22	6	A12 / Petrol Station Exit	E	S	6:28:55	6	6	0	0.0%	0.0	Pass Low
23	7	A12 / Petrol Station Entrance	S	N	7:17:17	76	80	4	5.4%	0.5	Pass Low
24	7	A12 / Petrol Station Entrance	S	E	7:17:47	5	6	1	10.0%	0.2	Pass Low
25	7	A12 / Petrol Station Entrance	N	S	7:55:55	72	72	0	-0.1%	0.0	Pass Low
26	7	A12 / Petrol Station Entrance	N	E	7:55:47	6	6	0	-8.3%	0.2	Pass Low
27	8	A12 / The St	S	N	8:33:33	79	80	1	1.1%	0.1	Pass Low
28	8	A12 / The St	S	E	8:33:35	0	0	0		0.0	Pass Low
29	8	A12 / The St	N	S	8:34:34	77	77	-1	-0.6%	0.1	Pass Low
30	8	A12 / The St	N	E	8:34:35	0	0	0		0.0	Pass Low
31	8	A12 / The St	E	N	8:36:33	3	4	1	30.0%	0.5	Pass Low
32	8	A12 / The St	E	S	8:36:34	1	1	0	0.0%	0.0	Pass Low
33	9	A12 / Willow Marsh Ln	S	N	9:33:37	81	83	2	2.0%	0.2	Pass Low
34	9	A12 / Willow Marsh Ln	S	W	9:33:43	1	1	0	20.0%	0.2	Pass Low
35	9	A12 / Willow Marsh Ln	N	S	9:42:34	77	77	0	0.0%	0.0	Pass Low
36	9	A12 / Willow Marsh Ln	N	W	9:42:43	0	0	0		0.0	Pass Low
37	9	A12 / Willow Marsh Ln	W	S	9:44:34	0	0	0		0.0	Pass Low
38	9	A12 / Willow Marsh Ln	W	N	9:44:37	1	1	0	10.0%	0.1	Pass Low
39	10	A12 / Lymballs Ln	S	N	10:37:37	82	84	2	2.0%	0.2	Pass Low
40	10	A12 / Lymballs Ln	S	E	10:37:45	0	0	0		0.0	Pass Low
41	10	A12 / Lymballs Ln	N	S	10:42:42	77	77	0	-0.1%	0.0	Pass Low
42	10	A12 / Lymballs Ln	N	E	10:42:45	0	0	0		0.0	Pass Low
43	10	A12 / Lymballs Ln	E	N	10:46:37	0	0	0		0.0	Pass Low
44	10	A12 / Lymballs Ln	E	S	10:46:42	0	0	0		0.0	Pass Low
45	11	A12 / A144	S	N	11:37:38	64	65	1	2.2%	0.2	Pass Low
46	11	A12 / A144	S	W	11:37:40	18	18	0	-1.1%	0.0	Pass Low
47	11	A12 / A144	W	N	11:41:38	3	3	0	6.7%	0.1	Pass Low
48	11	A12 / A144	W	S	11:41:42	17	16	-1	-4.7%	0.2	Pass Low
49	11	A12 / A144	N	W	11:49:40	2	2	0	10.0%	0.1	Pass Low
50	11	A12 / A144	N	S	11:49:42	60	61	1	1.2%	0.1	Pass Low

	Sum Obs.	Sum Mod.	Diff	% Diff	Ave. GEH
Overall Stats	1485	1498	13	0.9%	0.1



**Vehicle Flow Information
Calibration Statistics
All Vehicles
PM Peak**

Index	Junction	Name	Origin	Destination	Reference	Observed Flow	Modelled Flow	Difference	% Difference	G.E.H. Value (using hourly flows)	Flow Test (using hourly flows)
1	3	A1120 / A12	N	E	3:1:4	131	133	2	1.3%	0.1	Pass Low
2	3	A1120 / A12	N	W	3:1:5	22	22	0	0.0%	0.0	Pass Low
3	3	A1120 / A12	W	N	3:4:3	19	19	0	-0.5%	0.0	Pass Low
4	3	A1120 / A12	W	E	3:4:4	546	546	0	0.0%	0.0	Pass Low
5	3	A1120 / A12	E	N	3:5:3	128	130	2	1.9%	0.2	Pass Low
6	3	A1120 / A12	E	W	3:5:5	361	362	1	0.3%	0.1	Pass Low
7	4	A12 / B1122	W	E	4:8:9	614	616	2	0.4%	0.1	Pass Low
8	4	A12 / B1122	W	S	4:8:10	63	63	0	-0.6%	0.1	Pass Low
9	4	A12 / B1122	S	E	4:11:9	64	67	3	4.4%	0.3	Pass Low
10	4	A12 / B1122	S	W	4:11:12	55	56	1	1.8%	0.1	Pass Low
11	4	A12 / B1122	E	S	4:13:10	64	64	0	0.5%	0.0	Pass Low
12	4	A12 / B1122	E	W	4:13:12	434	435	1	0.3%	0.1	Pass Low
13	5	A12 / Westleton Rd	S	N	5:16:17	652	659	7	1.1%	0.3	Pass Low
14	5	A12 / Westleton Rd	S	E	5:16:19	26	27	1	2.3%	0.1	Pass Low
15	5	A12 / Westleton Rd	N	S	5:55:13	469	467	-2	-0.4%	0.1	Pass Low
16	5	A12 / Westleton Rd	N	E	5:55:19	4	4	0	-7.5%	0.2	Pass Low
17	5	A12 / Westleton Rd	E	S	5:20:13	29	29	0	-1.4%	0.1	Pass Low
18	5	A12 / Westleton Rd	E	N	5:20:17	7	8	1	7.1%	0.2	Pass Low
19	6	A12 / Petrol Station Exit	S	N	6:17:17	659	667	8	1.3%	0.3	Pass Low
20	6	A12 / Petrol Station Exit	N	S	6:55:55	446	446	0	0.1%	0.0	Pass Low
21	6	A12 / Petrol Station Exit	E	N	6:28:17	21	20	-1	-4.3%	0.2	Pass Low
22	6	A12 / Petrol Station Exit	E	S	6:28:55	27	27	0	-0.4%	0.0	Pass Low
23	7	A12 / Petrol Station Entrance	S	N	7:17:17	635	661	26	4.1%	1.0	Pass Low
24	7	A12 / Petrol Station Entrance	S	E	7:17:47	24	25	1	4.6%	0.2	Pass Low
25	7	A12 / Petrol Station Entrance	N	S	7:55:55	446	446	0	-0.1%	0.0	Pass Low
26	7	A12 / Petrol Station Entrance	N	E	7:55:47	29	29	0	-0.3%	0.0	Pass Low
27	8	A12 / The St	S	N	8:33:33	642	647	5	0.8%	0.2	Pass Low
28	8	A12 / The St	S	E	8:33:35	14	14	0	1.4%	0.1	Pass Low
29	8	A12 / The St	N	S	8:34:34	462	462	0	0.0%	0.0	Pass Low
30	8	A12 / The St	N	E	8:34:35	11	11	-1	-4.5%	0.2	Pass Low
31	8	A12 / The St	E	N	8:36:33	9	9	-1	-5.6%	0.2	Pass Low
32	8	A12 / The St	E	S	8:36:34	13	14	1	6.2%	0.2	Pass Low
33	9	A12 / Willow Marsh Ln	S	N	9:33:37	645	651	6	0.9%	0.2	Pass Low
34	9	A12 / Willow Marsh Ln	S	W	9:33:43	6	6	0	0.0%	0.0	Pass Low
35	9	A12 / Willow Marsh Ln	N	S	9:42:34	472	471	-1	-0.2%	0.1	Pass Low
36	9	A12 / Willow Marsh Ln	N	W	9:42:43	2	2	0	-20.0%	0.3	Pass Low
37	9	A12 / Willow Marsh Ln	W	S	9:44:34	1	1	0	20.0%	0.2	Pass Low
38	9	A12 / Willow Marsh Ln	W	N	9:44:37	3	4	1	33.3%	0.5	Pass Low
39	10	A12 / Lymballs Ln	S	N	10:37:37	647	660	13	1.9%	0.5	Pass Low
40	10	A12 / Lymballs Ln	S	E	10:37:45	1	1	0	-10.0%	0.1	Pass Low
41	10	A12 / Lymballs Ln	N	S	10:42:42	473	471	-3	-0.5%	0.1	Pass Low
42	10	A12 / Lymballs Ln	N	E	10:42:45	3	3	0	0.0%	0.0	Pass Low
43	10	A12 / Lymballs Ln	E	N	10:46:37	5	5	0	-4.0%	0.1	Pass Low
44	10	A12 / Lymballs Ln	E	S	10:46:42	1	1	0	-40.0%	0.4	Pass Low
45	11	A12 / A144	S	N	11:37:38	516	522	6	1.2%	0.3	Pass Low
46	11	A12 / A144	S	W	11:37:40	136	145	9	6.5%	0.8	Pass Low
47	11	A12 / A144	W	N	11:41:38	14	14	0	0.0%	0.0	Pass Low
48	11	A12 / A144	W	S	11:41:42	103	102	-1	-0.6%	0.1	Pass Low
49	11	A12 / A144	N	W	11:49:40	22	22	0	-0.5%	0.0	Pass Low
50	11	A12 / A144	N	S	11:49:42	373	372	-1	-0.2%	0.0	Pass Low

	Sum Obs.	Sum Mod.	Diff	% Diff	Ave. GEH
Overall Stats	10549	10635	86	0.8%	0.2



**Vehicle Flow Information
Calibration Statistics
Car Vehicles
PM Peak**

Index	Junction	Name	Origin	Destination	Reference	Observed Flow	Modelled Flow	Difference	% Difference	G.E.H. Value (using hourly flows)	Flow Test (using hourly flows)
1	3	A1120 / A12	N	E	3:1:4	111	112	1	1.1%	0.1	Pass Low
2	3	A1120 / A12	N	W	3:1:5	21	21	0	-1.0%	0.0	Pass Low
3	3	A1120 / A12	W	N	3:4:3	18	18	0	-2.2%	0.1	Pass Low
4	3	A1120 / A12	W	E	3:4:4	478	478	0	0.0%	0.0	Pass Low
5	3	A1120 / A12	E	N	3:5:3	107	110	3	2.8%	0.3	Pass Low
6	3	A1120 / A12	E	W	3:5:5	316	316	0	0.0%	0.0	Pass Low
7	4	A12 / B1122	W	E	4:8:9	532	534	2	0.5%	0.1	Pass Low
8	4	A12 / B1122	W	S	4:8:10	57	57	0	-0.7%	0.1	Pass Low
9	4	A12 / B1122	S	E	4:11:9	55	57	2	3.6%	0.3	Pass Low
10	4	A12 / B1122	S	W	4:11:12	46	47	1	2.2%	0.1	Pass Low
11	4	A12 / B1122	E	S	4:13:10	59	59	0	-0.2%	0.0	Pass Low
12	4	A12 / B1122	E	W	4:13:12	377	378	1	0.3%	0.1	Pass Low
13	5	A12 / Westleton Rd	S	N	5:16:17	562	569	7	1.2%	0.3	Pass Low
14	5	A12 / Westleton Rd	S	E	5:16:19	25	25	0	0.8%	0.0	Pass Low
15	5	A12 / Westleton Rd	N	S	5:55:13	410	407	-3	-0.6%	0.1	Pass Low
16	5	A12 / Westleton Rd	N	E	5:55:19	4	4	0	-7.5%	0.2	Pass Low
17	5	A12 / Westleton Rd	E	S	5:20:13	26	26	0	1.5%	0.1	Pass Low
18	5	A12 / Westleton Rd	E	N	5:20:17	7	8	1	7.1%	0.2	Pass Low
19	6	A12 / Petrol Station Exit	S	N	6:17:17	569	576	7	1.2%	0.3	Pass Low
20	6	A12 / Petrol Station Exit	N	S	6:55:55	392	392	0	0.0%	0.0	Pass Low
21	6	A12 / Petrol Station Exit	E	N	6:28:17	19	18	-1	-4.7%	0.2	Pass Low
22	6	A12 / Petrol Station Exit	E	S	6:28:55	22	22	0	0.0%	0.0	Pass Low
23	7	A12 / Petrol Station Entrance	S	N	7:17:17	548	571	23	4.3%	1.0	Pass Low
24	7	A12 / Petrol Station Entrance	S	E	7:17:47	21	22	1	2.9%	0.1	Pass Low
25	7	A12 / Petrol Station Entrance	N	S	7:55:55	392	392	-1	-0.1%	0.0	Pass Low
26	7	A12 / Petrol Station Entrance	N	E	7:55:47	23	23	0	0.9%	0.0	Pass Low
27	8	A12 / The St	S	N	8:33:33	553	557	4	0.6%	0.1	Pass Low
28	8	A12 / The St	S	E	8:33:35	14	14	0	1.4%	0.1	Pass Low
29	8	A12 / The St	N	S	8:34:34	402	402	0	0.0%	0.0	Pass Low
30	8	A12 / The St	N	E	8:34:35	11	11	-1	-4.5%	0.2	Pass Low
31	8	A12 / The St	E	N	8:36:33	8	7	-1	-7.5%	0.2	Pass Low
32	8	A12 / The St	E	S	8:36:34	13	14	1	4.6%	0.2	Pass Low
33	9	A12 / Willow Marsh Ln	S	N	9:33:37	558	562	4	0.8%	0.2	Pass Low
34	9	A12 / Willow Marsh Ln	S	W	9:33:43	3	3	0	-3.3%	0.1	Pass Low
35	9	A12 / Willow Marsh Ln	N	S	9:42:34	412	411	-1	-0.2%	0.0	Pass Low
36	9	A12 / Willow Marsh Ln	N	W	9:42:43	1	1	0	-30.0%	0.3	Pass Low
37	9	A12 / Willow Marsh Ln	W	S	9:44:34	1	1	0	20.0%	0.2	Pass Low
38	9	A12 / Willow Marsh Ln	W	N	9:44:37	1	2	1	70.0%	0.6	Pass Low
39	10	A12 / Lymballs Ln	S	N	10:37:37	558	568	10	1.8%	0.4	Pass Low
40	10	A12 / Lymballs Ln	S	E	10:37:45	1	1	0	-10.0%	0.1	Pass Low
41	10	A12 / Lymballs Ln	N	S	10:42:42	412	410	-2	-0.6%	0.1	Pass Low
42	10	A12 / Lymballs Ln	N	E	10:42:45	2	2	0	-5.0%	0.1	Pass Low
43	10	A12 / Lymballs Ln	E	N	10:46:37	5	5	0	-4.0%	0.1	Pass Low
44	10	A12 / Lymballs Ln	E	S	10:46:42	1	1	0	-40.0%	0.4	Pass Low
45	11	A12 / A144	S	N	11:37:38	439	444	5	1.1%	0.2	Pass Low
46	11	A12 / A144	S	W	11:37:40	124	132	8	6.4%	0.7	Pass Low
47	11	A12 / A144	W	N	11:41:38	12	12	0	0.0%	0.0	Pass Low
48	11	A12 / A144	W	S	11:41:42	82	81	-1	-1.0%	0.1	Pass Low
49	11	A12 / A144	N	W	11:49:40	16	16	0	-1.9%	0.1	Pass Low
50	11	A12 / A144	N	S	11:49:42	332	331	-1	-0.3%	0.0	Pass Low

	Sum Obs.	Sum Mod.	Diff	% Diff	Ave. GEH
Overall Stats	9158	9227	69	0.8%	0.2



**Vehicle Flow Information
Calibration Statistics
HGV Vehicles
PM Peak**

Index	Junction	Name	Origin	Destination	Reference	Observed Flow	Modelled Flow	Difference	% Difference	G.E.H. Value (using hourly flows)	Flow Test (using hourly flows)
1	3	A1120 / A12	N	E	3:1:4	0	0	0		0.4	Pass Low
2	3	A1120 / A12	N	W	3:1:5	0	0	0		0.0	Pass Low
3	3	A1120 / A12	W	N	3:4:3	0	0	0		0.0	Pass Low
4	3	A1120 / A12	W	E	3:4:4	10	10	0	-1.0%	0.0	Pass Low
5	3	A1120 / A12	E	N	3:5:3	0	0	0		0.9	Pass Low
6	3	A1120 / A12	E	W	3:5:5	8	9	1	17.5%	0.5	Pass Low
7	4	A12 / B1122	W	E	4:8:9	9	9	0	-3.3%	0.1	Pass Low
8	4	A12 / B1122	W	S	4:8:10	1	1	0	30.0%	0.3	Pass Low
9	4	A12 / B1122	S	E	4:11:9	1	1	0	20.0%	0.2	Pass Low
10	4	A12 / B1122	S	W	4:11:12	0	0	0		0.6	Pass Low
11	4	A12 / B1122	E	S	4:13:10	0	0	0		0.4	Pass Low
12	4	A12 / B1122	E	W	4:13:12	8	9	1	13.8%	0.4	Pass Low
13	5	A12 / Westleton Rd	S	N	5:16:17	10	10	0	3.0%	0.1	Pass Low
14	5	A12 / Westleton Rd	S	E	5:16:19	0	0	0		0.0	Pass Low
15	5	A12 / Westleton Rd	N	S	5:55:13	8	9	1	11.3%	0.3	Pass Low
16	5	A12 / Westleton Rd	N	E	5:55:19	0	0	0		0.0	Pass Low
17	5	A12 / Westleton Rd	E	S	5:20:13	0	0	0		0.0	Pass Low
18	5	A12 / Westleton Rd	E	N	5:20:17	0	0	0		0.0	Pass Low
19	6	A12 / Petrol Station Exit	S	N	6:17:17	10	11	1	6.0%	0.2	Pass Low
20	6	A12 / Petrol Station Exit	N	S	6:55:55	8	9	1	6.3%	0.2	Pass Low
21	6	A12 / Petrol Station Exit	E	N	6:28:17	0	0	0		0.0	Pass Low
22	6	A12 / Petrol Station Exit	E	S	6:28:55	0	0	0		0.0	Pass Low
23	7	A12 / Petrol Station Entrance	S	N	7:17:17	10	11	1	6.0%	0.2	Pass Low
24	7	A12 / Petrol Station Entrance	S	E	7:17:47	0	0	0		0.0	Pass Low
25	7	A12 / Petrol Station Entrance	N	S	7:55:55	8	9	1	6.3%	0.2	Pass Low
26	7	A12 / Petrol Station Entrance	N	E	7:55:47	0	0	0		0.0	Pass Low
27	8	A12 / The St	S	N	8:33:33	10	11	1	11.0%	0.3	Pass Low
28	8	A12 / The St	S	E	8:33:35	0	0	0		0.0	Pass Low
29	8	A12 / The St	N	S	8:34:34	8	8	0	5.0%	0.1	Pass Low
30	8	A12 / The St	N	E	8:34:35	0	0	0		0.0	Pass Low
31	8	A12 / The St	E	N	8:36:33	0	0	0		0.0	Pass Low
32	8	A12 / The St	E	S	8:36:34	0	0	0		0.0	Pass Low
33	9	A12 / Willow Marsh Ln	S	N	9:33:37	7	8	1	15.7%	0.4	Pass Low
34	9	A12 / Willow Marsh Ln	S	W	9:33:43	3	3	0	3.3%	0.1	Pass Low
35	9	A12 / Willow Marsh Ln	N	S	9:42:34	8	8	0	3.7%	0.1	Pass Low
36	9	A12 / Willow Marsh Ln	N	W	9:42:43	0	0	0		0.0	Pass Low
37	9	A12 / Willow Marsh Ln	W	S	9:44:34	0	0	0		0.0	Pass Low
38	9	A12 / Willow Marsh Ln	W	N	9:44:37	0	0	0		0.0	Pass Low
39	10	A12 / Lymballs Ln	S	N	10:37:37	7	8	1	15.7%	0.4	Pass Low
40	10	A12 / Lymballs Ln	S	E	10:37:45	0	0	0		0.0	Pass Low
41	10	A12 / Lymballs Ln	N	S	10:42:42	8	8	0	5.0%	0.1	Pass Low
42	10	A12 / Lymballs Ln	N	E	10:42:45	1	1	0	10.0%	0.1	Pass Low
43	10	A12 / Lymballs Ln	E	N	10:46:37	0	0	0		0.0	Pass Low
44	10	A12 / Lymballs Ln	E	S	10:46:42	0	0	0		0.0	Pass Low
45	11	A12 / A144	S	N	11:37:38	5	6	1	22.0%	0.5	Pass Low
46	11	A12 / A144	S	W	11:37:40	2	2	0	10.0%	0.1	Pass Low
47	11	A12 / A144	W	N	11:41:38	1	1	0	0.0%	0.0	Pass Low
48	11	A12 / A144	W	S	11:41:42	1	1	0	10.0%	0.1	Pass Low
49	11	A12 / A144	N	W	11:49:40	0	0	0		0.0	Pass Low
50	11	A12 / A144	N	S	11:49:42	8	8	0	3.8%	0.1	Pass Low

	Sum Obs.	Sum Mod.	Diff	% Diff	Ave. GEH
Overall Stats	160	173	13	8.2%	0.1



**Vehicle Flow Information
Calibration Statistics
LGV Vehicles
PM Peak**

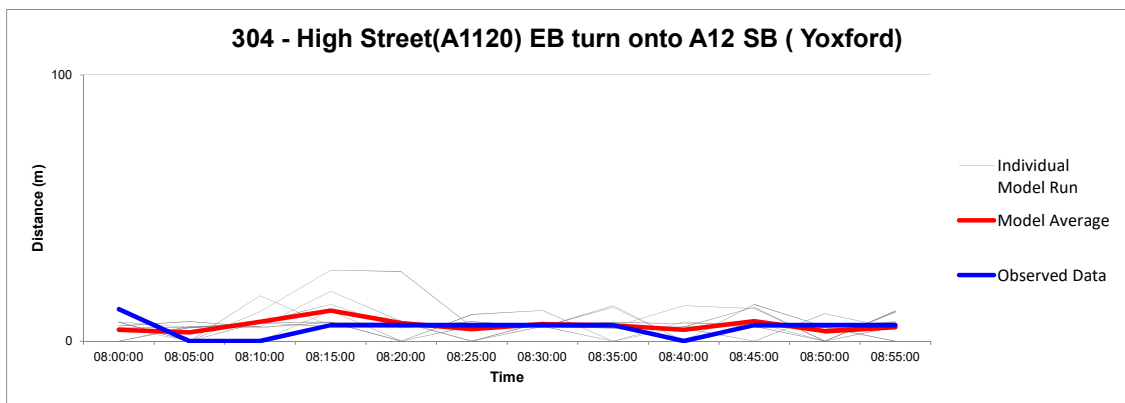
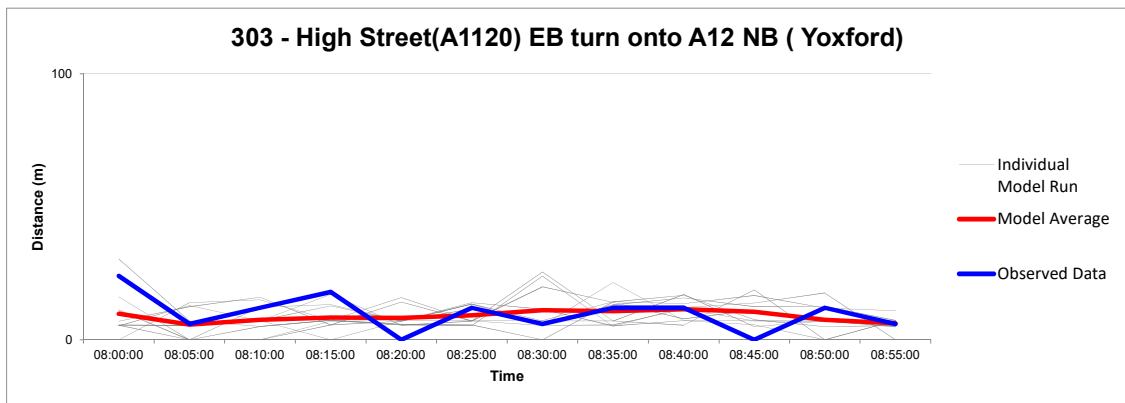
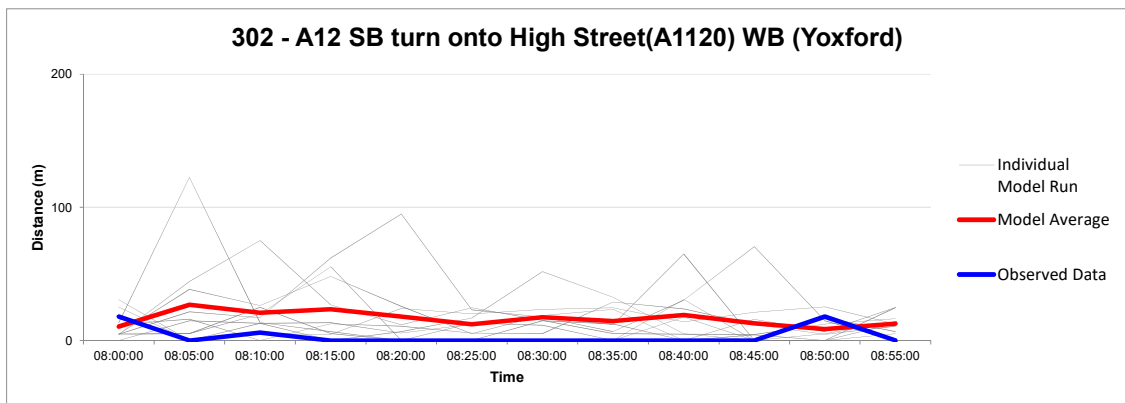
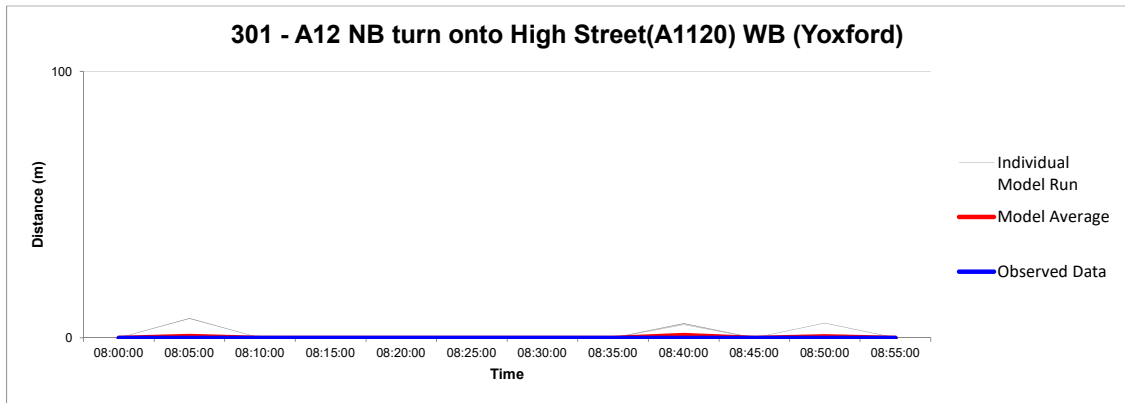
Index	Junction	Name	Origin	Destination	Reference	Observed Flow	Modelled Flow	Difference	% Difference	G.E.H. Value (using hourly flows)	Flow Test (using hourly flows)
1	3	A1120 / A12	N	E	3:1:4	20	20	0	2.0%	0.1	Pass Low
2	3	A1120 / A12	N	W	3:1:5	1	1	0	20.0%	0.2	Pass Low
3	3	A1120 / A12	W	N	3:4:3	1	1	0	30.0%	0.3	Pass Low
4	3	A1120 / A12	W	E	3:4:4	58	58	0	-0.5%	0.0	Pass Low
5	3	A1120 / A12	E	N	3:5:3	21	20	-1	-4.8%	0.2	Pass Low
6	3	A1120 / A12	E	W	3:5:5	37	37	0	-0.8%	0.0	Pass Low
7	4	A12 / B1122	W	E	4:8:9	73	73	0	0.3%	0.0	Pass Low
8	4	A12 / B1122	W	S	4:8:10	5	5	0	-6.0%	0.1	Pass Low
9	4	A12 / B1122	S	E	4:11:9	8	9	1	7.5%	0.2	Pass Low
10	4	A12 / B1122	S	W	4:11:12	9	9	0	-2.2%	0.1	Pass Low
11	4	A12 / B1122	E	S	4:13:10	5	5	0	6.0%	0.1	Pass Low
12	4	A12 / B1122	E	W	4:13:12	49	48	-1	-2.4%	0.2	Pass Low
13	5	A12 / Westleton Rd	S	N	5:16:17	80	80	0	0.5%	0.0	Pass Low
14	5	A12 / Westleton Rd	S	E	5:16:19	1	1	0	40.0%	0.4	Pass Low
15	5	A12 / Westleton Rd	N	S	5:55:13	51	51	0	-0.8%	0.1	Pass Low
16	5	A12 / Westleton Rd	N	E	5:55:19	0	0	0		0.0	Pass Low
17	5	A12 / Westleton Rd	E	S	5:20:13	3	2	-1	-26.7%	0.5	Pass Low
18	5	A12 / Westleton Rd	E	N	5:20:17	0	0	0		0.0	Pass Low
19	6	A12 / Petrol Station Exit	S	N	6:17:17	80	81	1	1.0%	0.1	Pass Low
20	6	A12 / Petrol Station Exit	N	S	6:55:55	46	46	0	-0.7%	0.0	Pass Low
21	6	A12 / Petrol Station Exit	E	N	6:28:17	2	2	0	0.0%	0.0	Pass Low
22	6	A12 / Petrol Station Exit	E	S	6:28:55	5	5	0	-2.0%	0.0	Pass Low
23	7	A12 / Petrol Station Entrance	S	N	7:17:17	77	79	2	2.9%	0.2	Pass Low
24	7	A12 / Petrol Station Entrance	S	E	7:17:47	3	4	1	16.7%	0.3	Pass Low
25	7	A12 / Petrol Station Entrance	N	S	7:55:55	46	46	0	-0.9%	0.1	Pass Low
26	7	A12 / Petrol Station Entrance	N	E	7:55:47	6	6	0	-5.0%	0.1	Pass Low
27	8	A12 / The St	S	N	8:33:33	79	79	0	0.4%	0.0	Pass Low
28	8	A12 / The St	S	E	8:33:35	0	0	0		0.0	Pass Low
29	8	A12 / The St	N	S	8:34:34	52	51	-1	-1.2%	0.1	Pass Low
30	8	A12 / The St	N	E	8:34:35	0	0	0		0.0	Pass Low
31	8	A12 / The St	E	N	8:36:33	1	1	0	10.0%	0.1	Pass Low
32	8	A12 / The St	E	S	8:36:34	0	0	0		0.6	Pass Low
33	9	A12 / Willow Marsh Ln	S	N	9:33:37	80	81	1	0.9%	0.1	Pass Low
34	9	A12 / Willow Marsh Ln	S	W	9:33:43	0	0	0		0.0	Pass Low
35	9	A12 / Willow Marsh Ln	N	S	9:42:34	52	52	0	-0.8%	0.1	Pass Low
36	9	A12 / Willow Marsh Ln	N	W	9:42:43	1	1	0	-10.0%	0.1	Pass Low
37	9	A12 / Willow Marsh Ln	W	S	9:44:34	0	0	0		0.0	Pass Low
38	9	A12 / Willow Marsh Ln	W	N	9:44:37	2	2	0	15.0%	0.2	Pass Low
39	10	A12 / Lymballs Ln	S	N	10:37:37	82	83	1	1.7%	0.2	Pass Low
40	10	A12 / Lymballs Ln	S	E	10:37:45	0	0	0		0.0	Pass Low
41	10	A12 / Lymballs Ln	N	S	10:42:42	53	53	-1	-0.9%	0.1	Pass Low
42	10	A12 / Lymballs Ln	N	E	10:42:45	0	0	0		0.0	Pass Low
43	10	A12 / Lymballs Ln	E	N	10:46:37	0	0	0		0.0	Pass Low
44	10	A12 / Lymballs Ln	E	S	10:46:42	0	0	0		0.0	Pass Low
45	11	A12 / A144	S	N	11:37:38	72	73	1	0.7%	0.1	Pass Low
46	11	A12 / A144	S	W	11:37:40	10	11	1	8.0%	0.2	Pass Low
47	11	A12 / A144	W	N	11:41:38	1	1	0	0.0%	0.0	Pass Low
48	11	A12 / A144	W	S	11:41:42	20	20	0	0.5%	0.0	Pass Low
49	11	A12 / A144	N	W	11:49:40	6	6	0	3.3%	0.1	Pass Low
50	11	A12 / A144	N	S	11:49:42	33	33	0	-0.9%	0.1	Pass Low

	Sum Obs.	Sum Mod.	Diff	% Diff	Ave. GEH
Overall Stats	1231	1234	3	0.3%	0.1



Queue Graphs

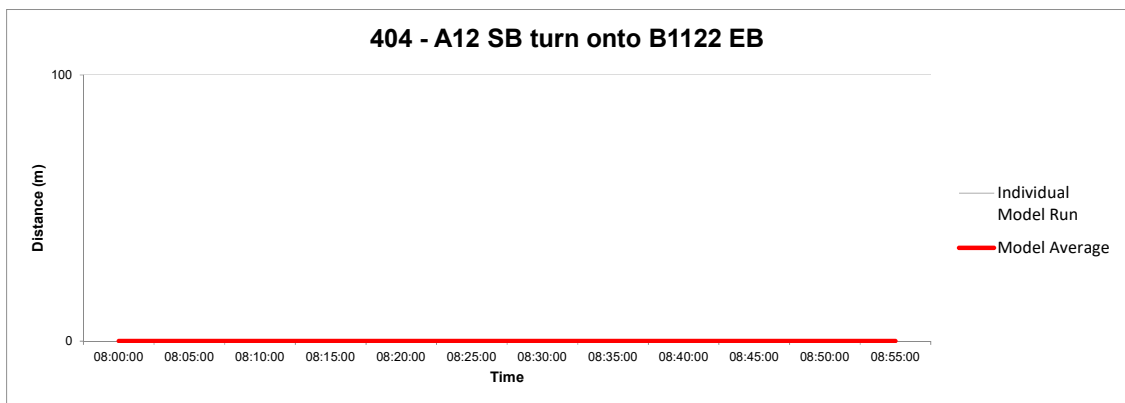
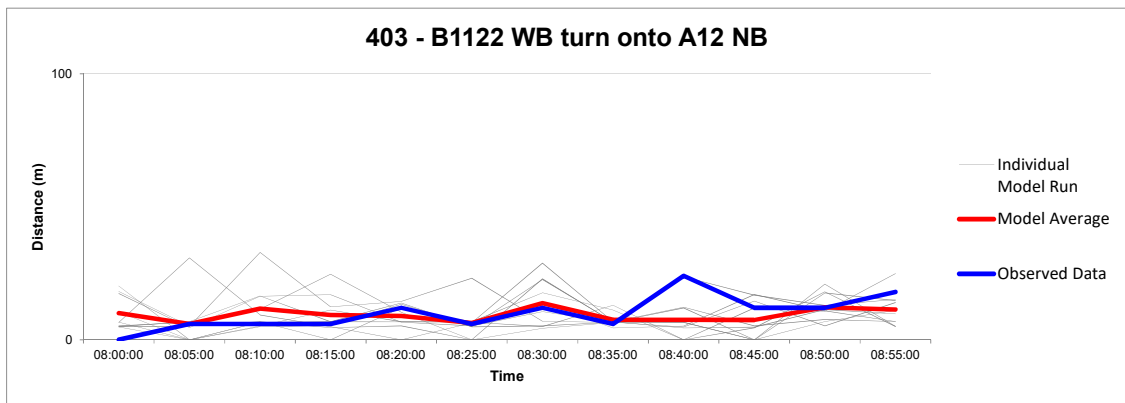
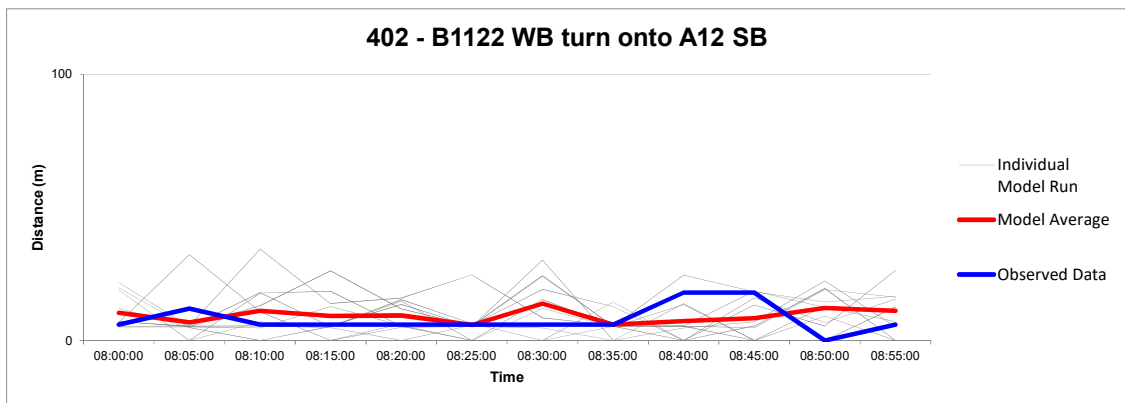
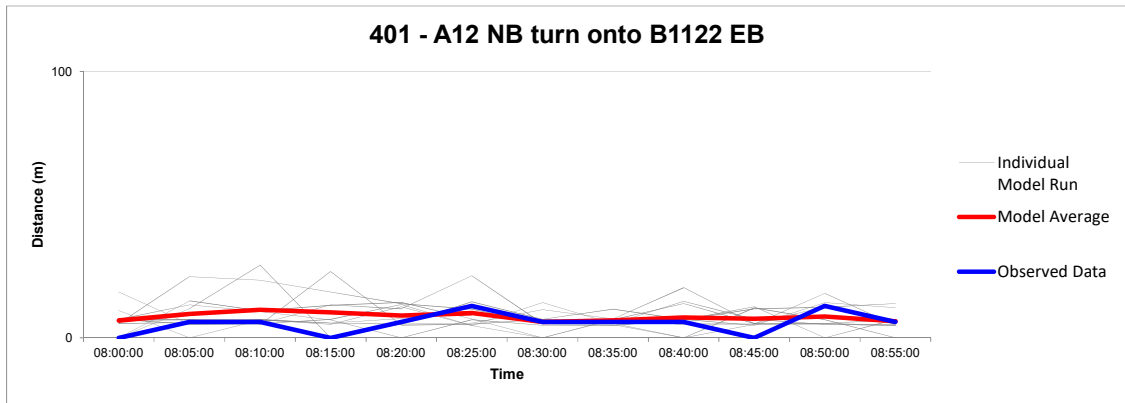
Junction Number 3
AM Peak





Queue Graphs

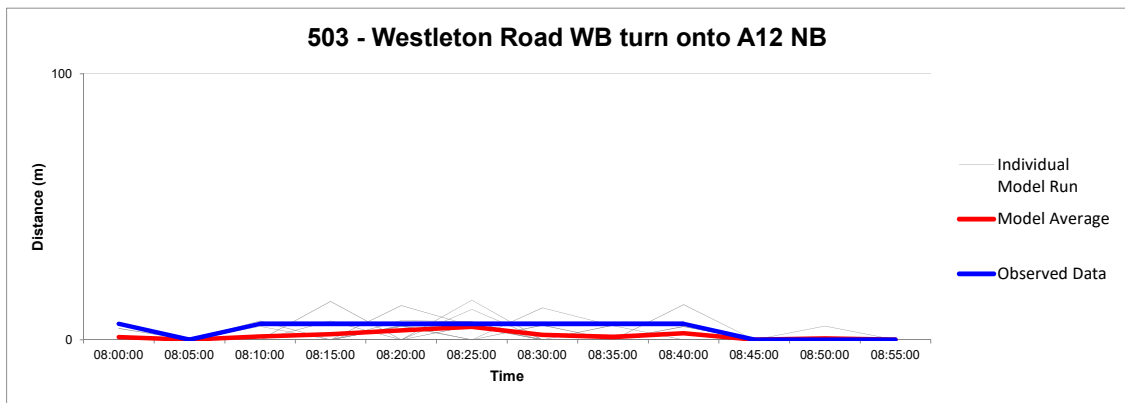
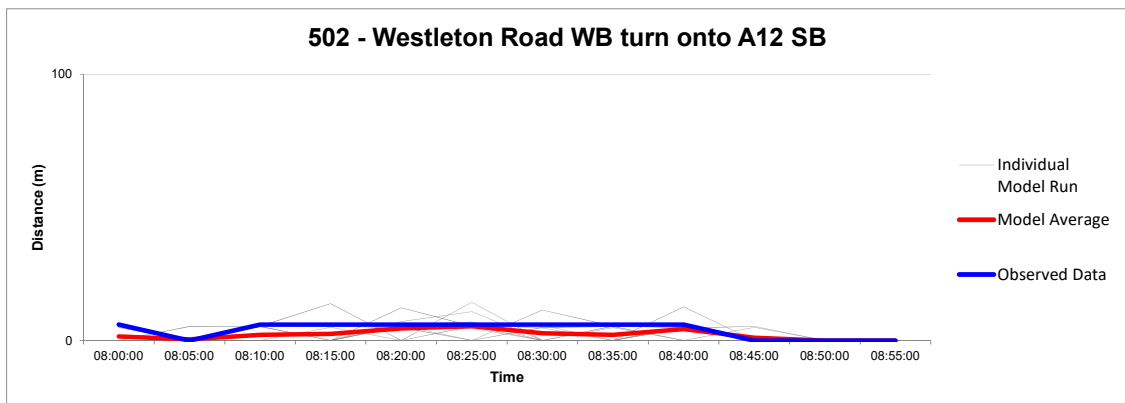
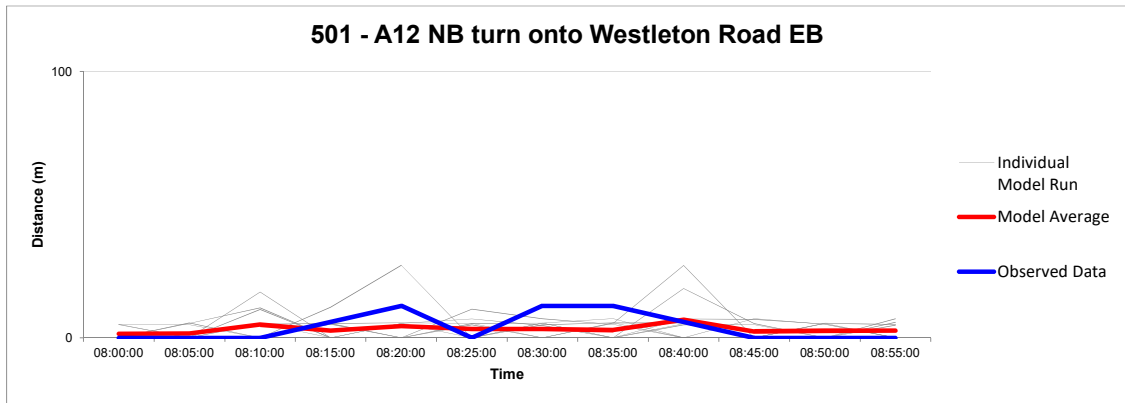
Junction Number 4
AM Peak





Queue Graphs

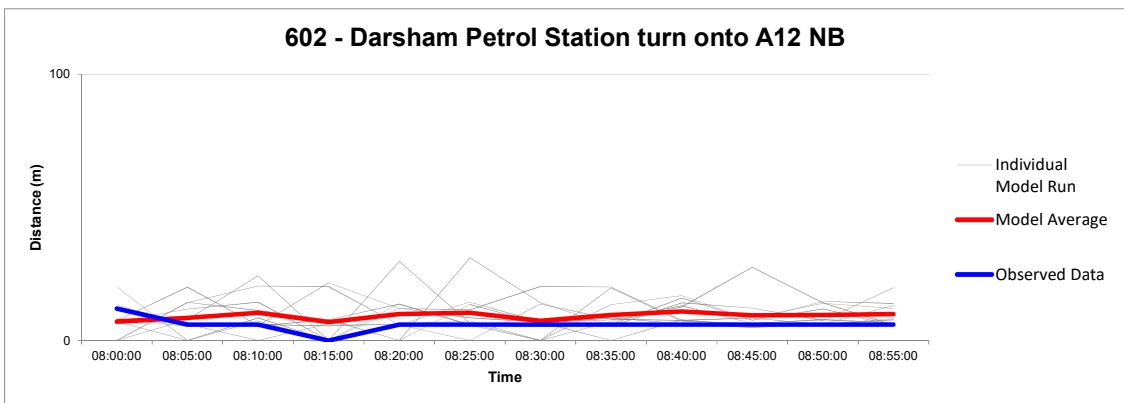
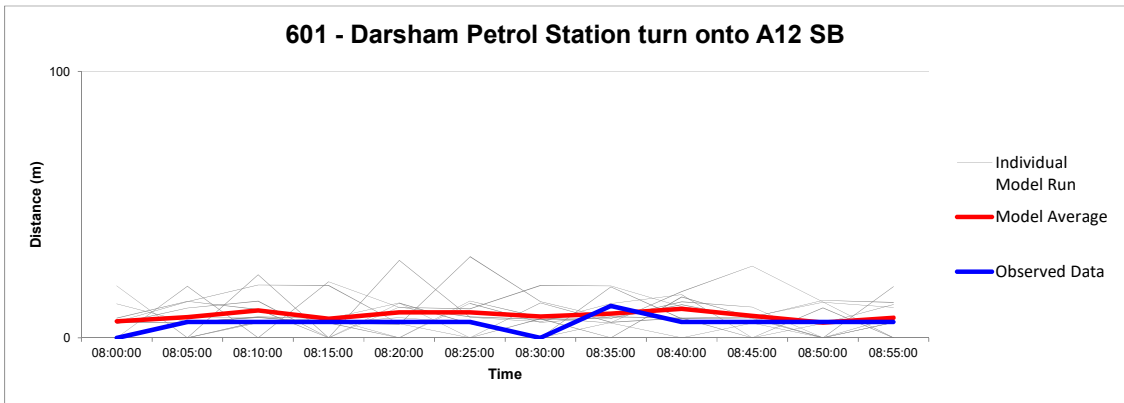
Junction Number 5
AM Peak





Queue Graphs

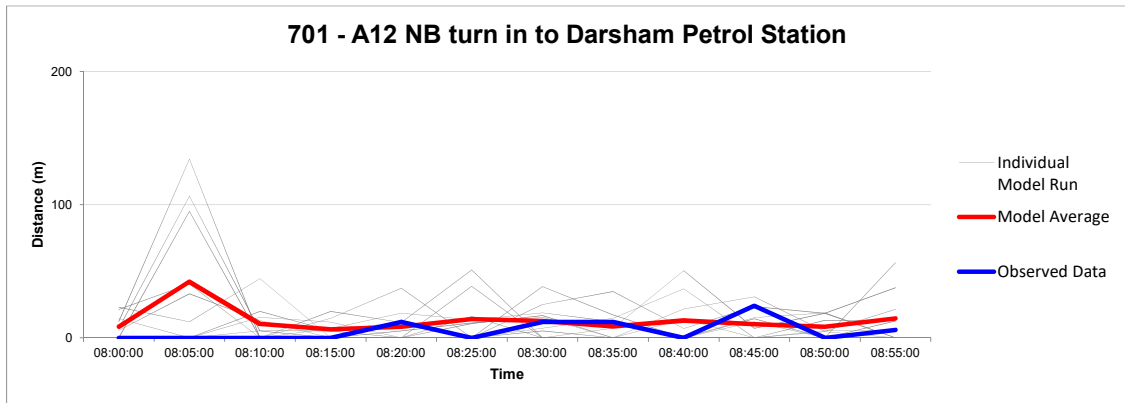
Junction Number 6
AM Peak





Queue Graphs

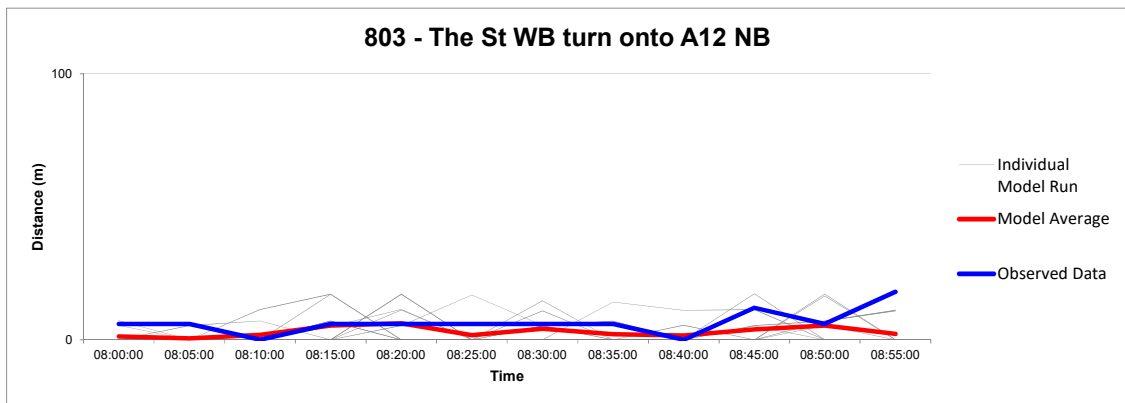
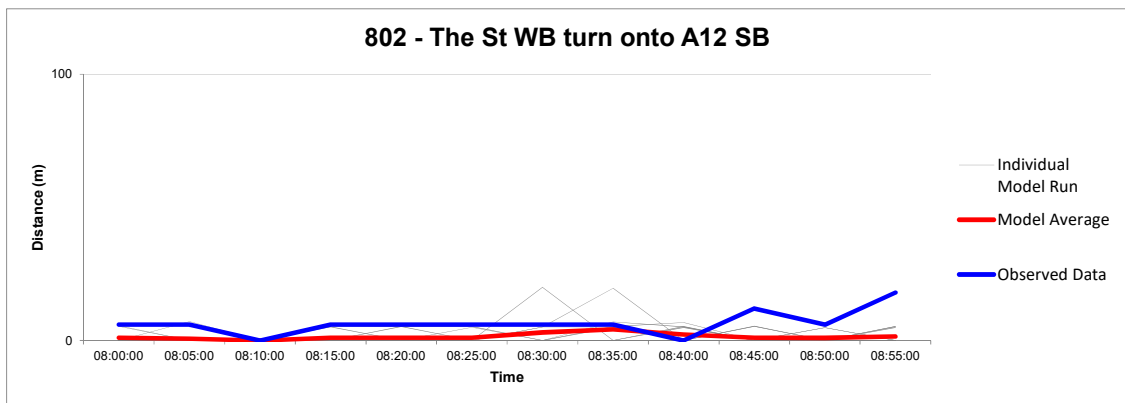
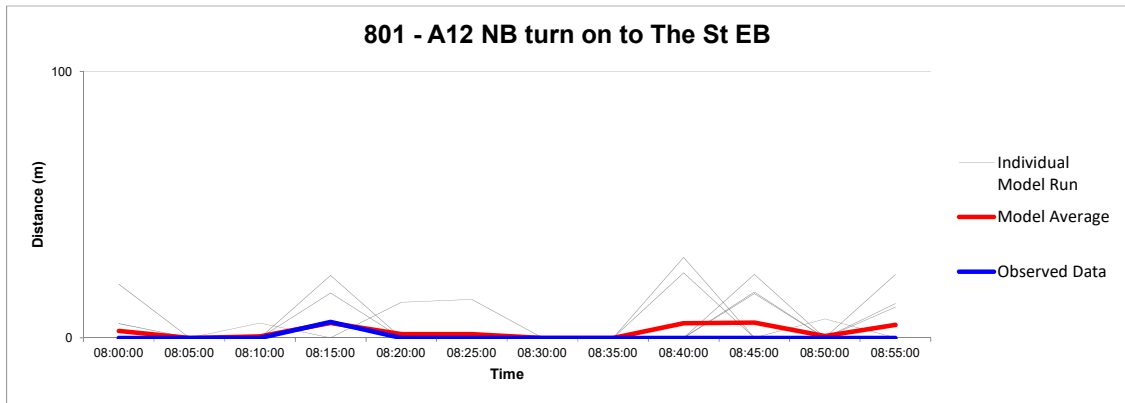
Junction Number 7
AM Peak





Queue Graphs

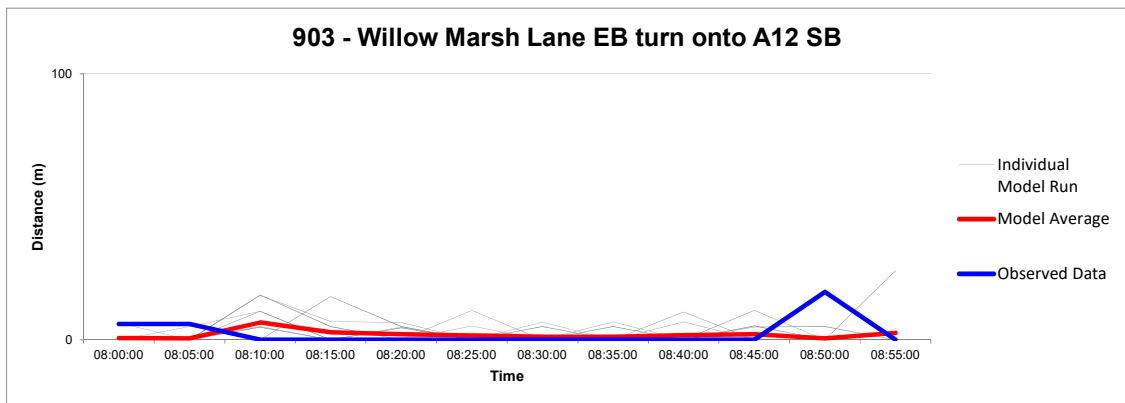
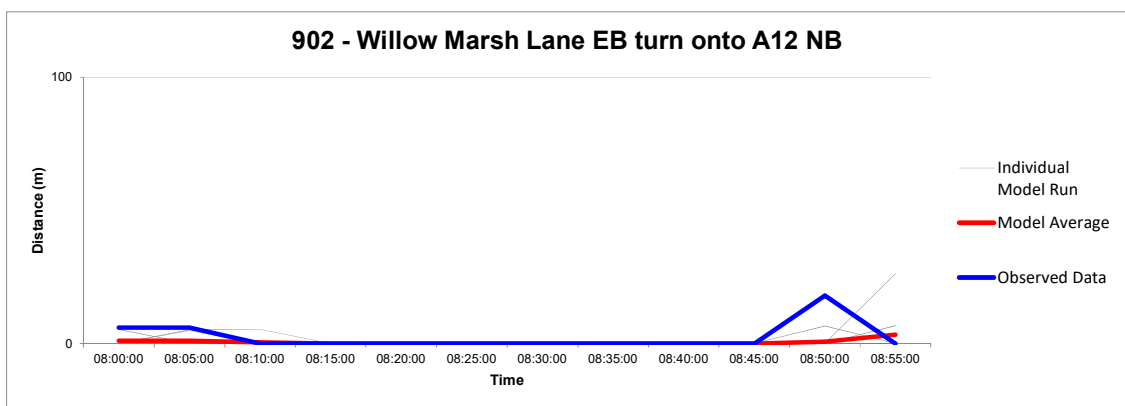
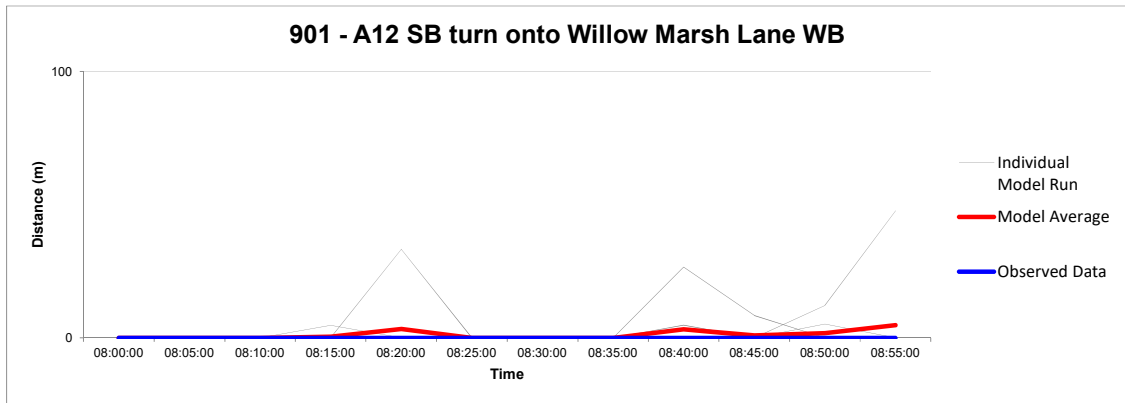
Junction Number 8
AM Peak





Queue Graphs

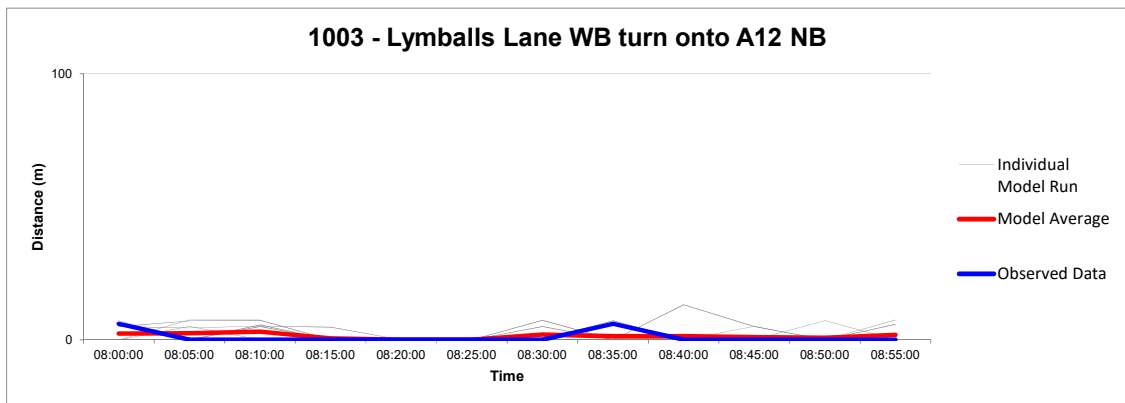
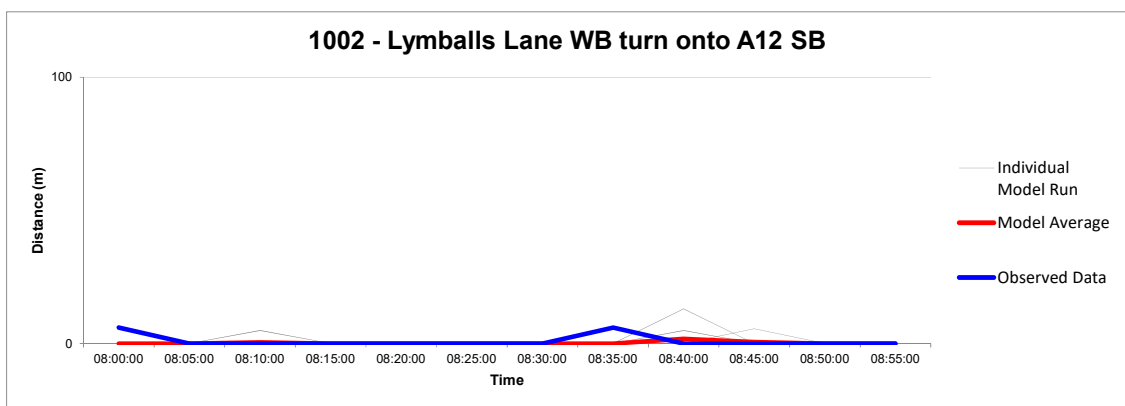
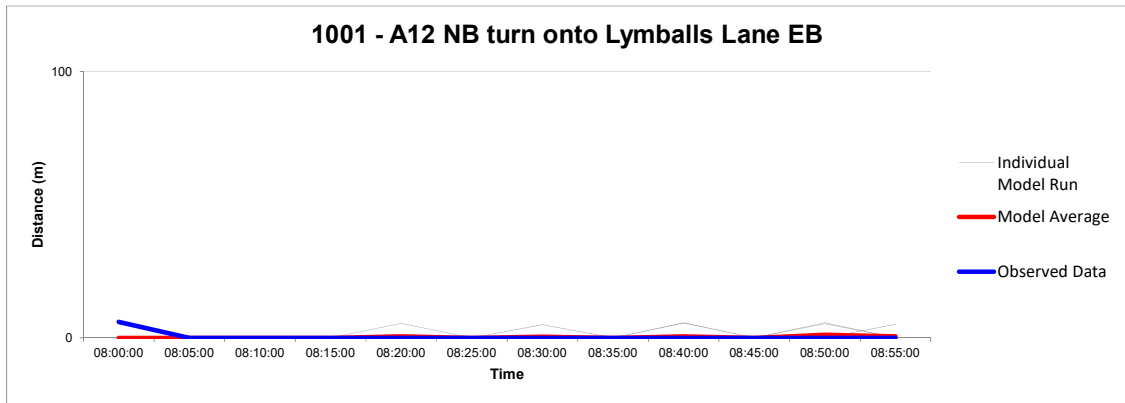
Junction Number 9
AM Peak





Queue Graphs

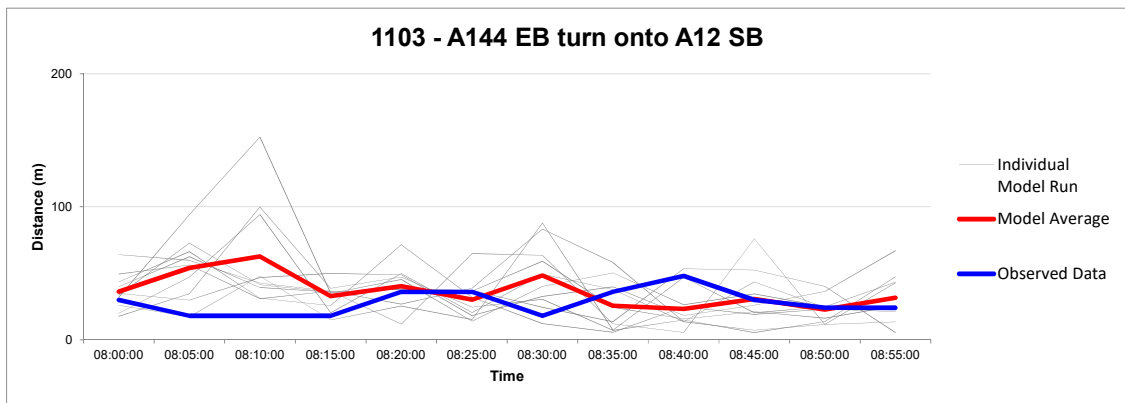
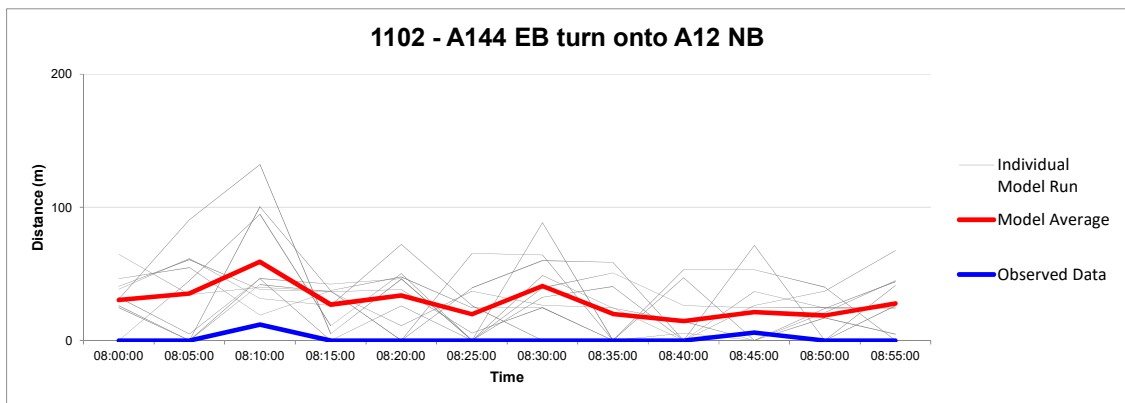
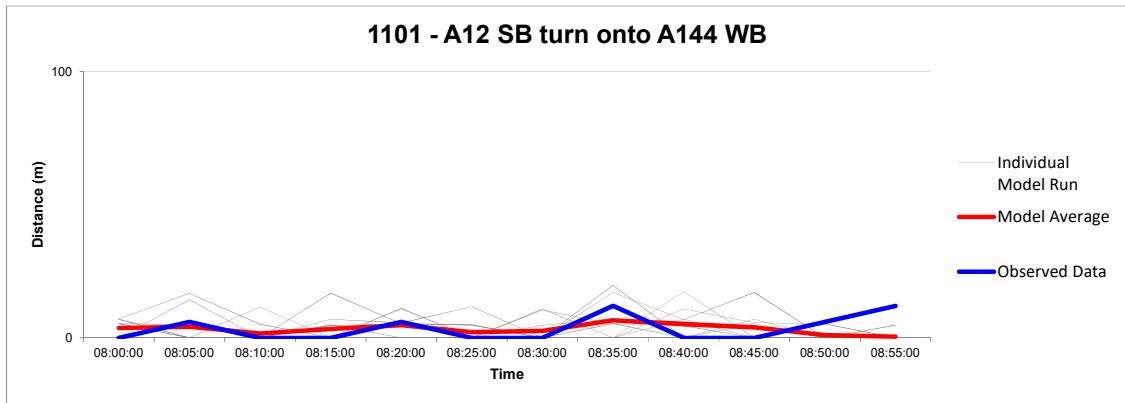
Junction Number 10
AM Peak





Queue Graphs

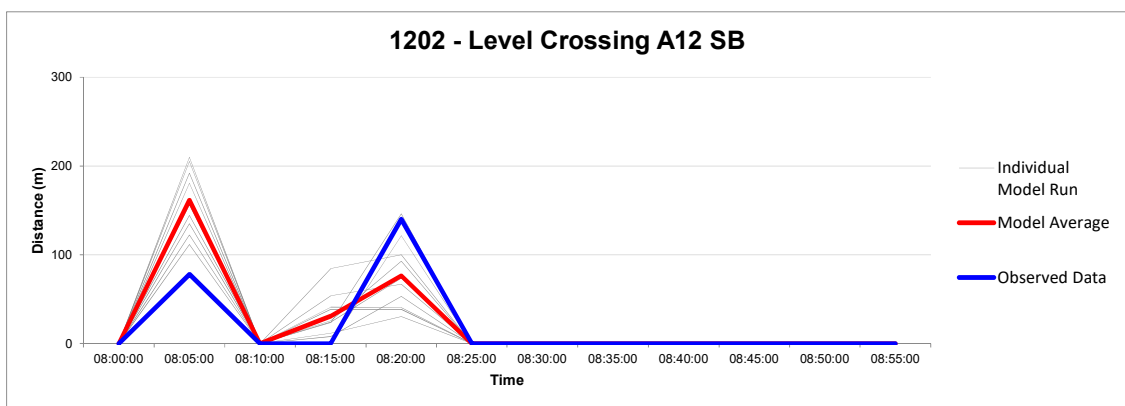
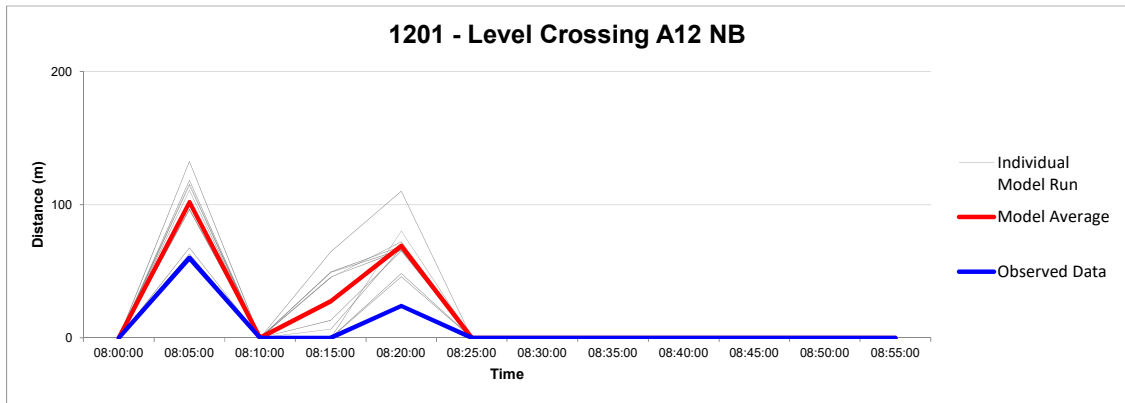
Junction Number 11
AM Peak





Queue Graphs

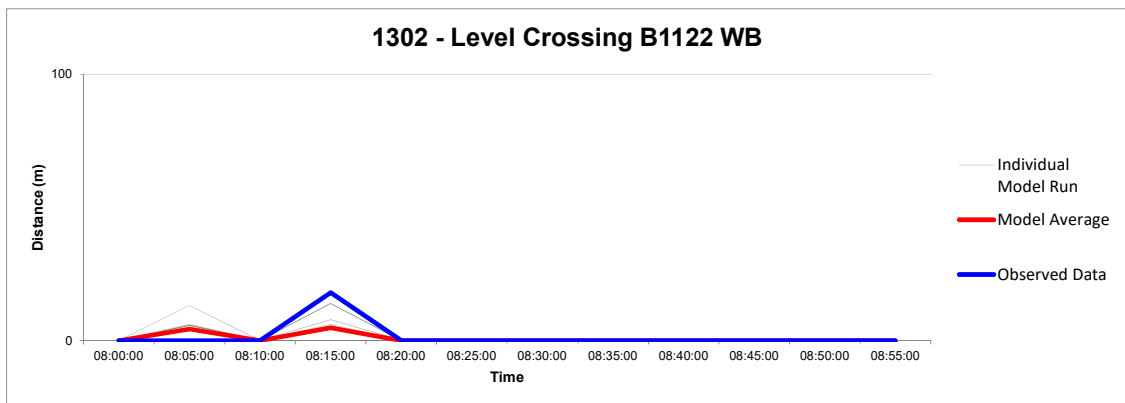
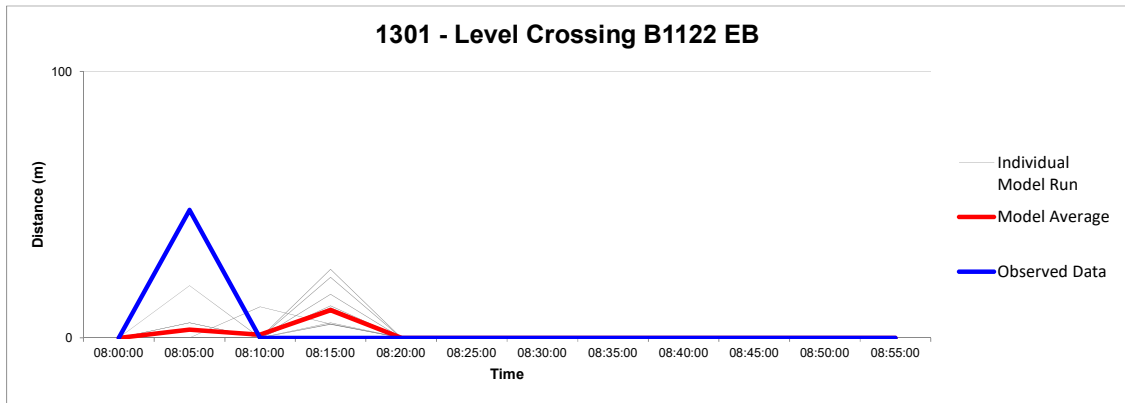
Junction Number 12
AM Peak





Queue Graphs

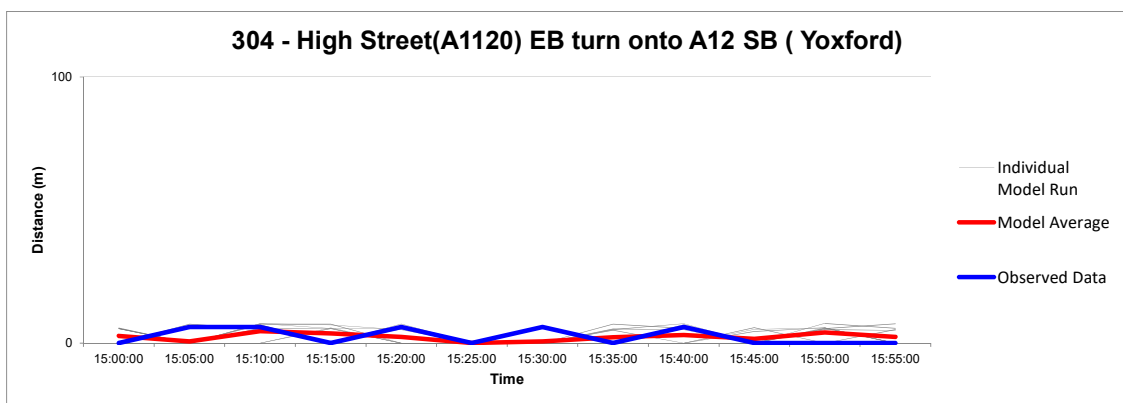
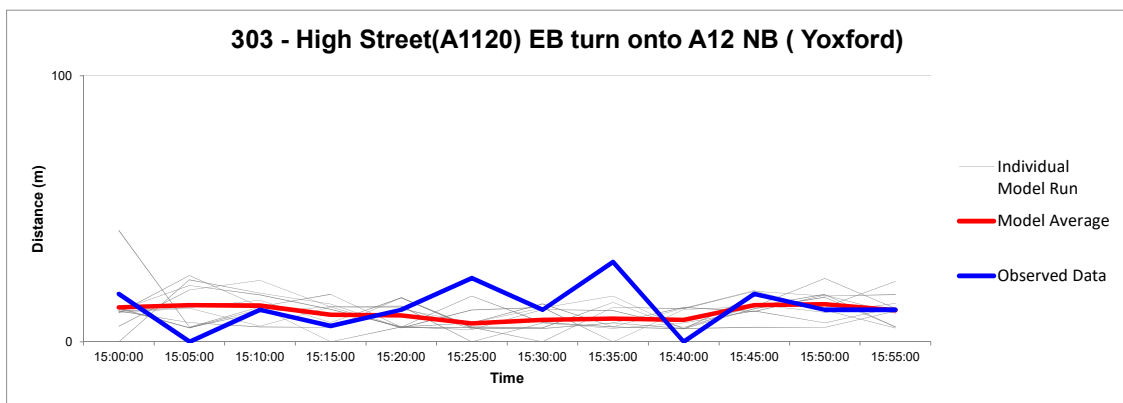
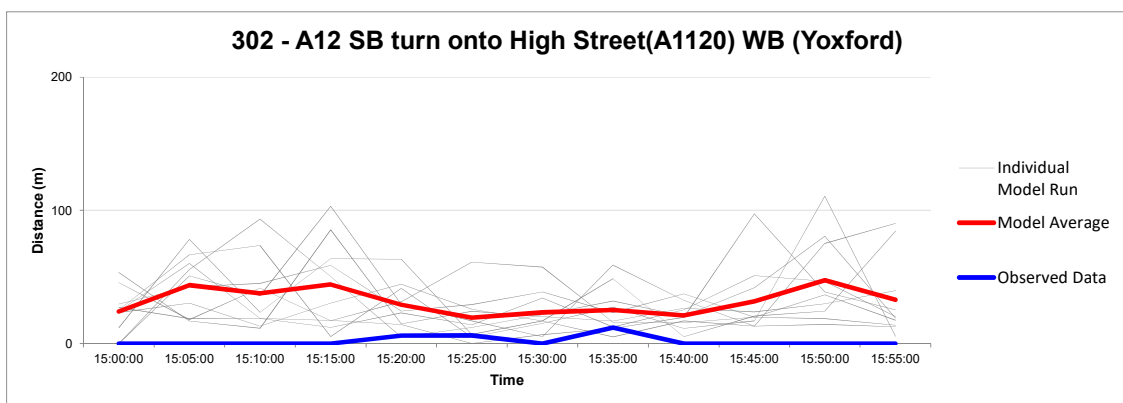
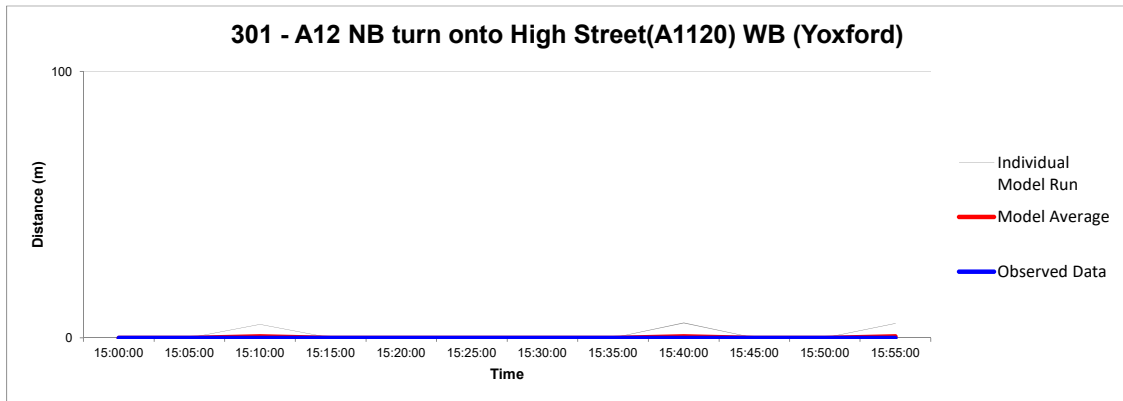
Junction Number 13
AM Peak





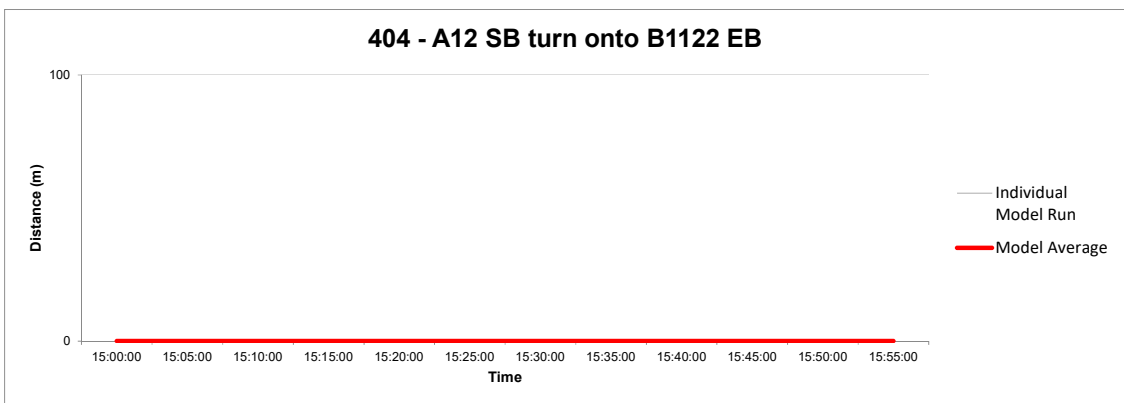
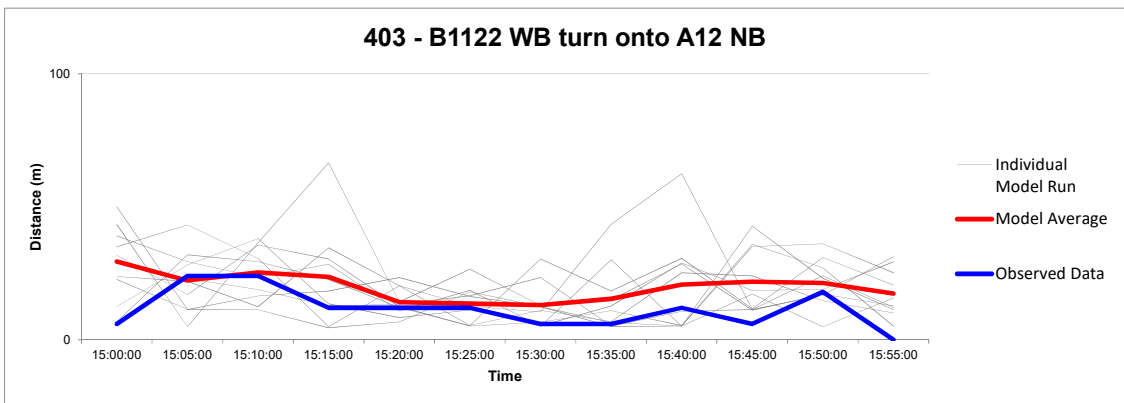
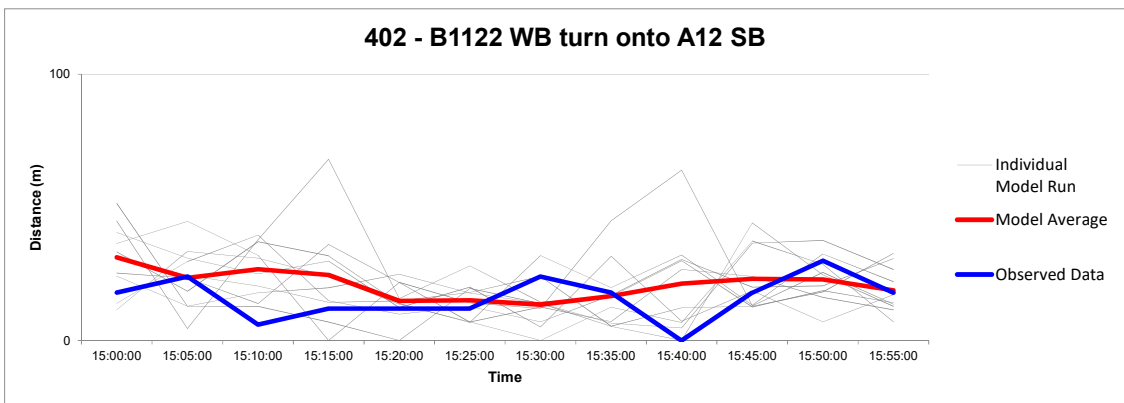
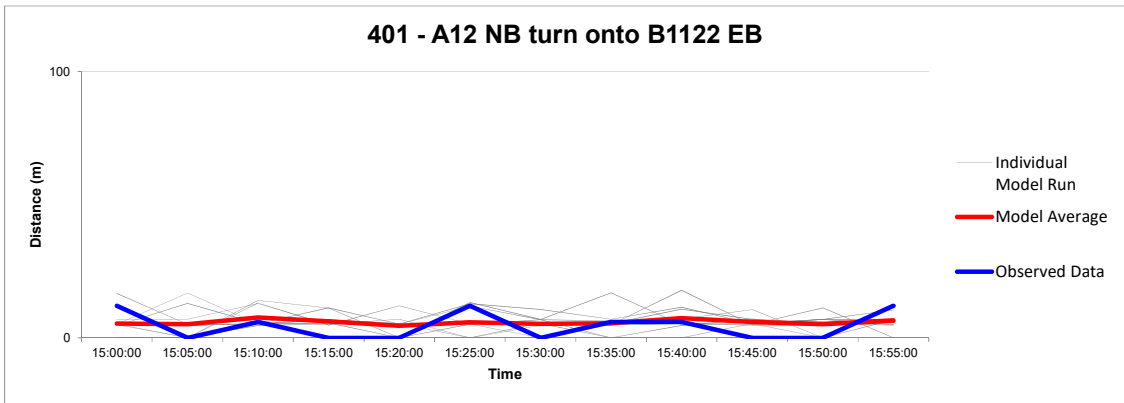
Queue Graphs

Junction Number 3
IP Peak





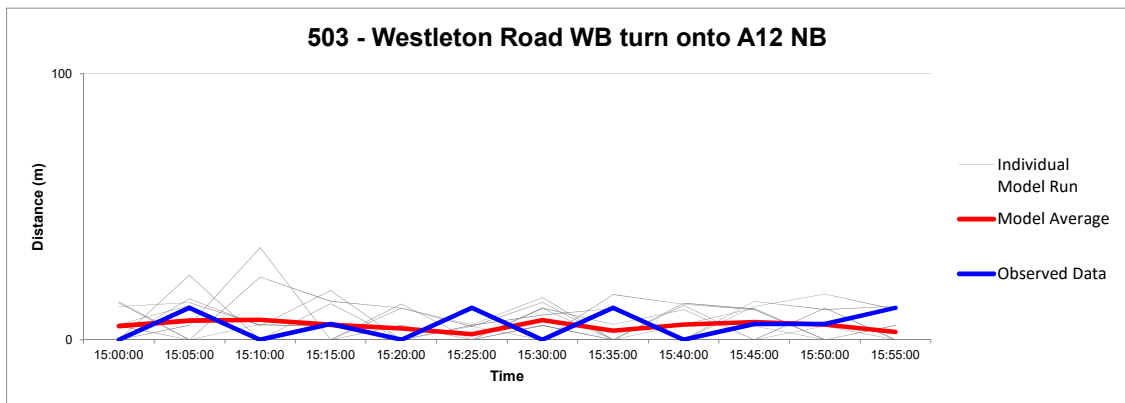
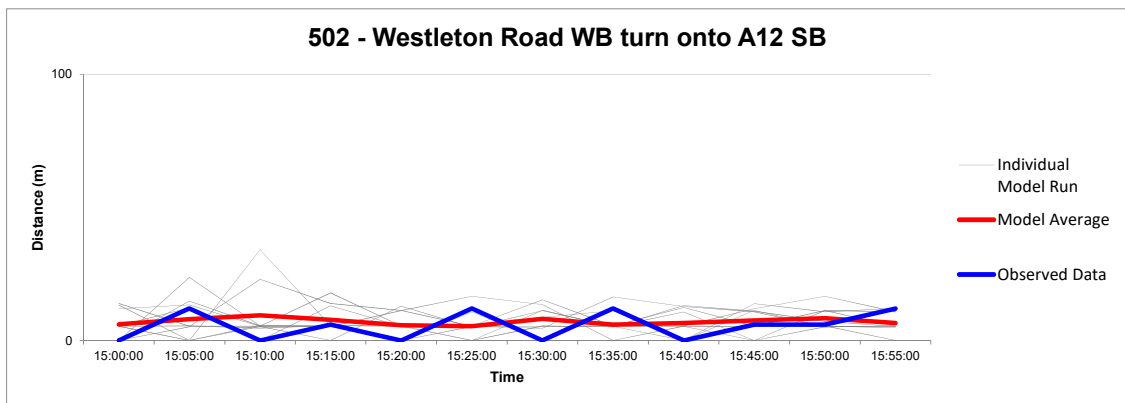
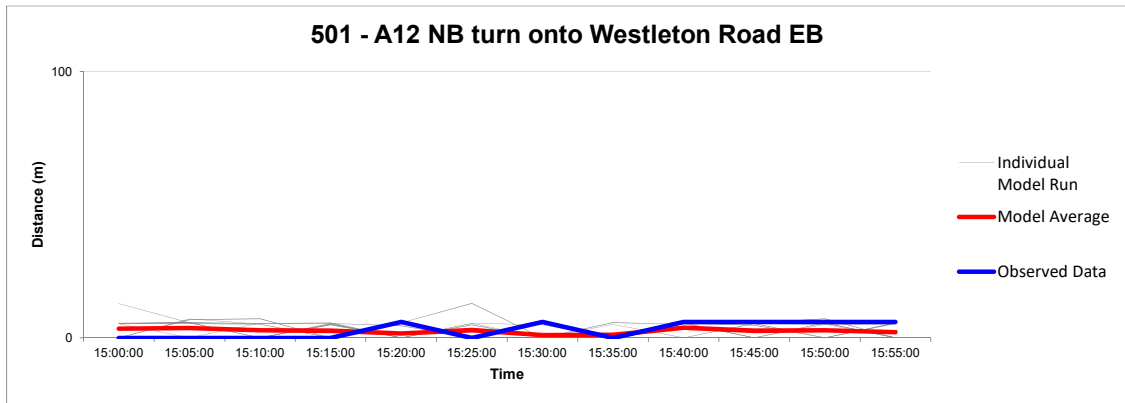
Queue Graphs
Junction Number 4
IP Peak





Queue Graphs

Junction Number 5
IP Peak

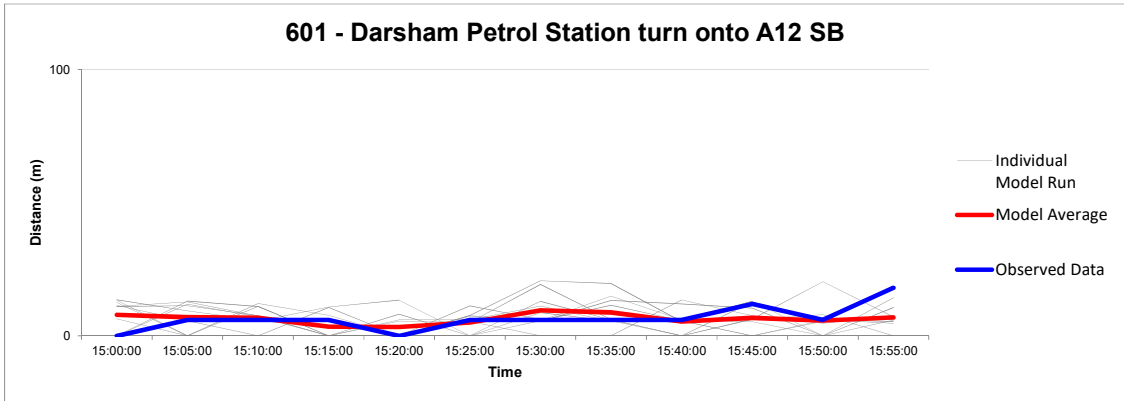




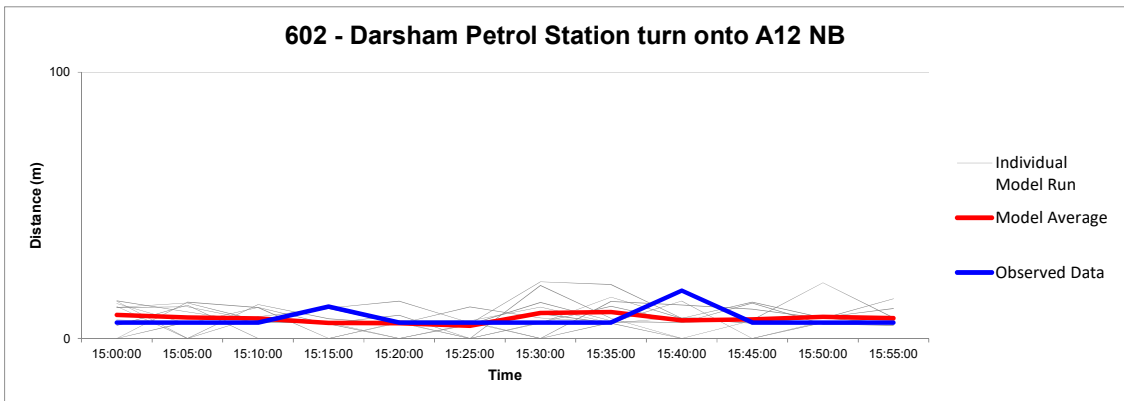
Queue Graphs

Junction Number 6
IP Peak

601 - Darsham Petrol Station turn onto A12 SB

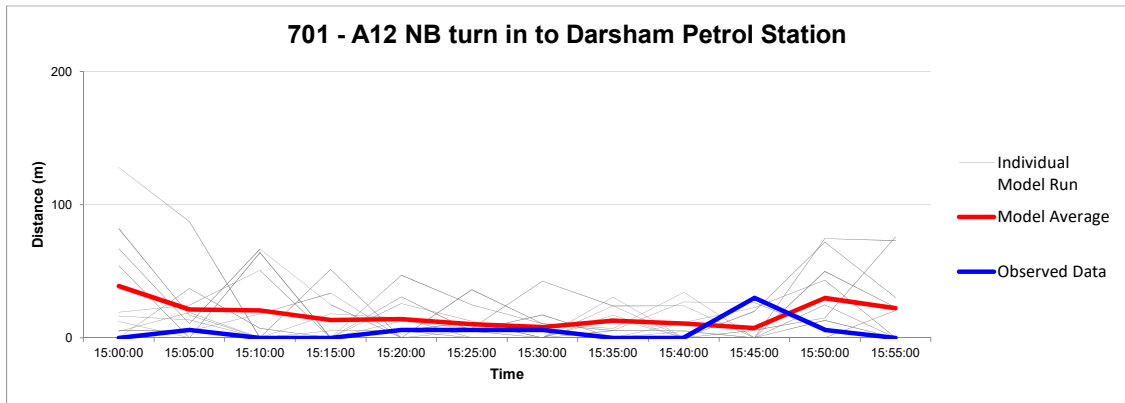


602 - Darsham Petrol Station turn onto A12 NB





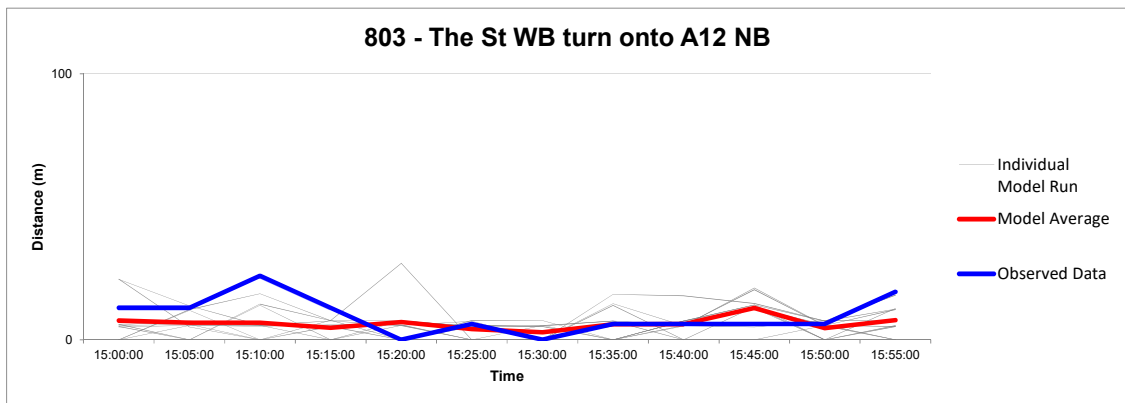
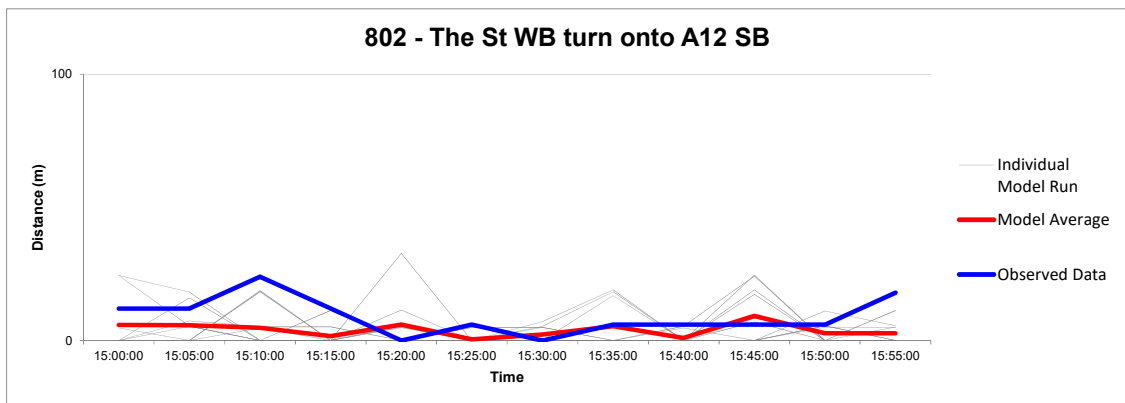
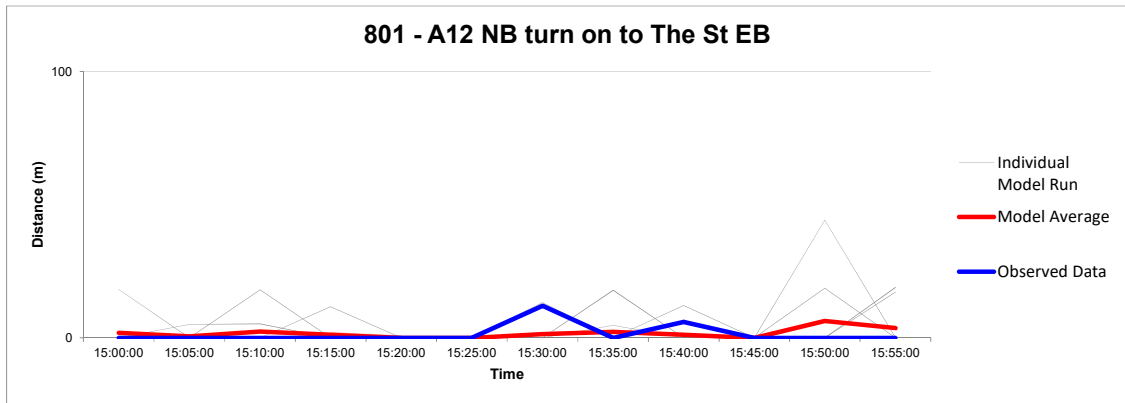
Queue Graphs
Junction Number 7
IP Peak





Queue Graphs

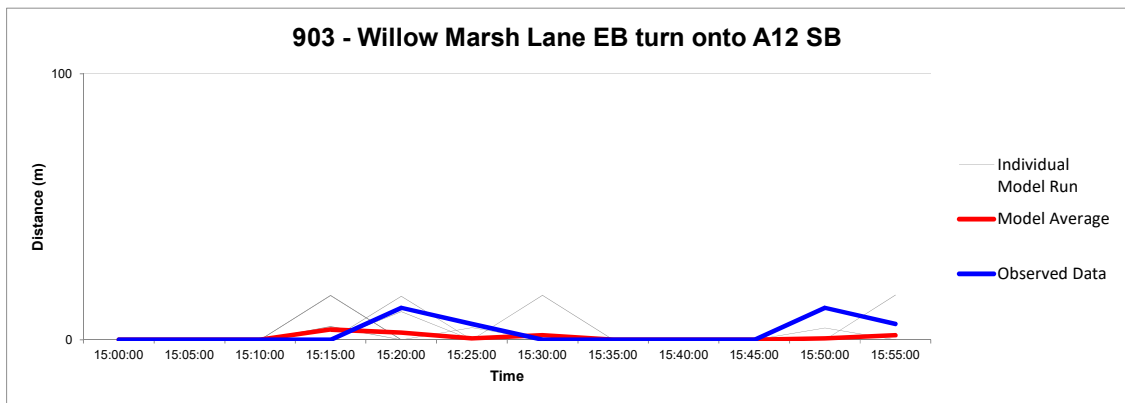
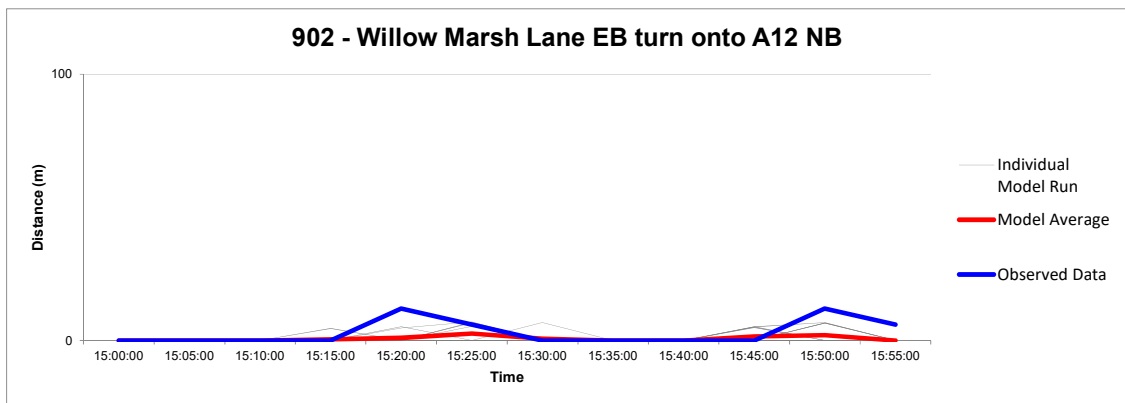
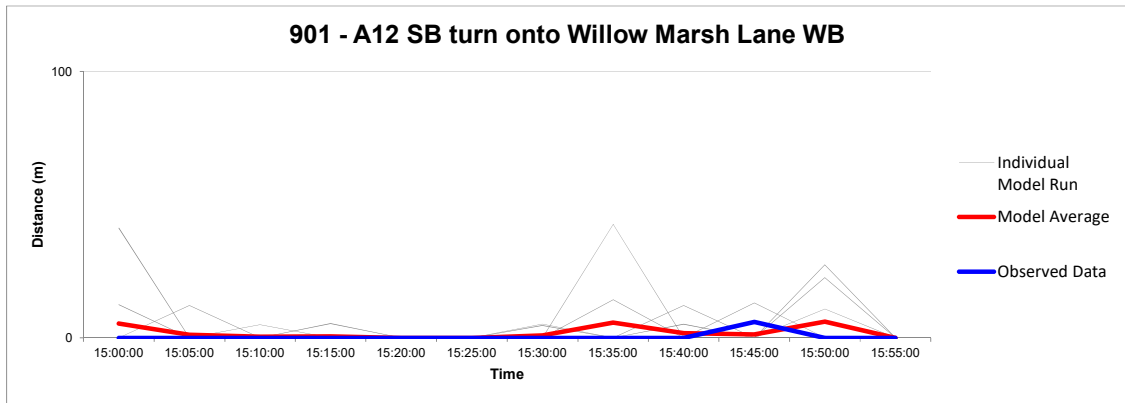
Junction Number 8
IP Peak





Queue Graphs

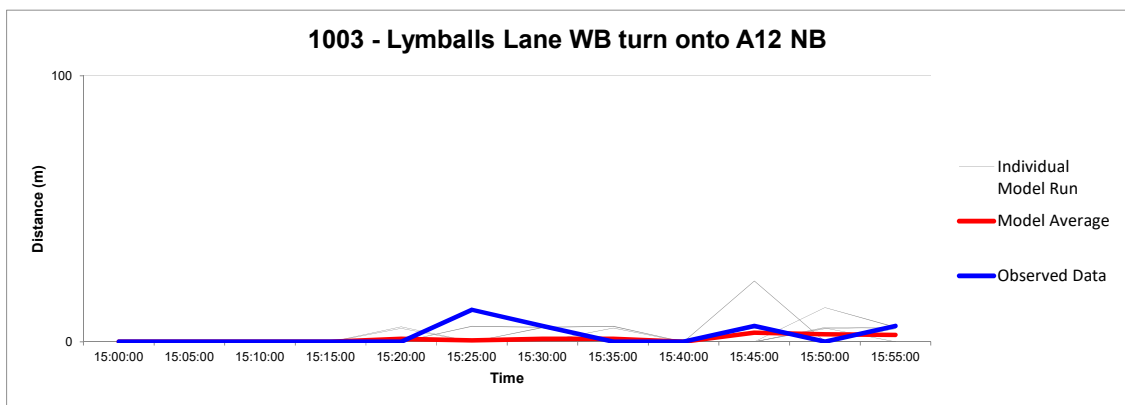
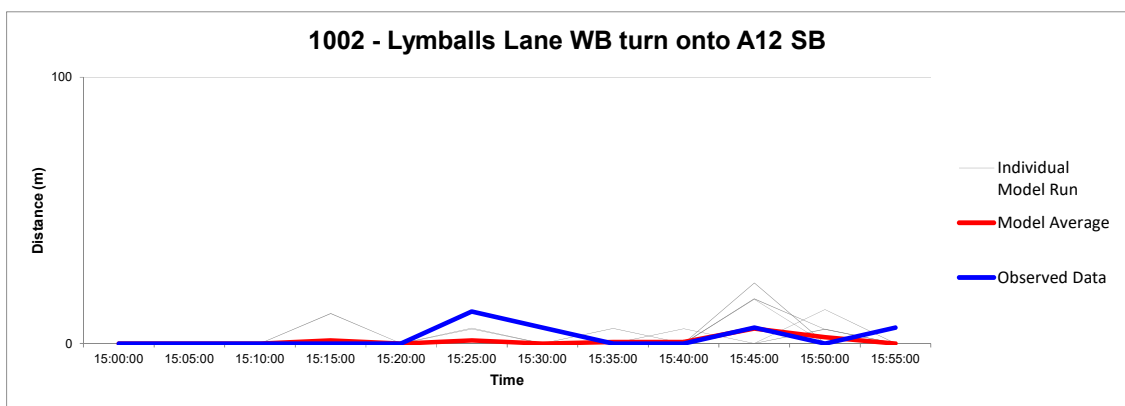
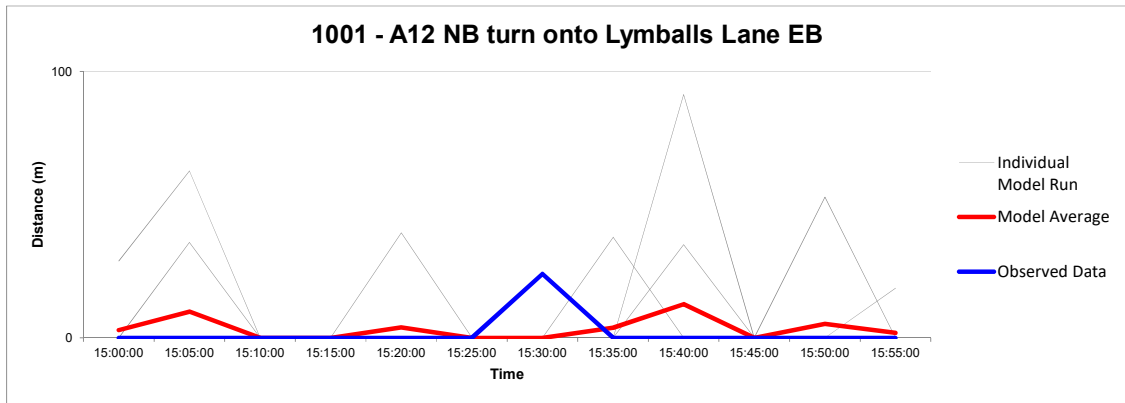
Junction Number 9
IP Peak





Queue Graphs

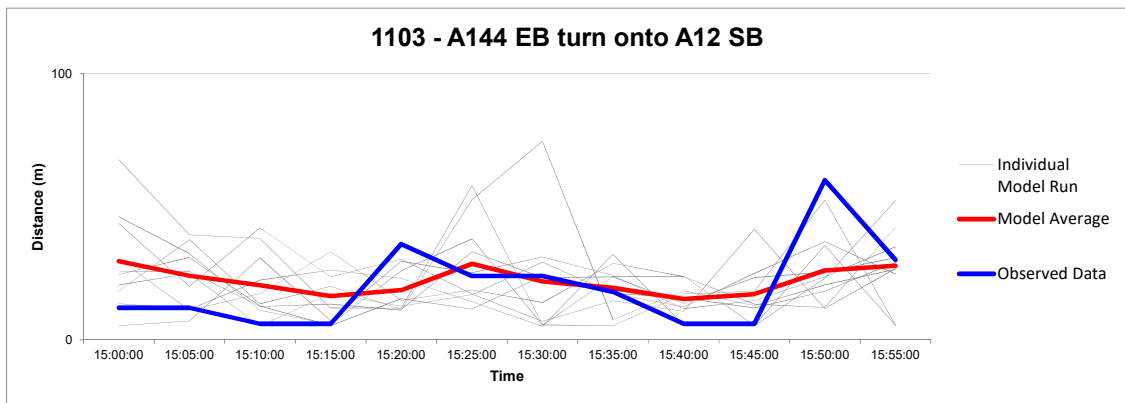
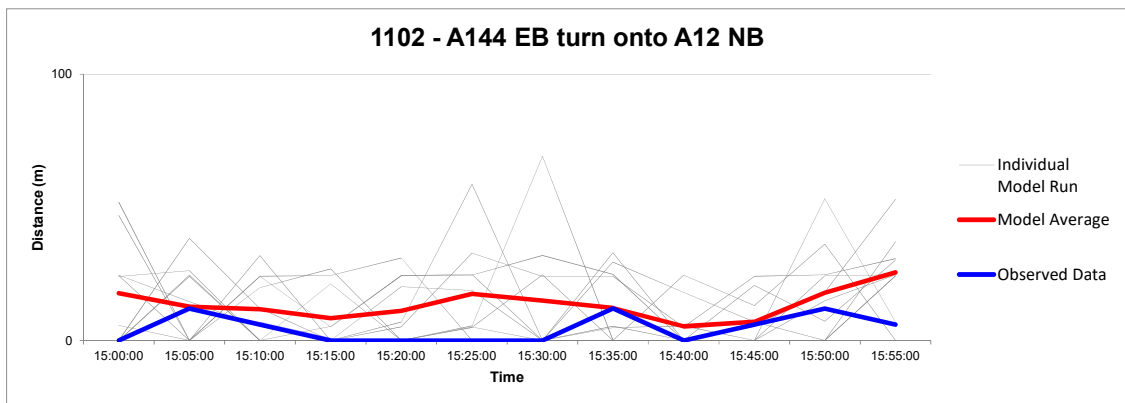
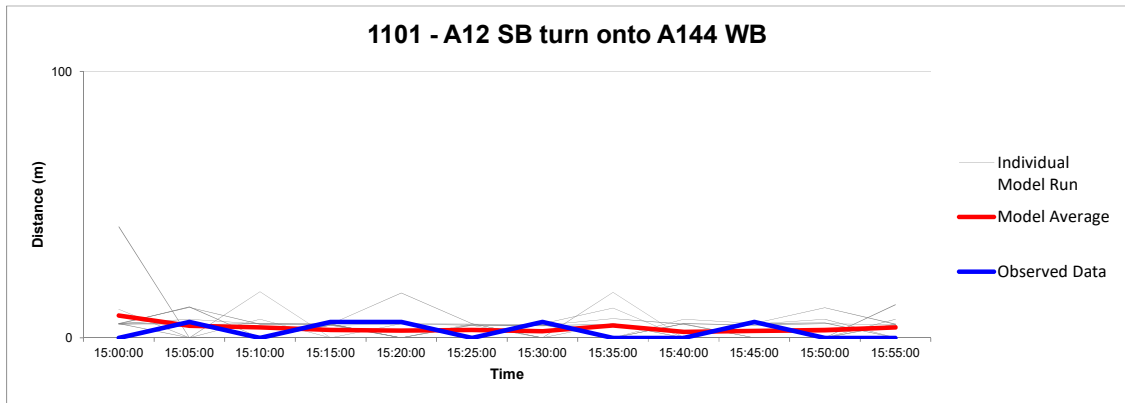
Junction Number 10
IP Peak





Queue Graphs

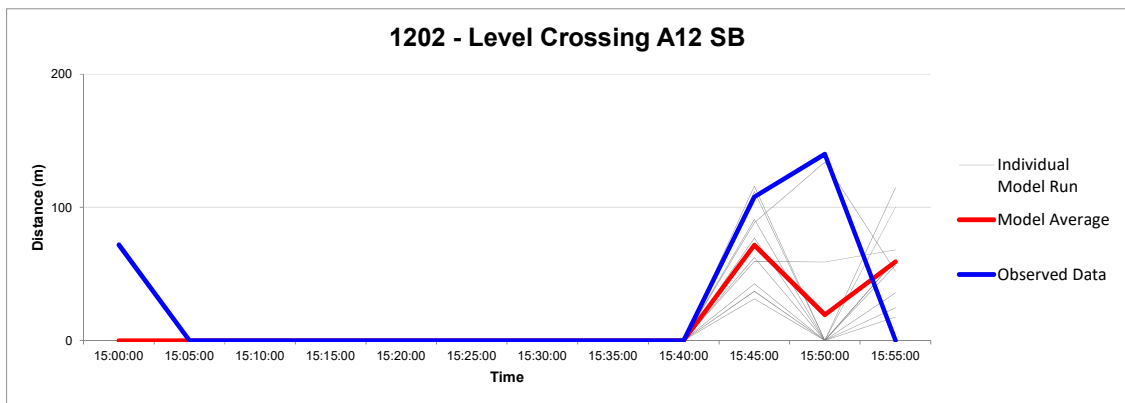
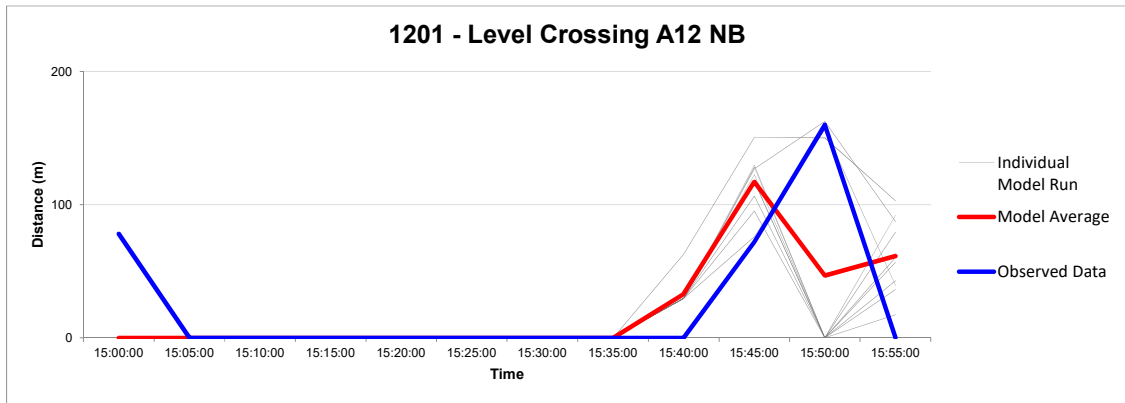
Junction Number 11
IP Peak





Queue Graphs

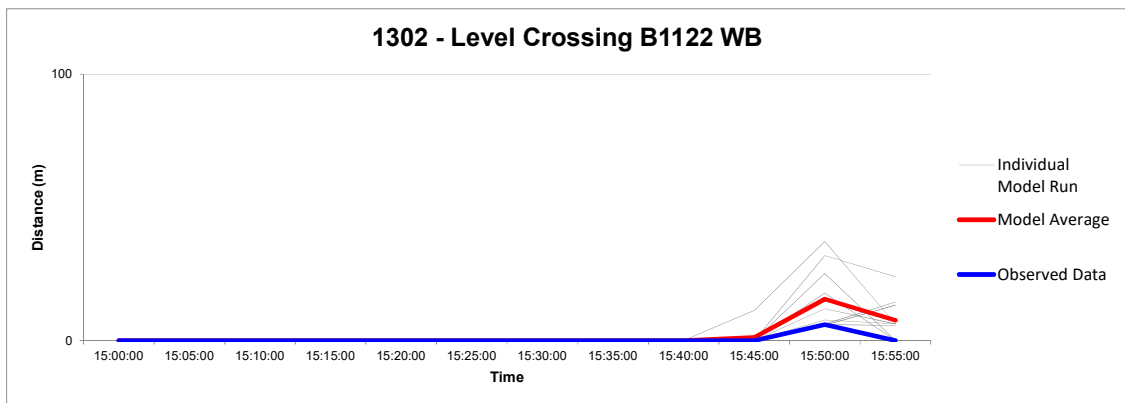
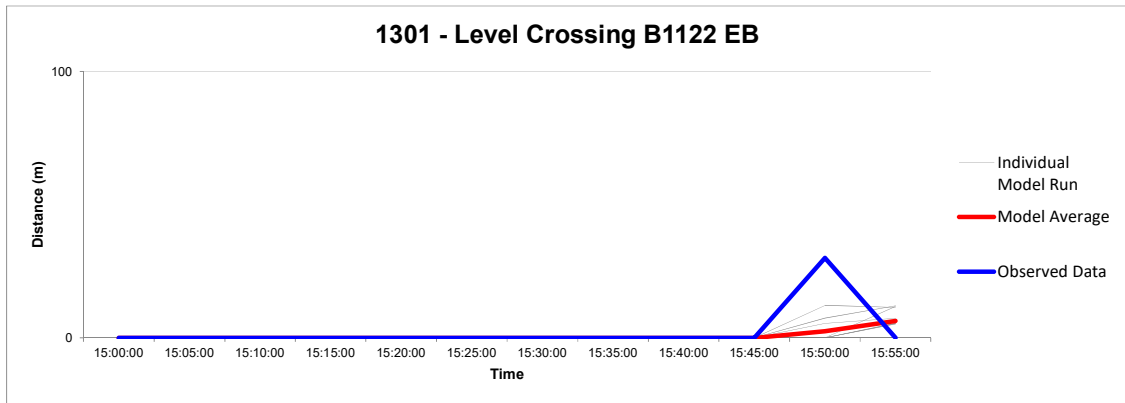
Junction Number 12
IP Peak





Queue Graphs

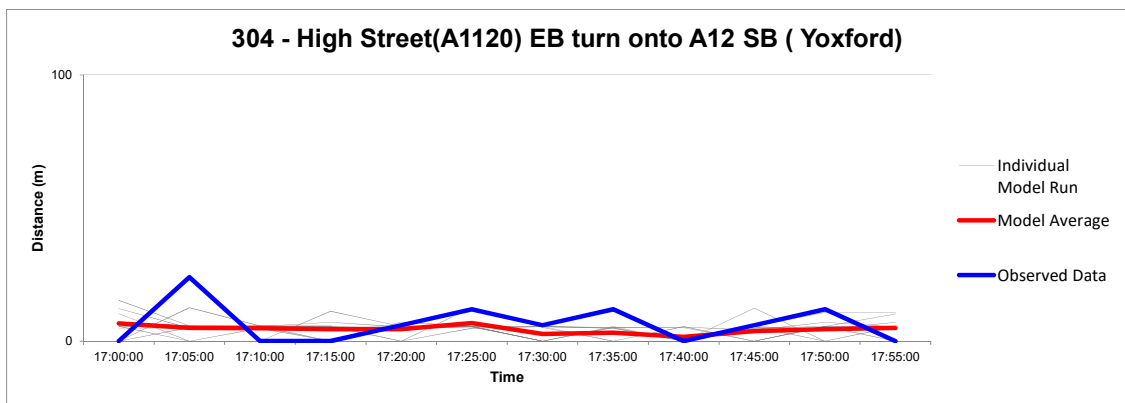
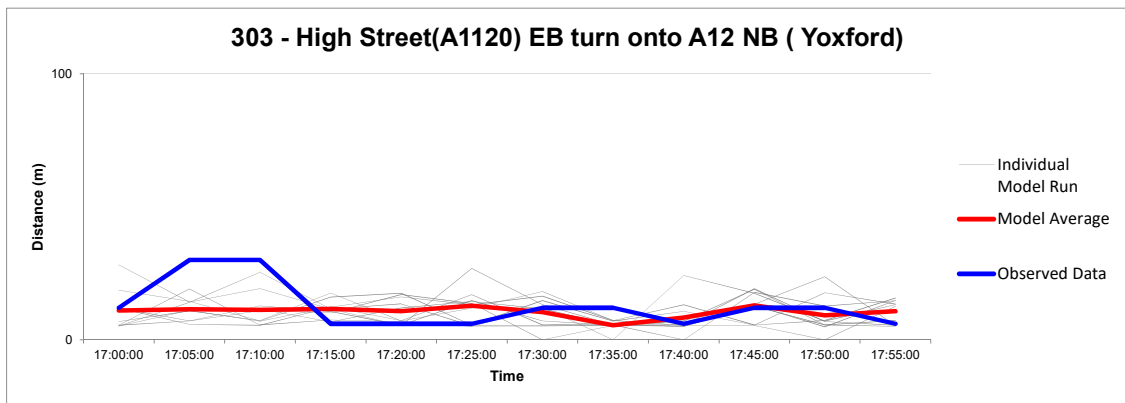
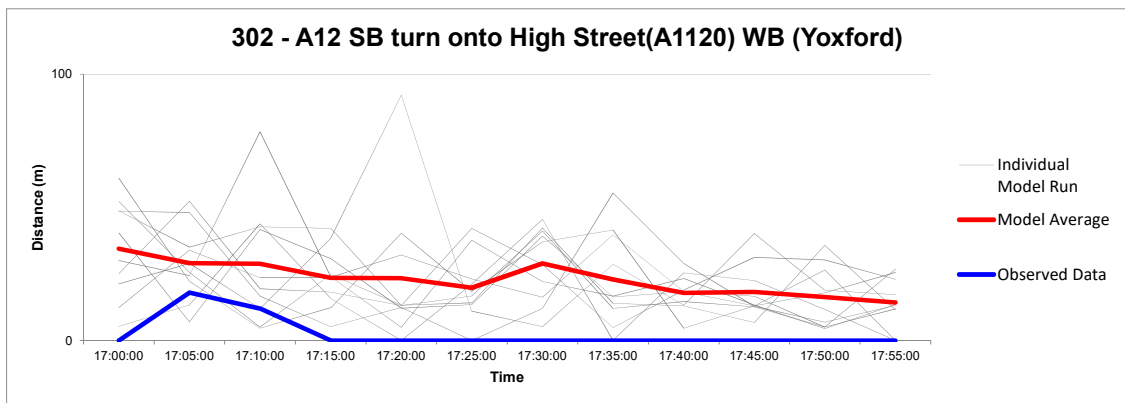
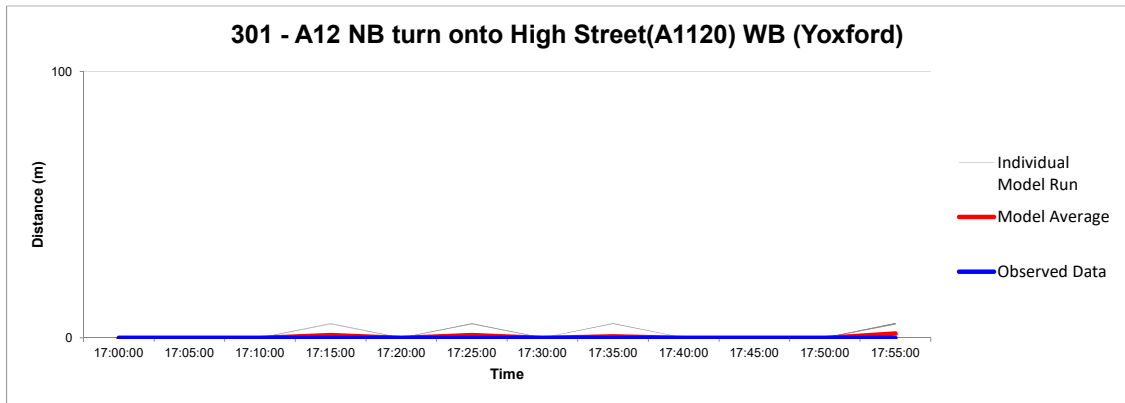
Junction Number 13
IP Peak





Queue Graphs

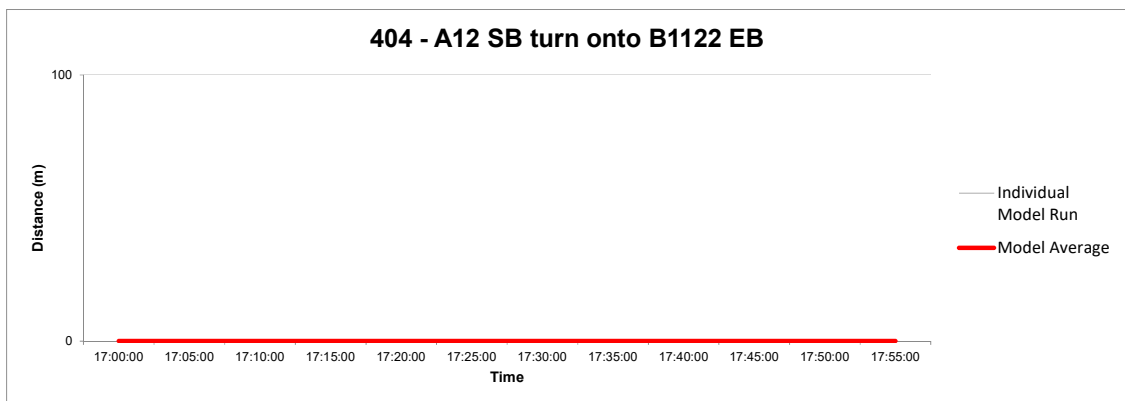
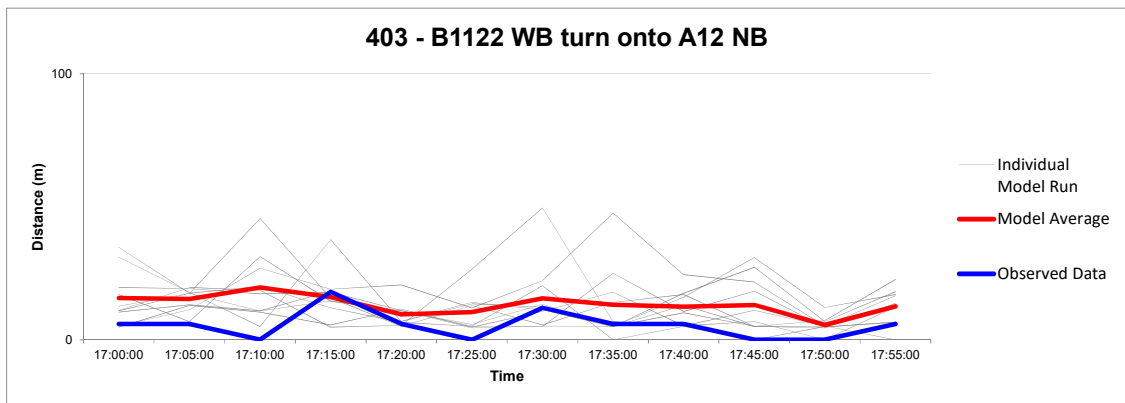
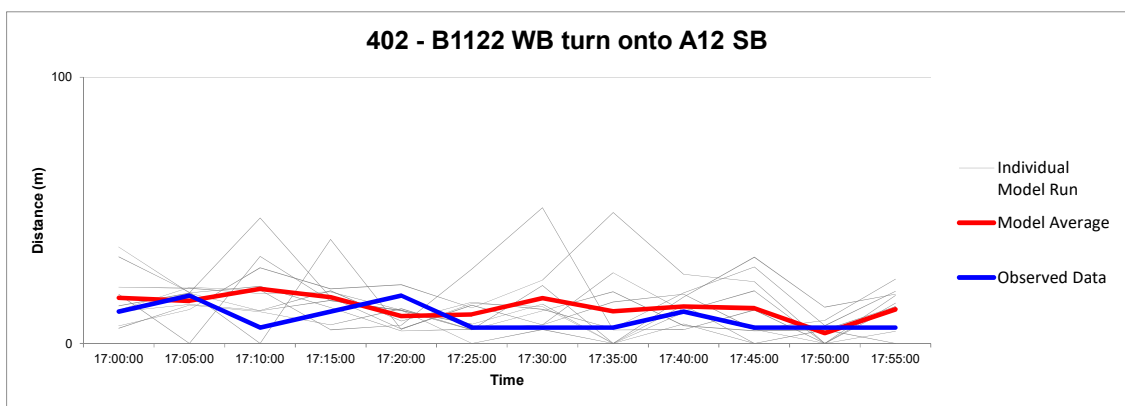
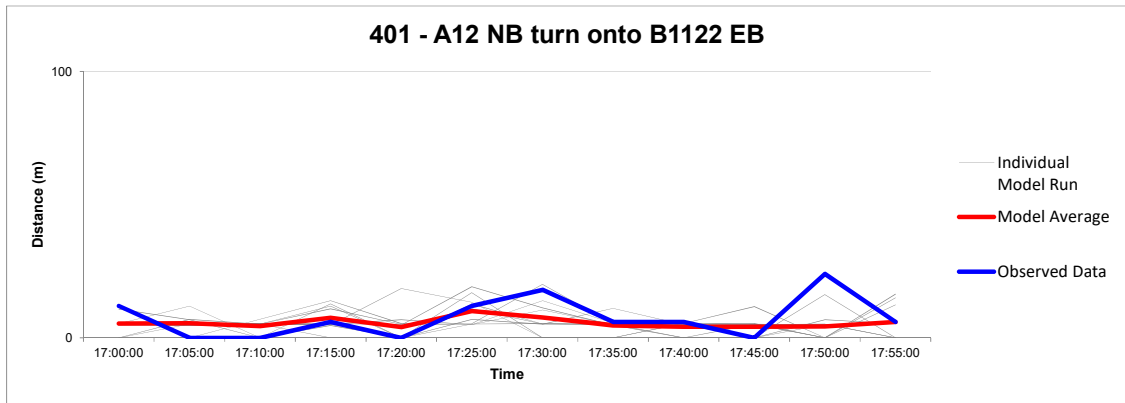
Junction Number 3
PM Peak





Queue Graphs

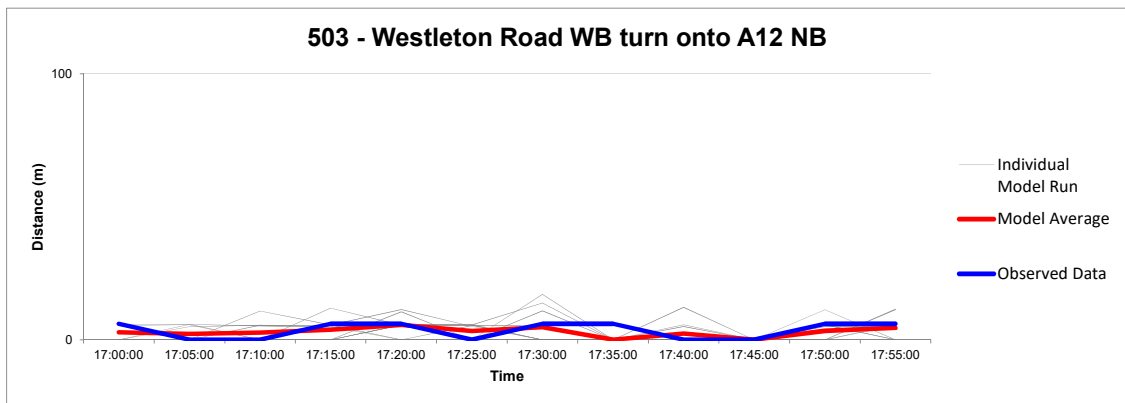
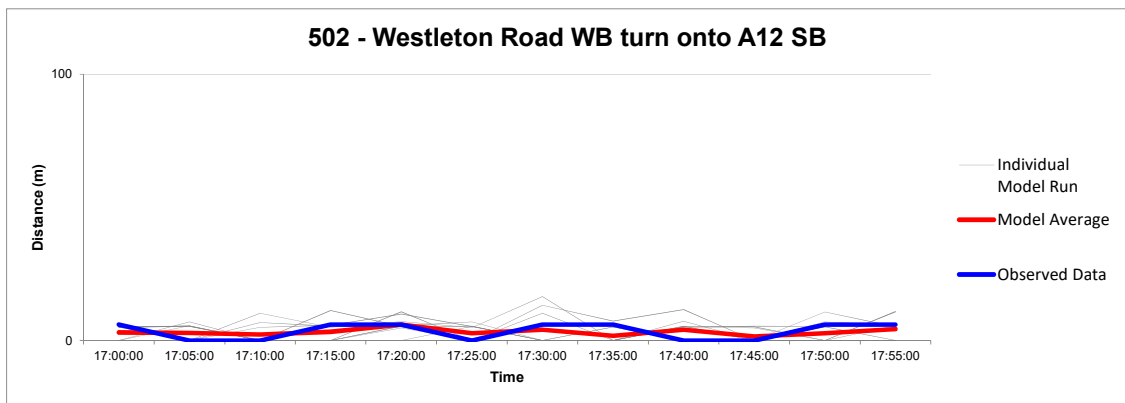
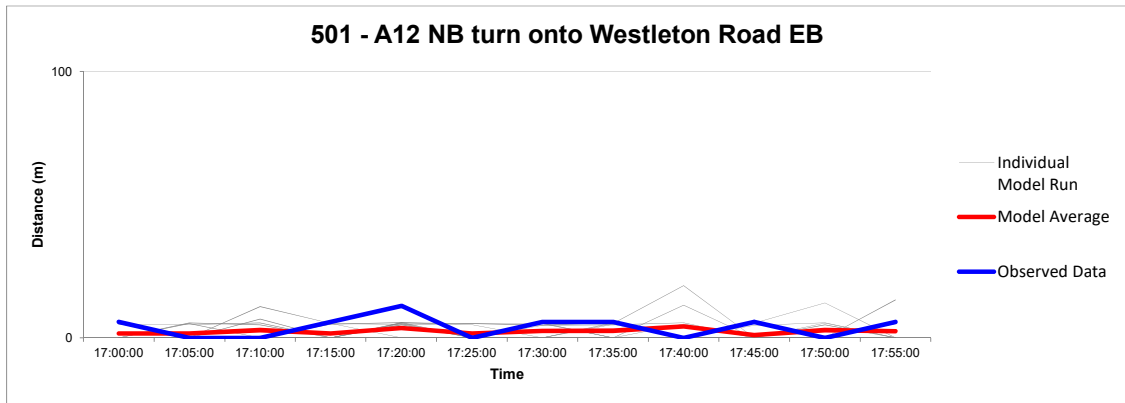
Junction Number 4
PM Peak





Queue Graphs

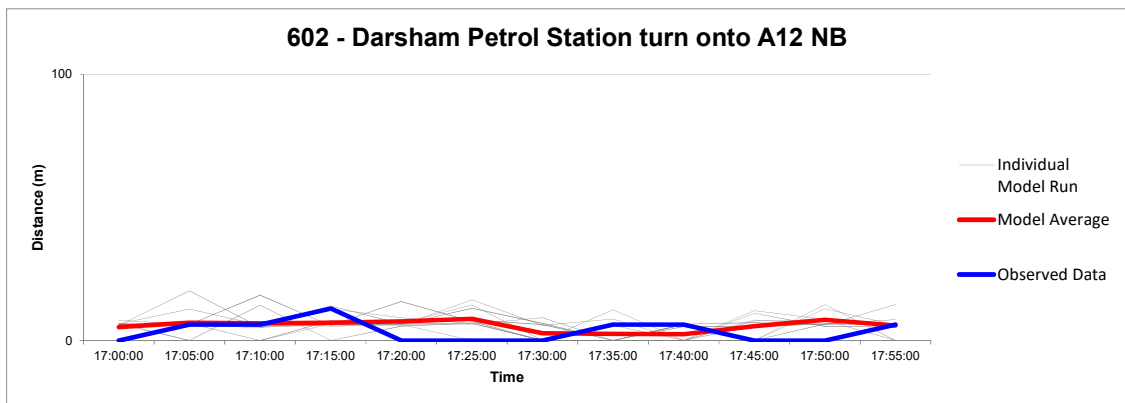
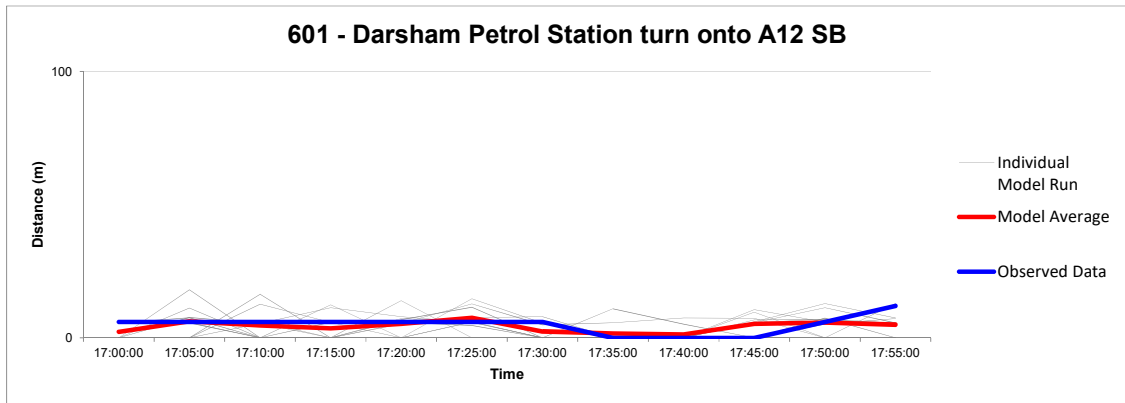
Junction Number 5
PM Peak





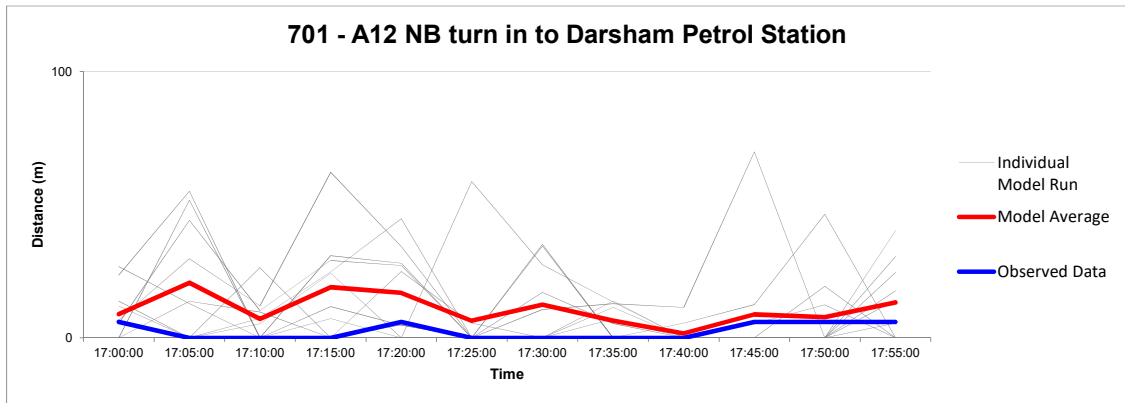
Queue Graphs

Junction Number 6
PM Peak





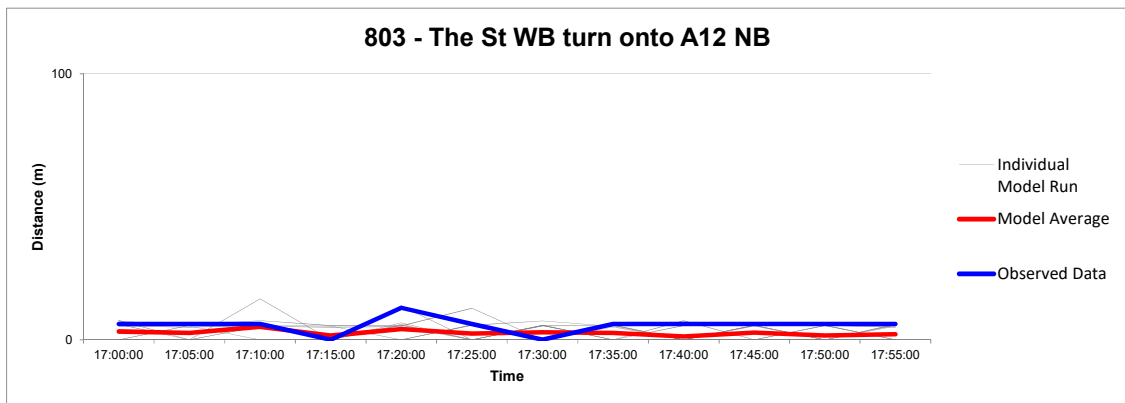
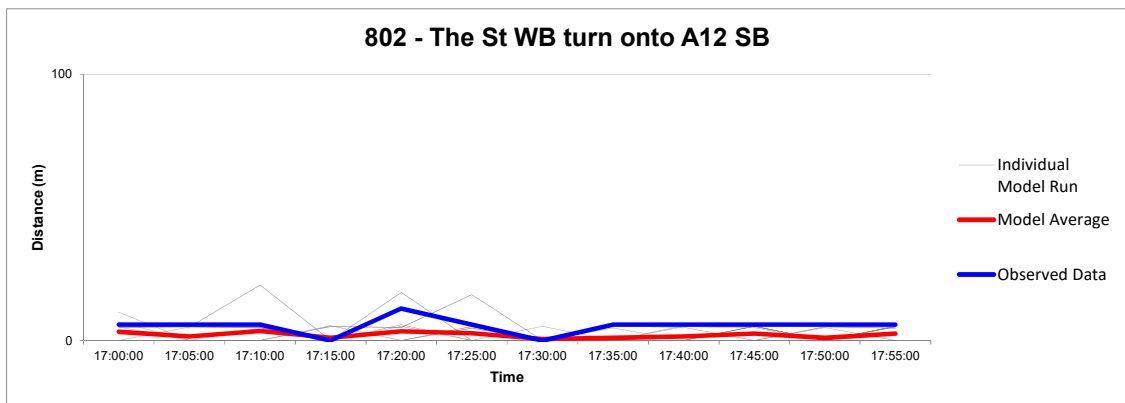
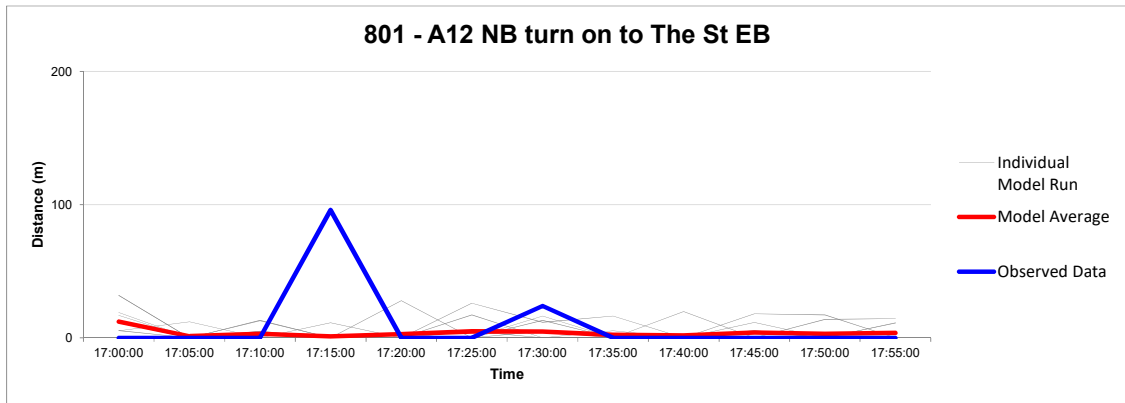
Queue Graphs
Junction Number 7
PM Peak





Queue Graphs

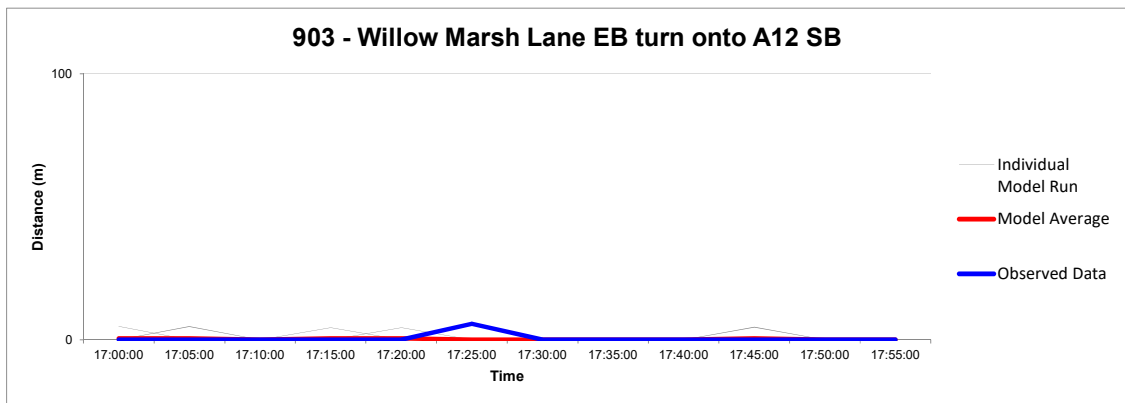
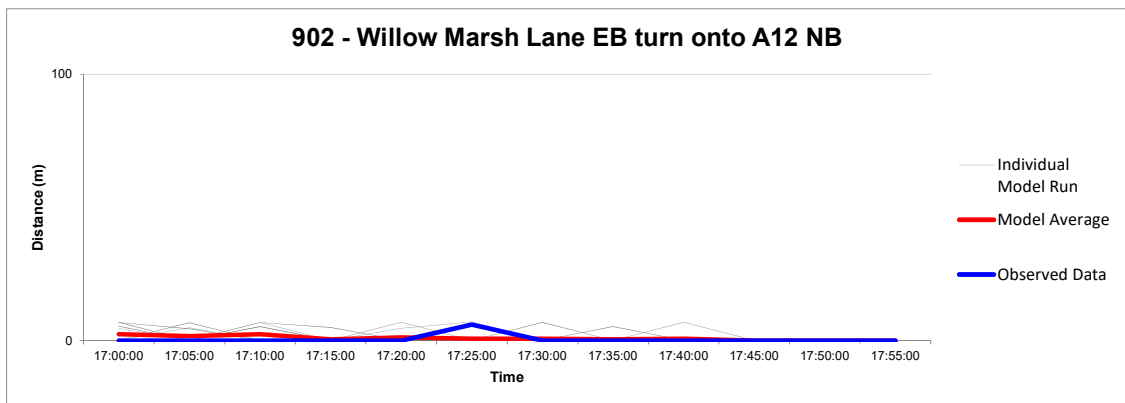
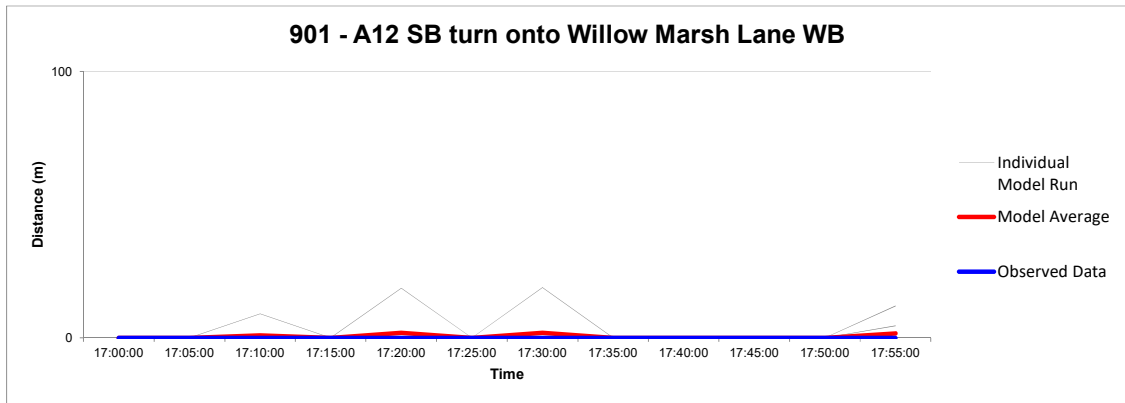
Junction Number 8
PM Peak





Queue Graphs

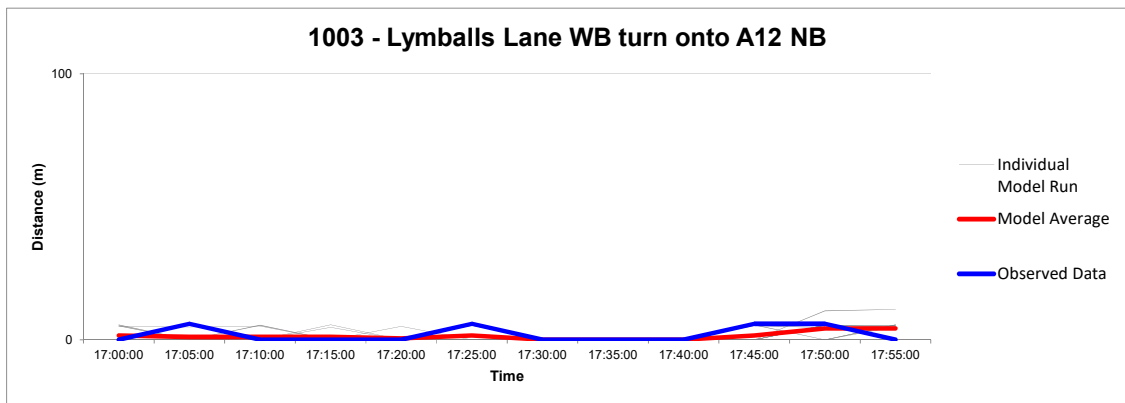
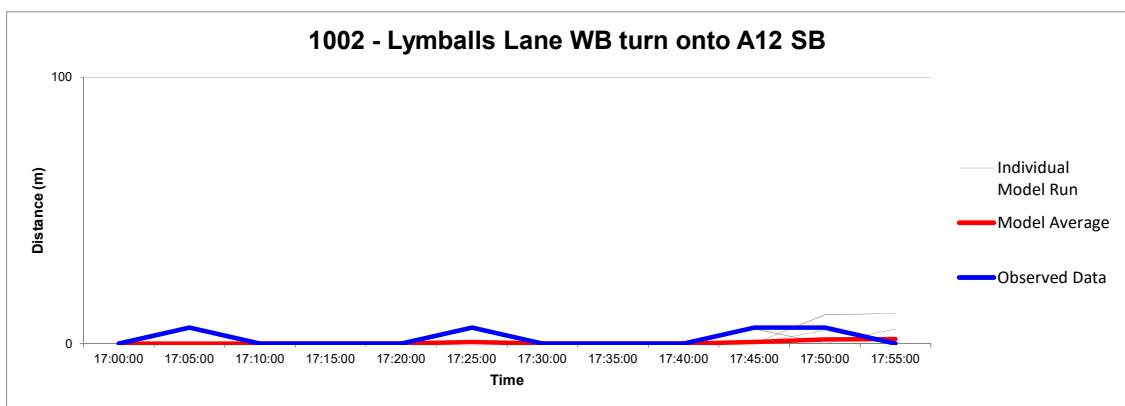
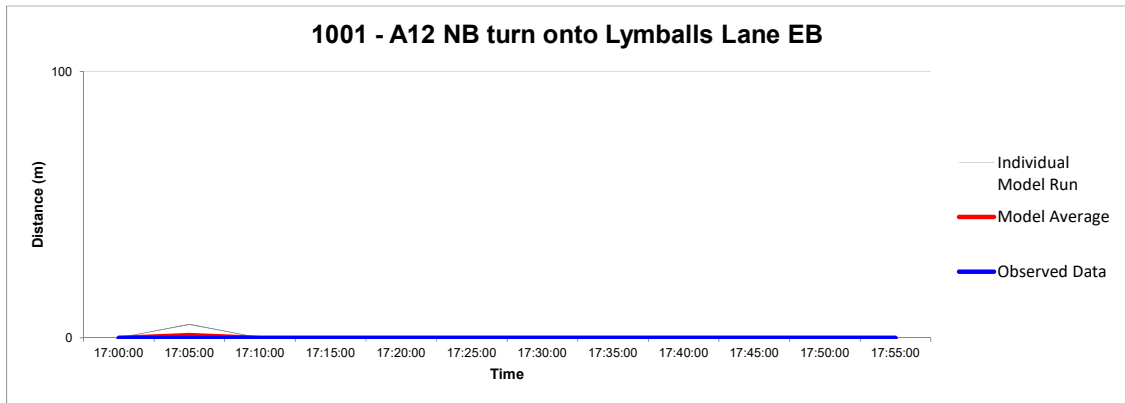
Junction Number 9
PM Peak





Queue Graphs

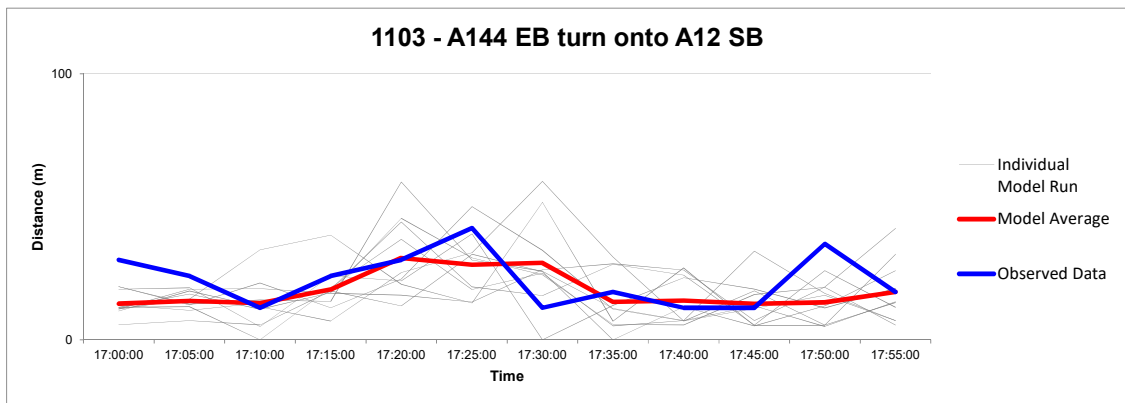
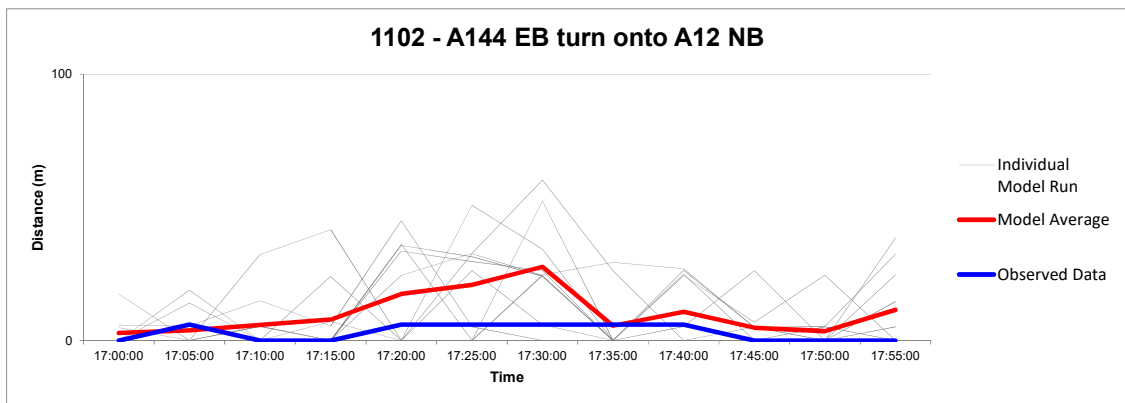
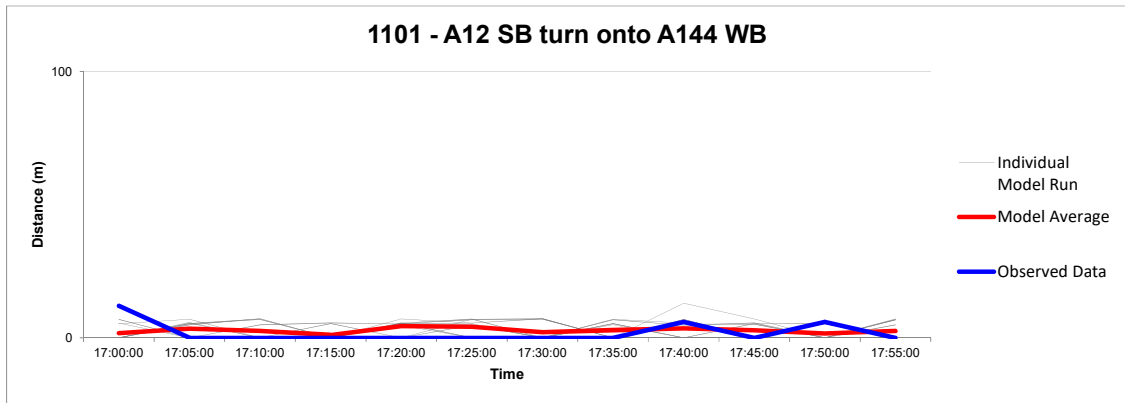
Junction Number 10
PM Peak





Queue Graphs

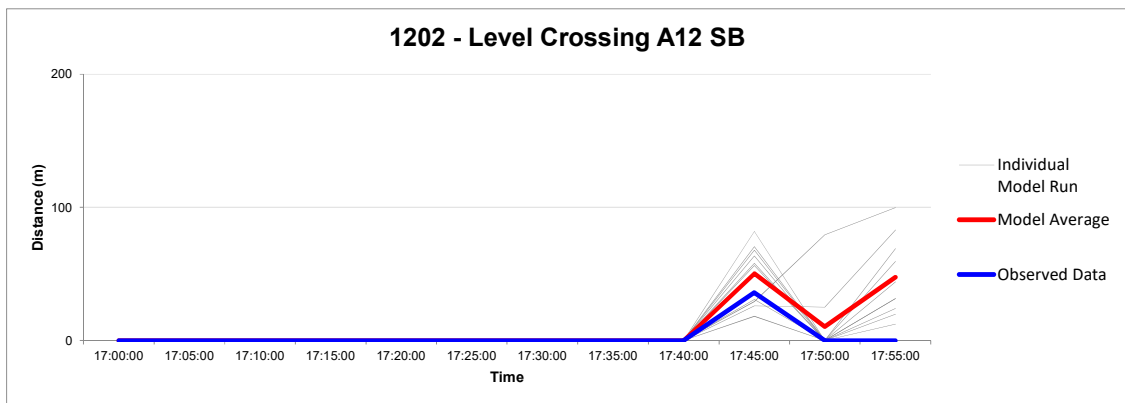
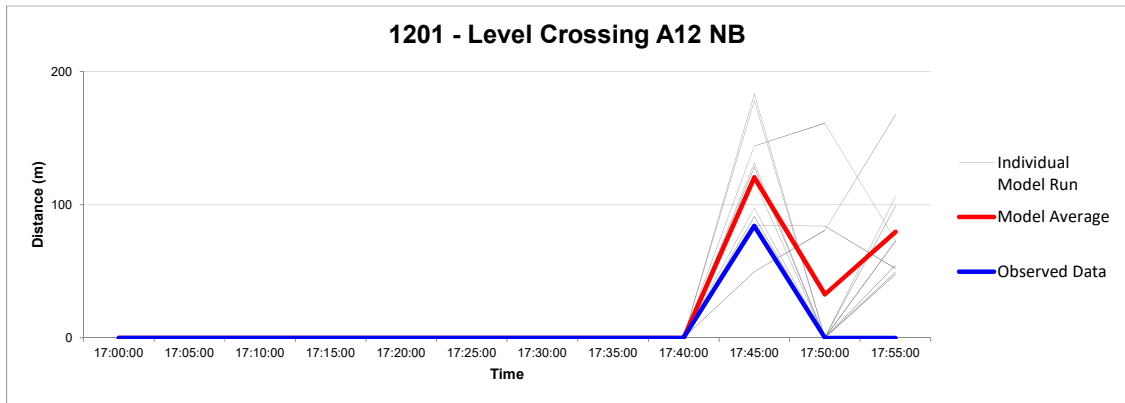
Junction Number 11
PM Peak





Queue Graphs

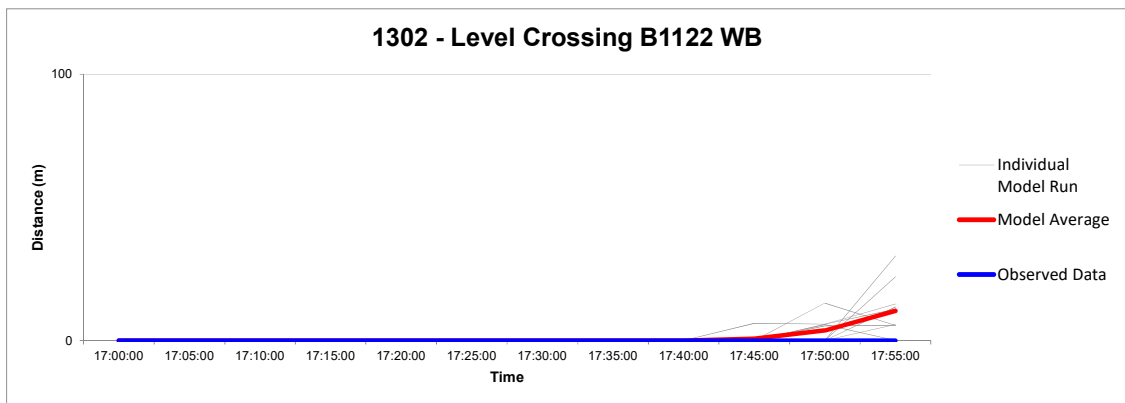
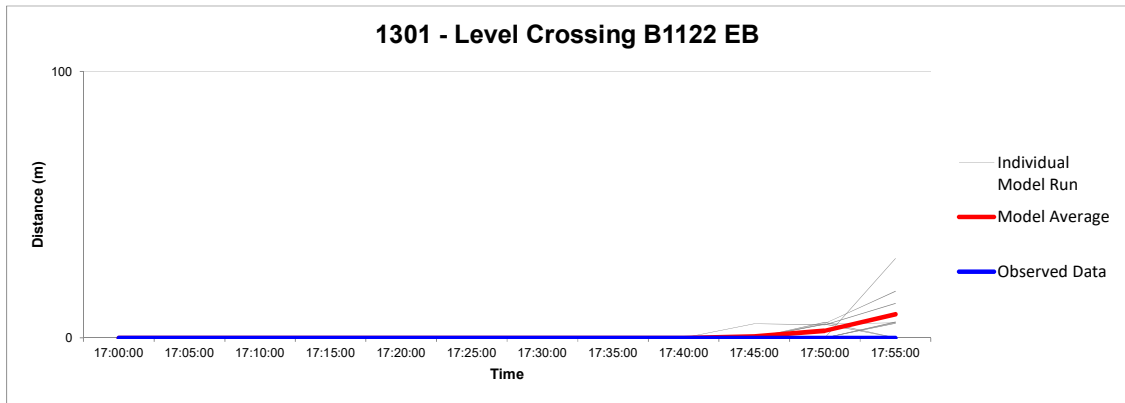
Junction Number 12
PM Peak





Queue Graphs

Junction Number 13
PM Peak





Journey Times
Validation Statistics

AM Peak

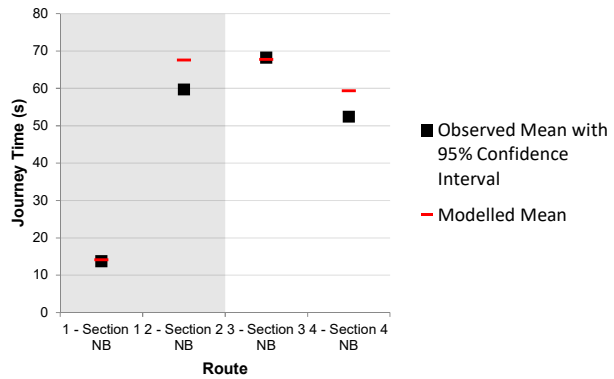
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			Average	95% Conf	Average	95% Conf	Var Chk							
1 - Section 1 NB	Partial - A	1	14		14	0	TRUE	2.8%	0	FALSE	TRUE	TRUE	TRUE	185
2 - Section 2 NB	Partial - B	1	60		68	0	TRUE	13.3%	8	FALSE	TRUE	TRUE	TRUE	1115
3 - Section 3 NB	Partial - C	1	68		68	0	TRUE	-0.8%	-1	FALSE	TRUE	TRUE	TRUE	1055
4 - Section 4 NB	Partial - D	1	52		59	1	TRUE	13.2%	7	FALSE	TRUE	TRUE	TRUE	1062
5 - Section 1 SB	Partial - E	2	48		56	1	TRUE	16.8%	8	FALSE	FALSE	TRUE	TRUE	1066
6 - Section 2 SB	Partial - F	2	66		72	1	TRUE	9.6%	6	FALSE	TRUE	TRUE	TRUE	1074
7 - Section 3 SB	Partial - G	2	61		68	0	TRUE	11.5%	7	FALSE	TRUE	TRUE	TRUE	1097
8 - Section 4 SB	Partial - H	2	13		16	0	TRUE	24.7%	3	FALSE	FALSE	TRUE	TRUE	190



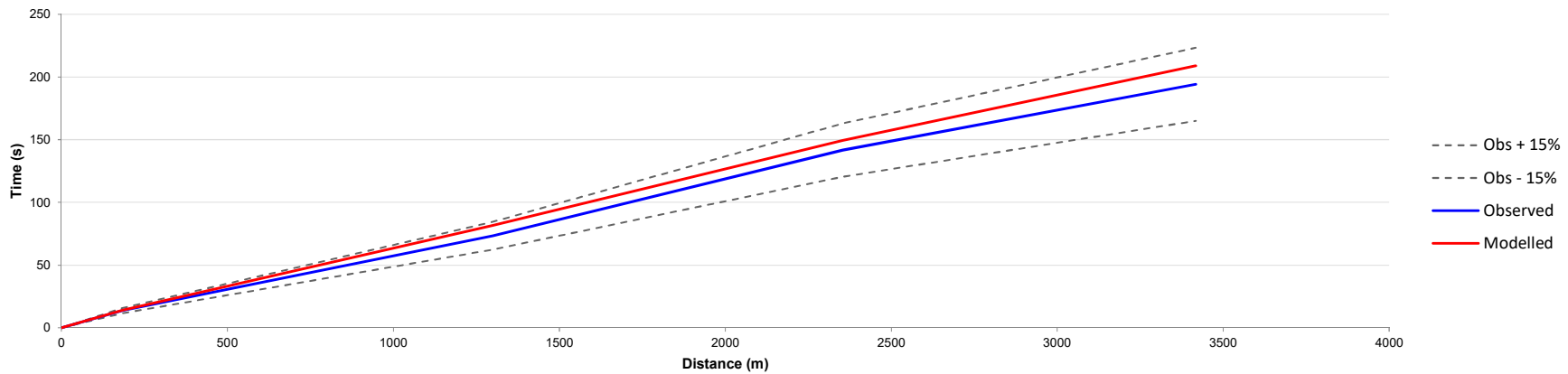
Journey Times Validation Statistics

AM Peak

Journey Time Summary for Group Number 1



A12 Journey Time Northbound

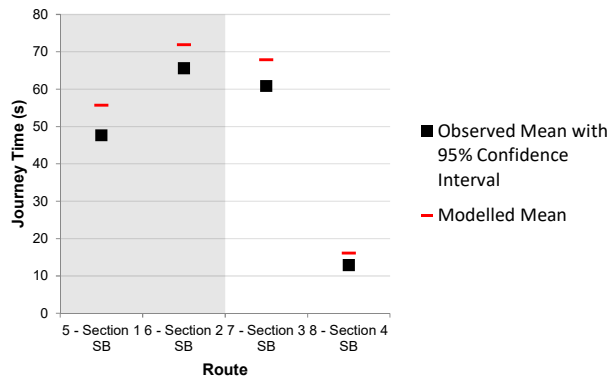




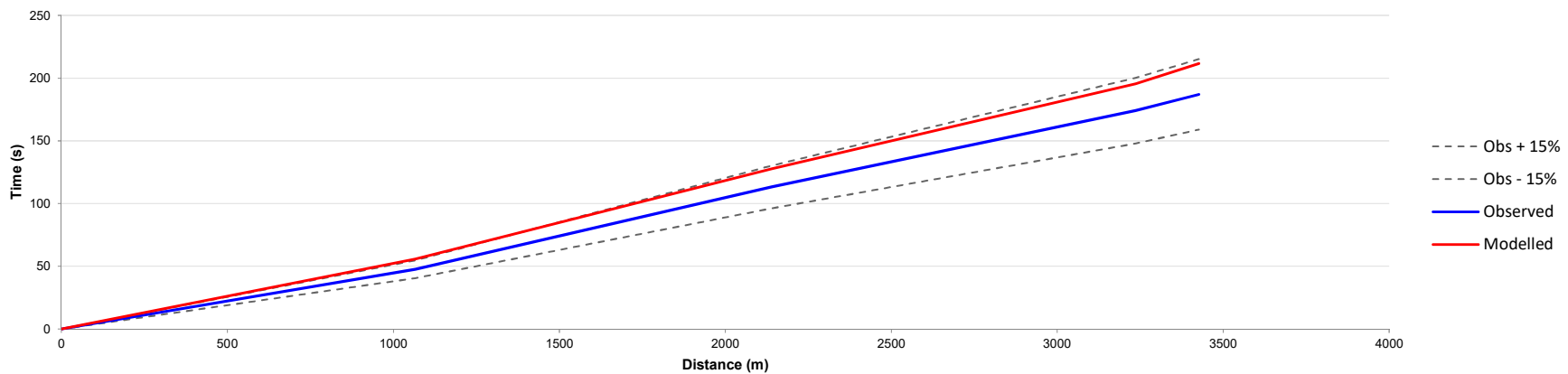
Journey Times Validation Statistics

AM Peak

Journey Time Summary for Group Number 2



A12 Journey Time Southbound





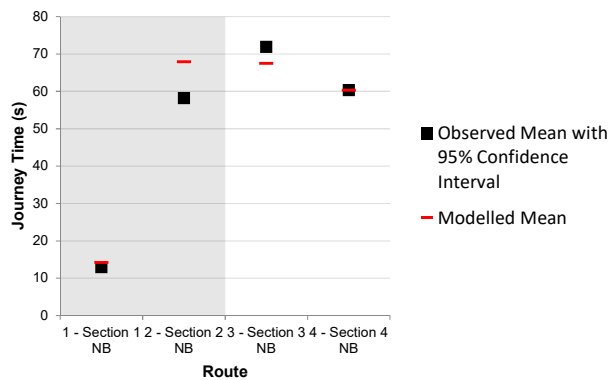
Journey Times
Validation Statistics

IP Peak

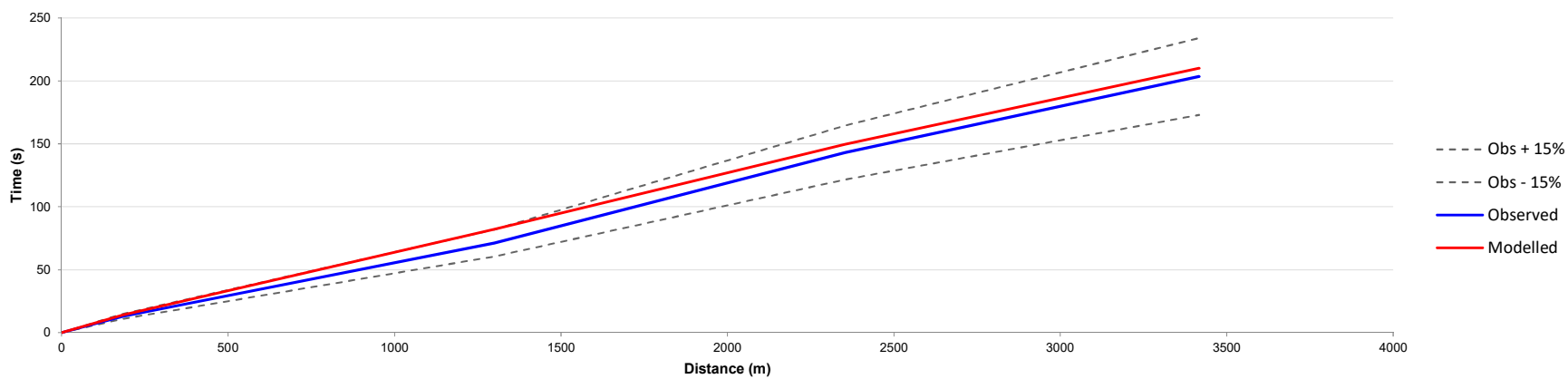
Route:	Segment	Graph Group	Observed		Modelled			% Diff	Diff	Conf?	15%	60s	WebTAG	Distance (m)
			Average	95% Conf	Average	95% Conf	Var Chk							
1 - Section 1 NB	Partial - A	1	13		14	0	TRUE	9.3%	1	FALSE	TRUE	TRUE	TRUE	185
2 - Section 2 NB	Partial - B	1	58		68	0	TRUE	16.6%	10	FALSE	FALSE	TRUE	TRUE	1115
3 - Section 3 NB	Partial - C	1	72		68	0	TRUE	-6.1%	-4	FALSE	TRUE	TRUE	TRUE	1055
4 - Section 4 NB	Partial - D	1	60		60	1	TRUE	0.0%	0	FALSE	TRUE	TRUE	TRUE	1062
5 - Section 1 SB	Partial - E	2	51		55	1	TRUE	8.0%	4	FALSE	TRUE	TRUE	TRUE	1066
6 - Section 2 SB	Partial - F	2	85		69	0	TRUE	-19.3%	-16	FALSE	FALSE	TRUE	TRUE	1074
7 - Section 3 SB	Partial - G	2	62		67	0	TRUE	8.9%	5	FALSE	TRUE	TRUE	TRUE	1097
8 - Section 4 SB	Partial - H	2	23		18	0	TRUE	-24.6%	-6	FALSE	FALSE	TRUE	TRUE	190



Journey Time Summary for Group Number 1



A12 Journey Time Northbound

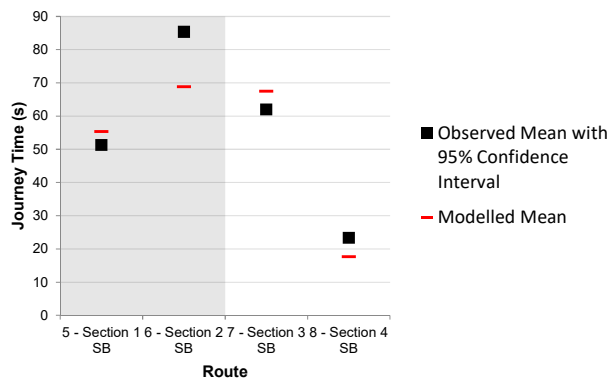




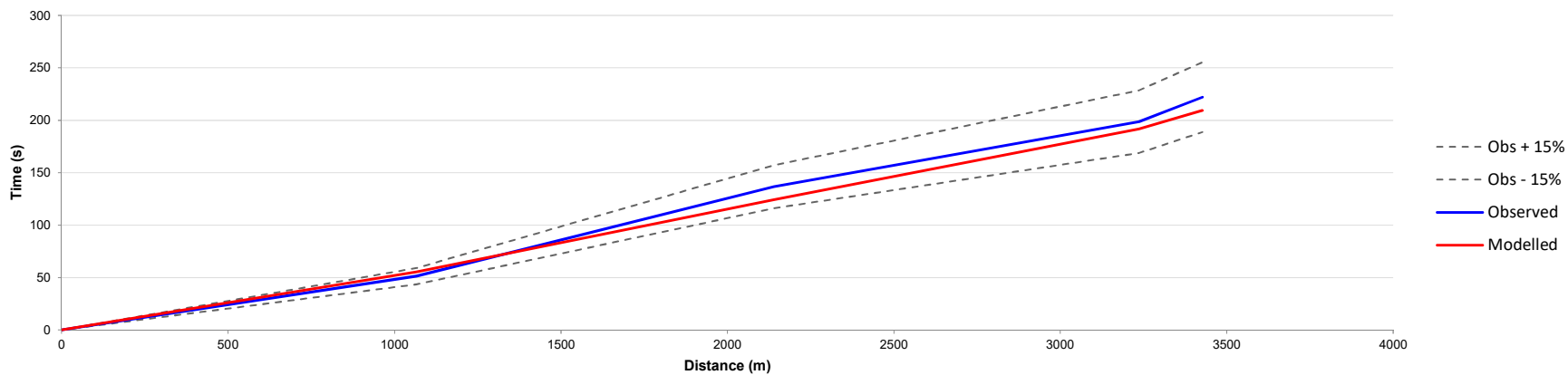
Journey Times Validation Statistics

IP Peak

Journey Time Summary for Group Number 2



A12 Journey Time Southbound





Journey Times
Validation Statistics

PM Peak

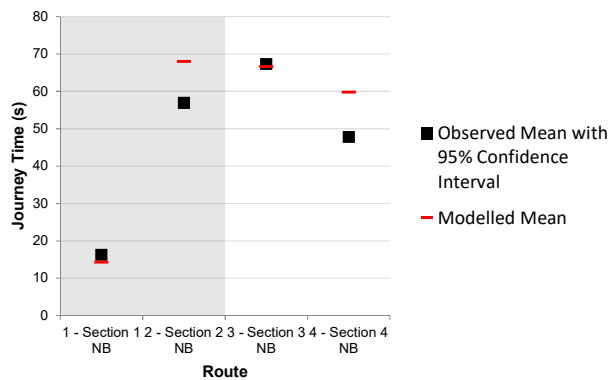
Route:	Segment	Graph Group	Observed		Modelled			% Diff	Diff	Conf?	15%	60s	WebTAG	Distance (m)
			Average	95% Conf	Average	95% Conf	Var Chk							
1 - Section 1 NB	Partial - A	1	16		14	0	TRUE	-12.3%	-2	FALSE	TRUE	TRUE	TRUE	185
2 - Section 2 NB	Partial - B	1	57		68	0	TRUE	19.4%	11	FALSE	FALSE	TRUE	TRUE	1115
3 - Section 3 NB	Partial - C	1	67		67	0	TRUE	-1.0%	-1	FALSE	TRUE	TRUE	TRUE	1055
4 - Section 4 NB	Partial - D	1	48		60	1	TRUE	25.2%	12	FALSE	FALSE	TRUE	TRUE	1062
5 - Section 1 SB	Partial - E	2	49		54	1	TRUE	10.0%	5	FALSE	TRUE	TRUE	TRUE	1066
6 - Section 2 SB	Partial - F	2	72		68	0	TRUE	-5.3%	-4	FALSE	TRUE	TRUE	TRUE	1074
7 - Section 3 SB	Partial - G	2	62		67	0	TRUE	9.2%	6	FALSE	TRUE	TRUE	TRUE	1097
8 - Section 4 SB	Partial - H	2	15		17	0	TRUE	14.6%	2	FALSE	TRUE	TRUE	TRUE	190



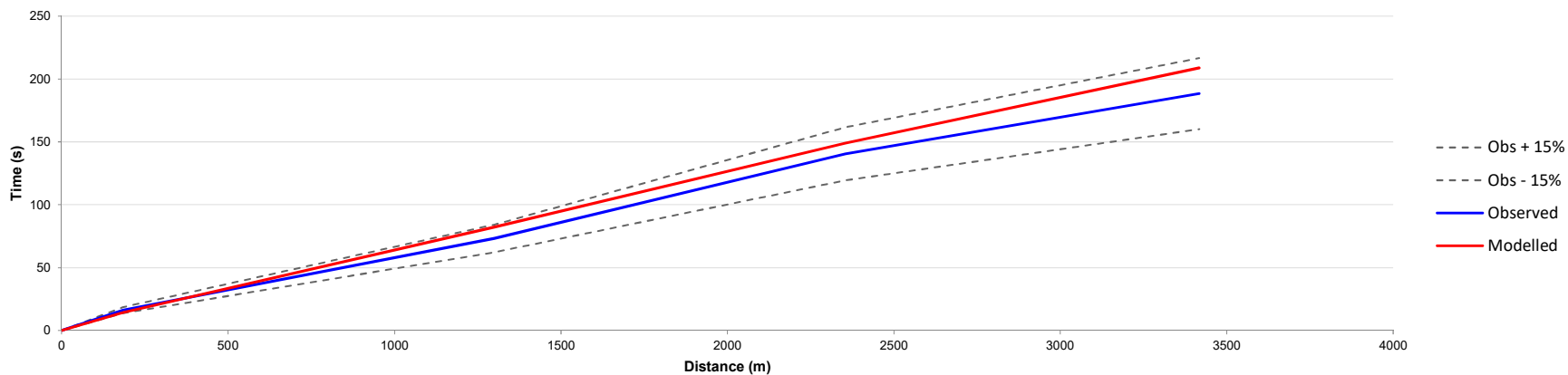
Journey Times Validation Statistics

PM Peak

Journey Time Summary for Group Number 1



A12 Journey Time Northbound

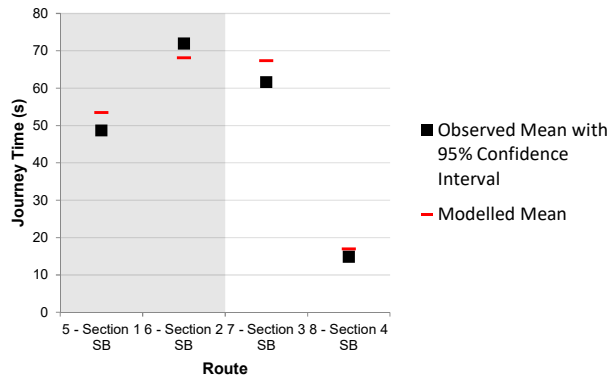




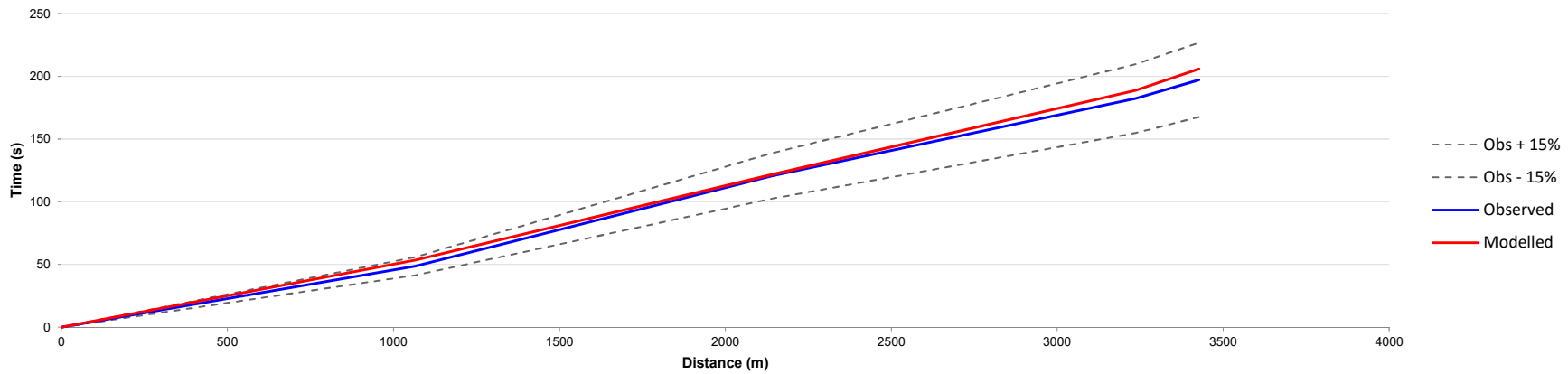
Journey Times Validation Statistics

PM Peak

Journey Time Summary for Group Number 2



A12 Journey Time Southbound



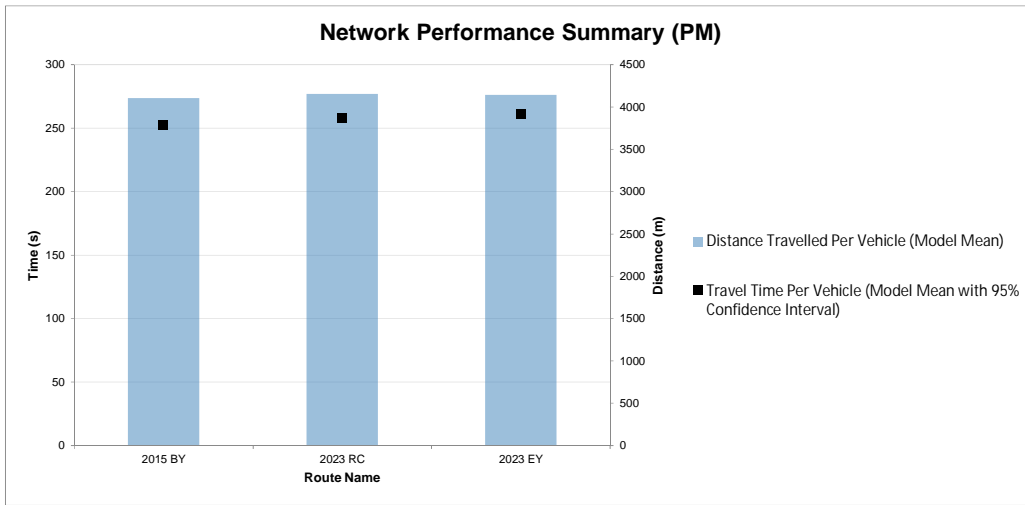
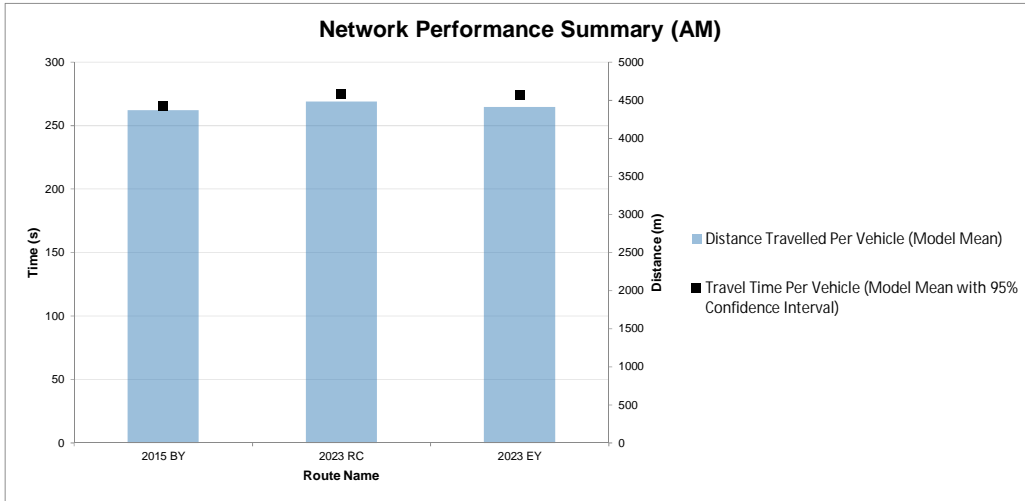
Appendix C

2023 FORECAST MODEL RESULTS





	2015 BY (AM)	2023 RC (AM)	2023 EY (AM)	2015 BY (PM)	2023 RC (PM)	2023 EY (PM)
Total Time Taken (s)	827774	988773	1136804	1472571	1693860	1865911
Total Distance (m)	13622319	16150433	18324239	23940671	27256159	29602800
Total Vehicles	3118	3604	4156	5831	6558	7146
Total Delay (s)	82029	103862	126470	153475	190445	226482
Average Time (s) / Vehicle	266	274	274	253	258	261
Average Time (s) / Mile	98	99	100	99	100	101
Average Distance (m) / Vehicle	4370	4482	4409	4105	4156	4143
Average Speed (mph)	37	37	36	36	36	35
Average Speed (kph)	59	59	58	59	58	57
Average Delay / Vehicle	26	29	30	26	29	32

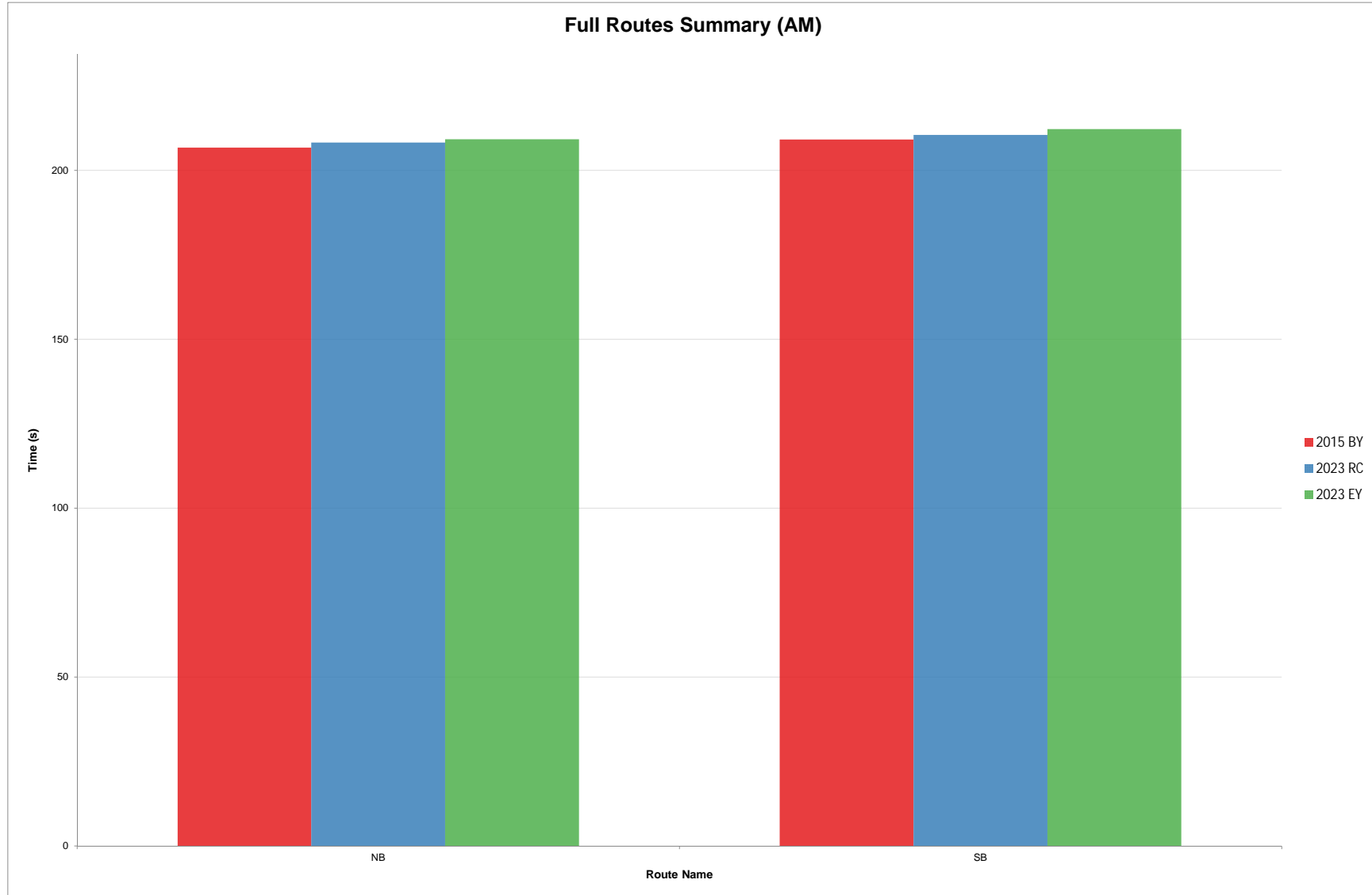


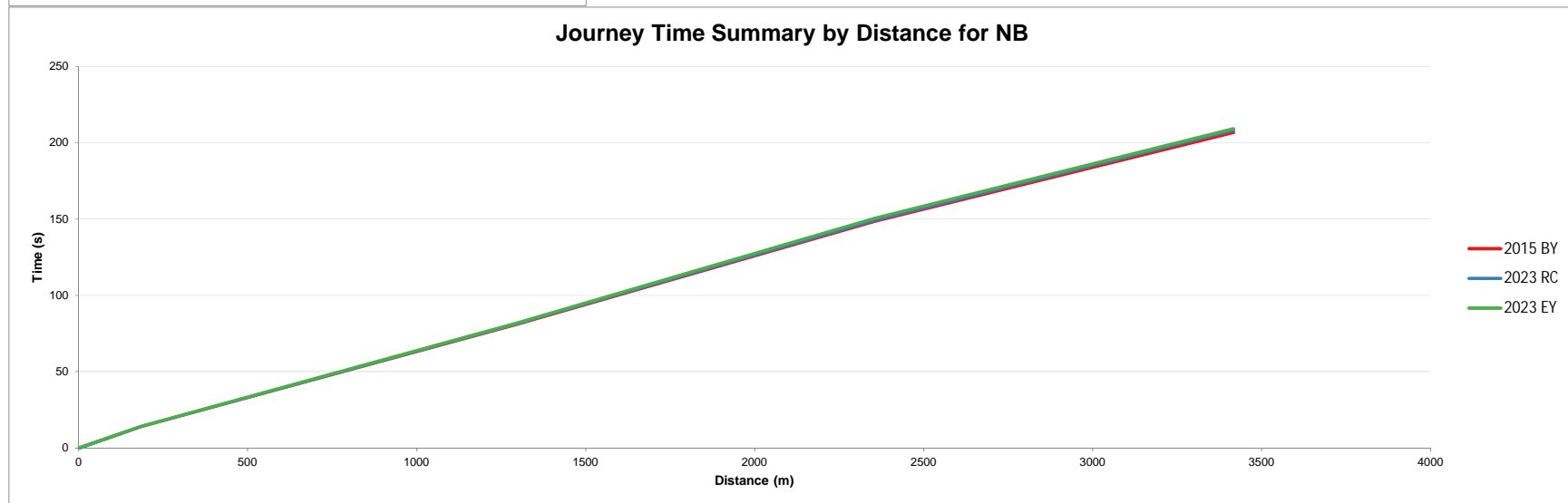
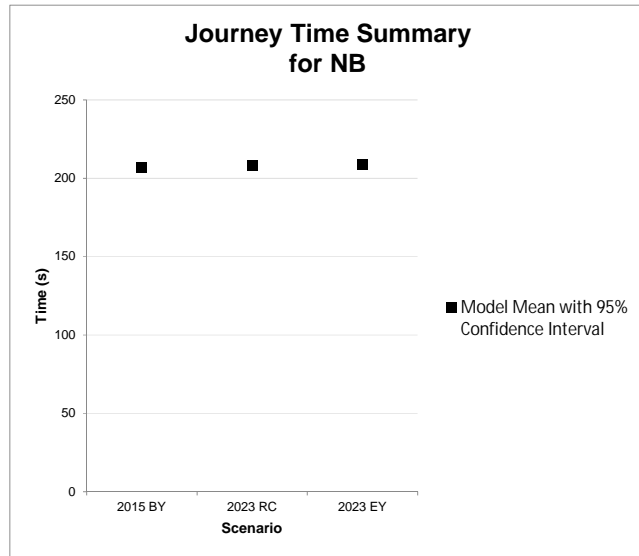


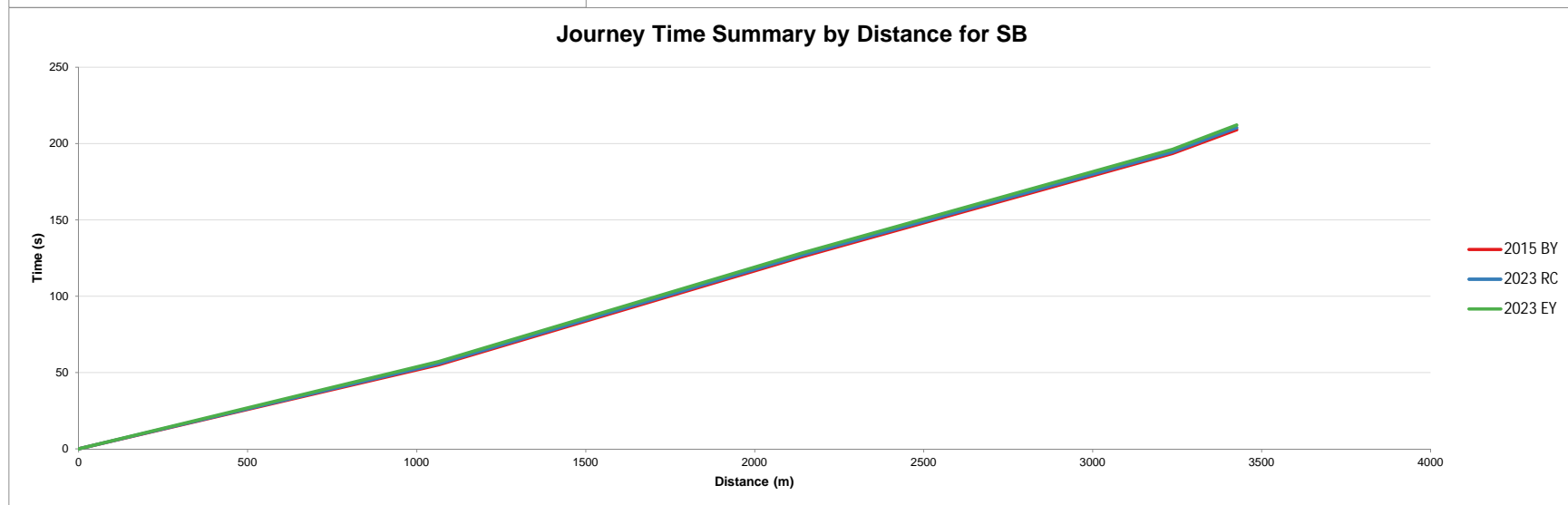
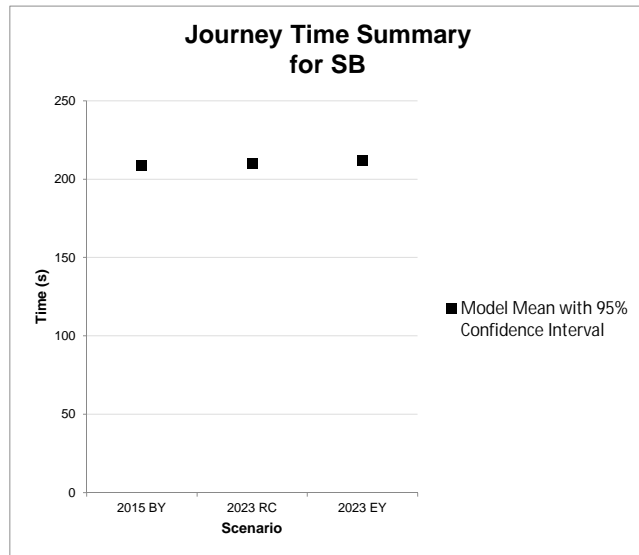
Journey Time Comparison Graphs

AM
06:00 - 09:00
2023

Full Routes Summary (AM)

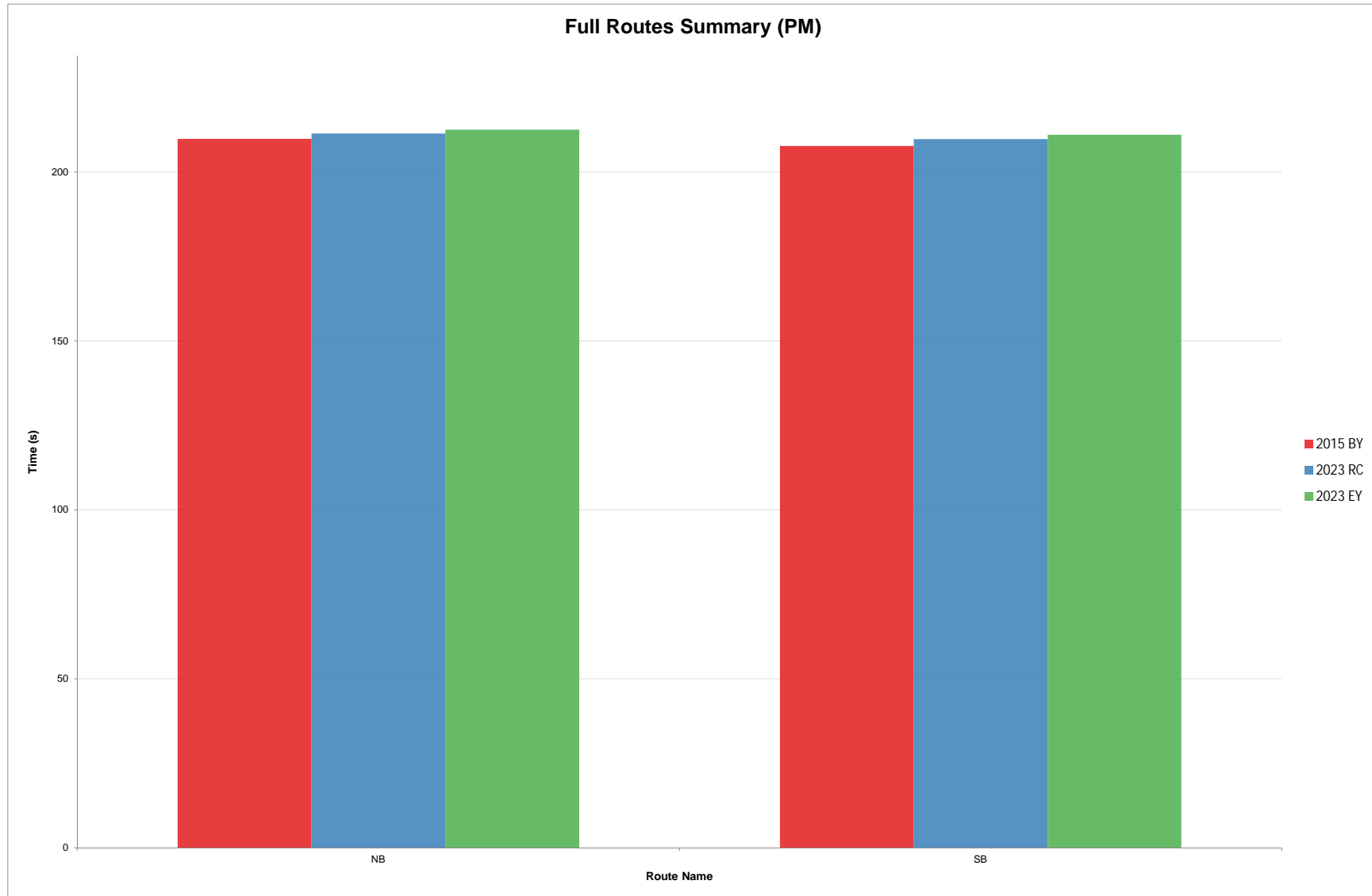


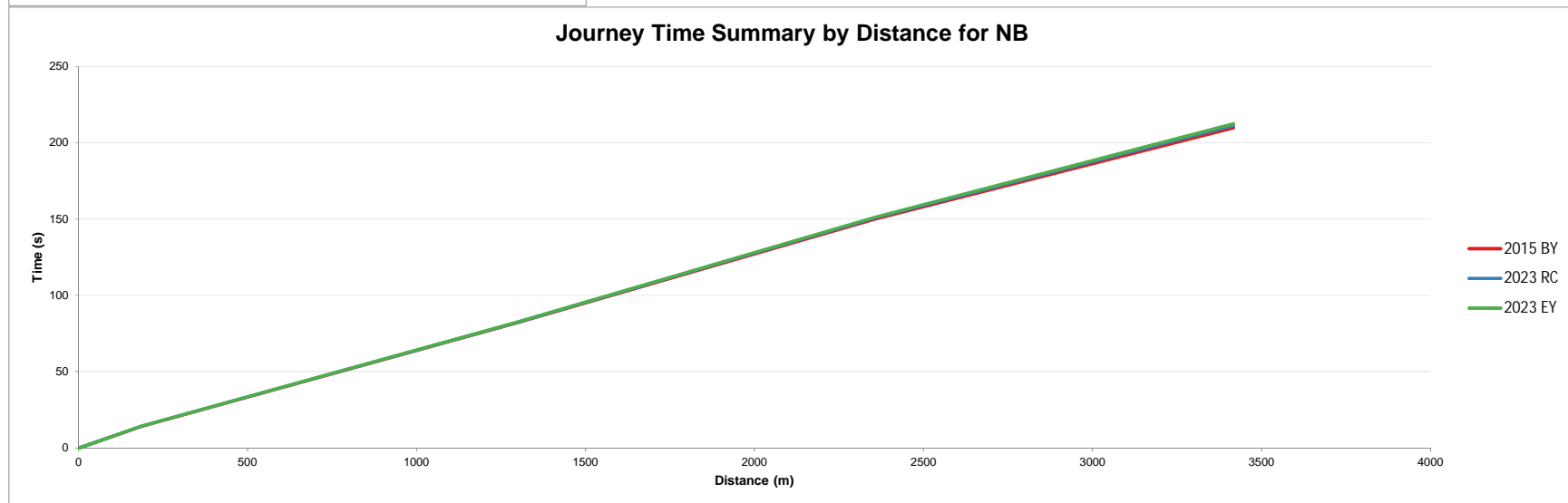
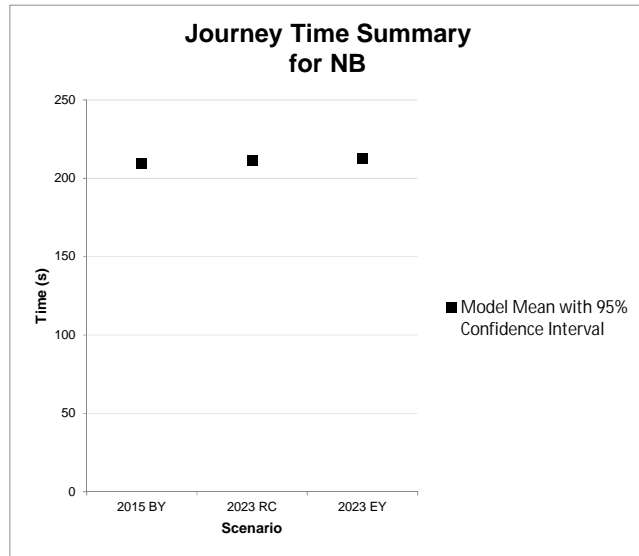


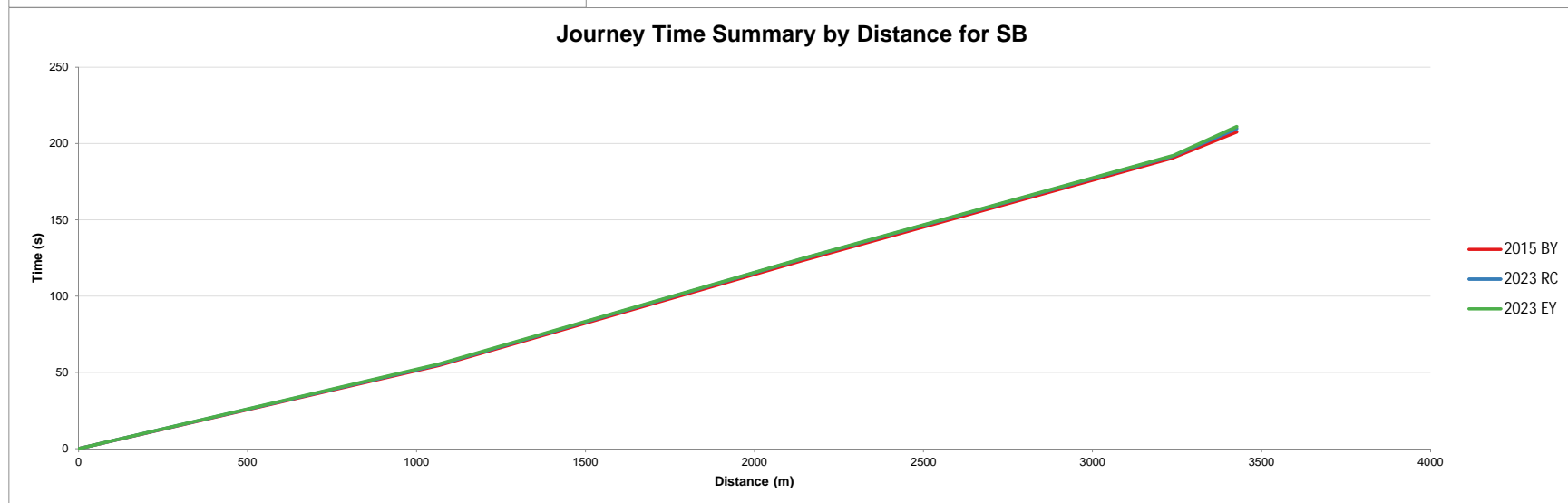
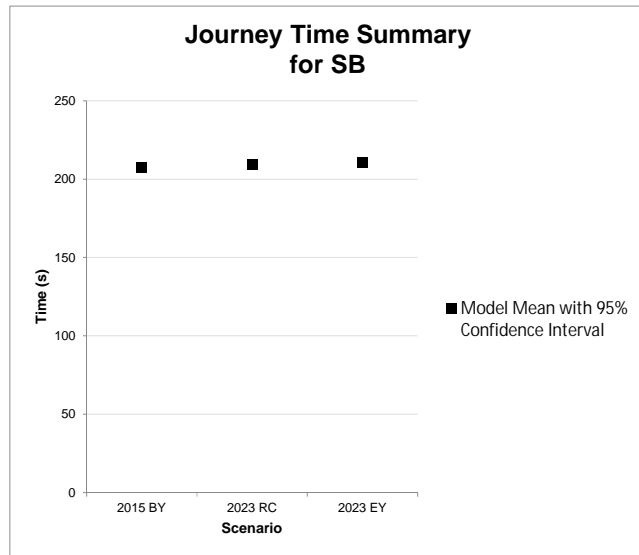




Full Routes Summary (PM)









Journey Time Table
AM
2023

Route Names	2015 BY	2023 RC	2023 EY
1 - Section 1 NB	14	14	14
2 - Section 2 NB	67	67	68
3 - Section 3 NB	67	68	69
4 - Section 4 NB	58	59	59
NB	207	208	209
5 - Section 1 SB	55	56	57
6 - Section 2 SB	71	71	71
7 - Section 3 SB	68	68	68
8 - Section 4 SB	16	16	16
SB	209	210	212



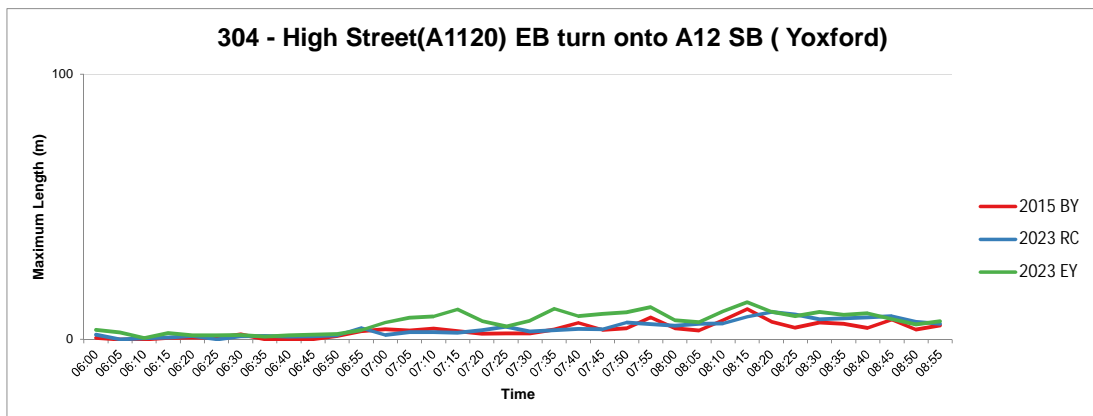
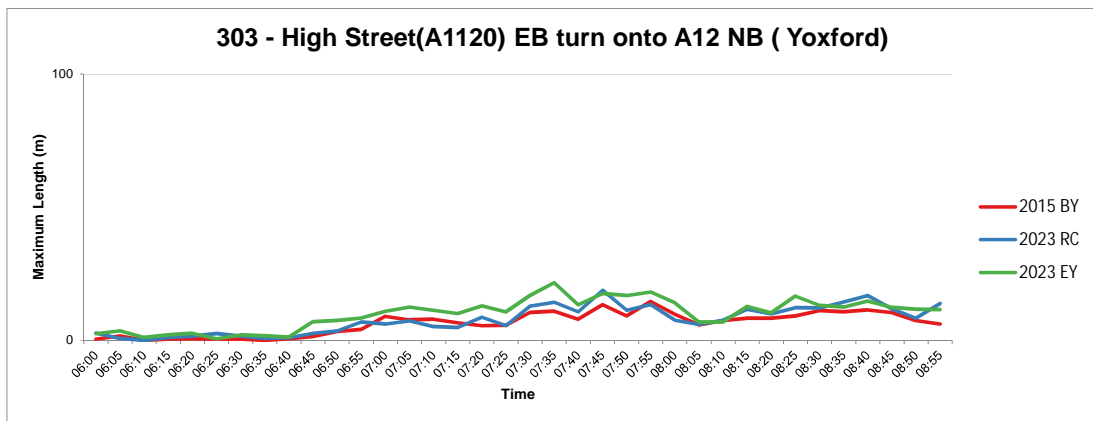
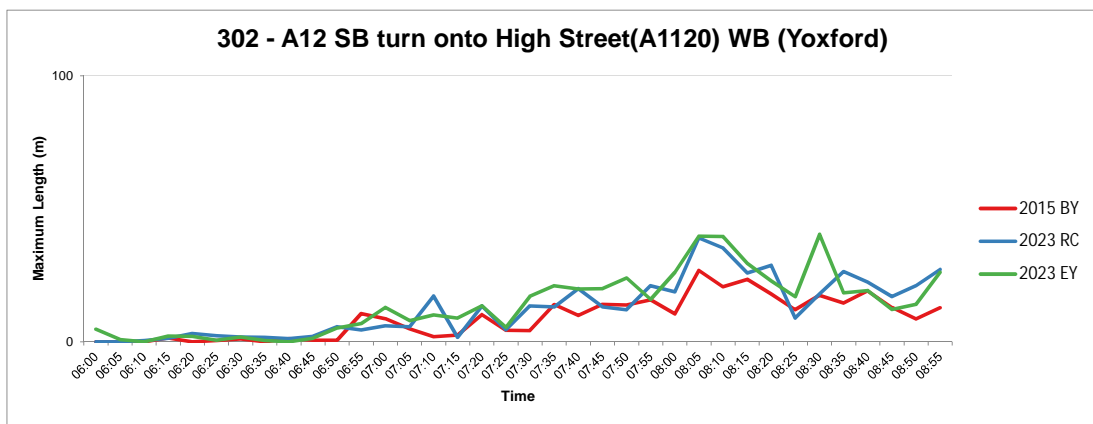
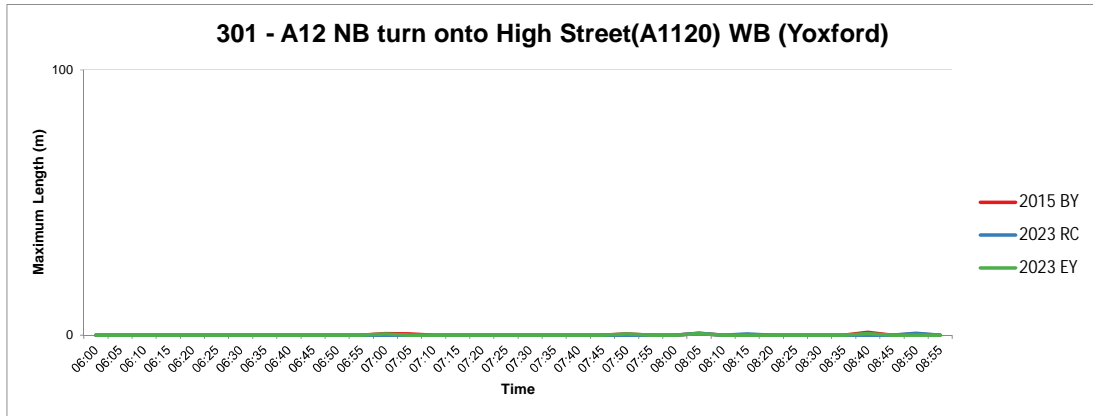
Journey Time Table
PM
2023

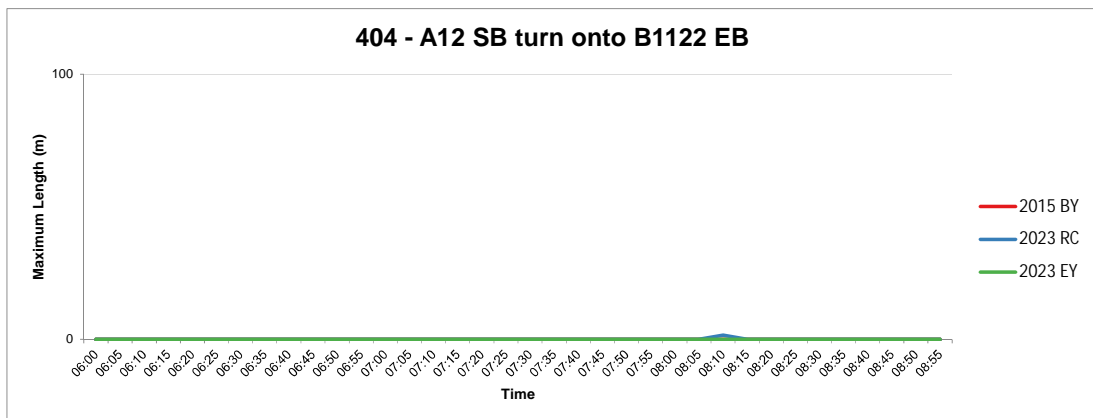
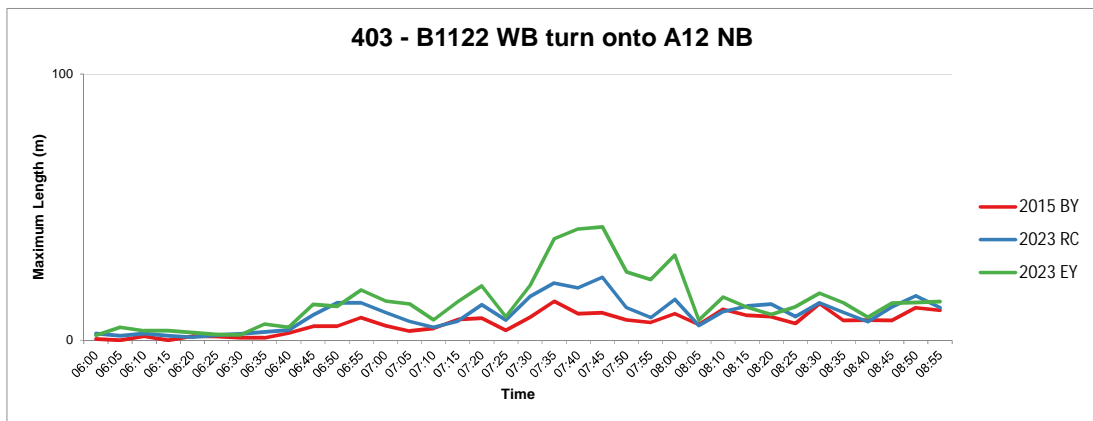
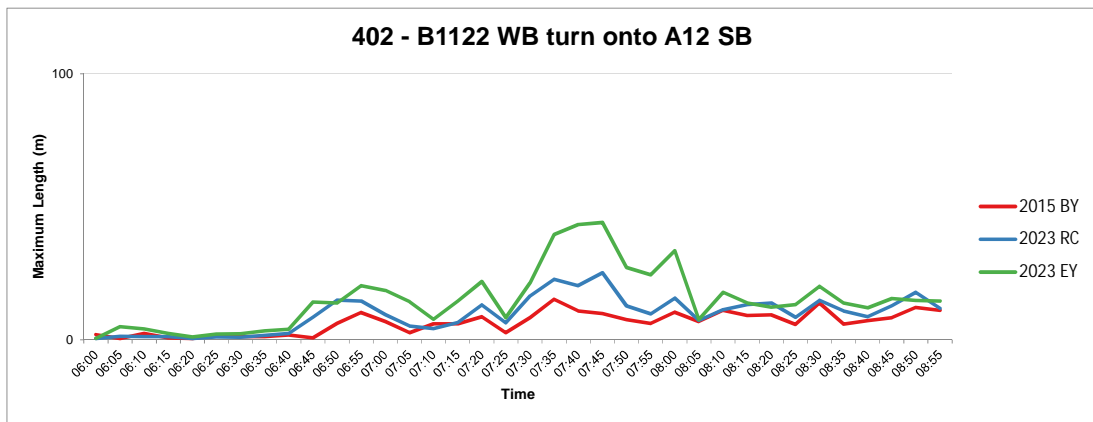
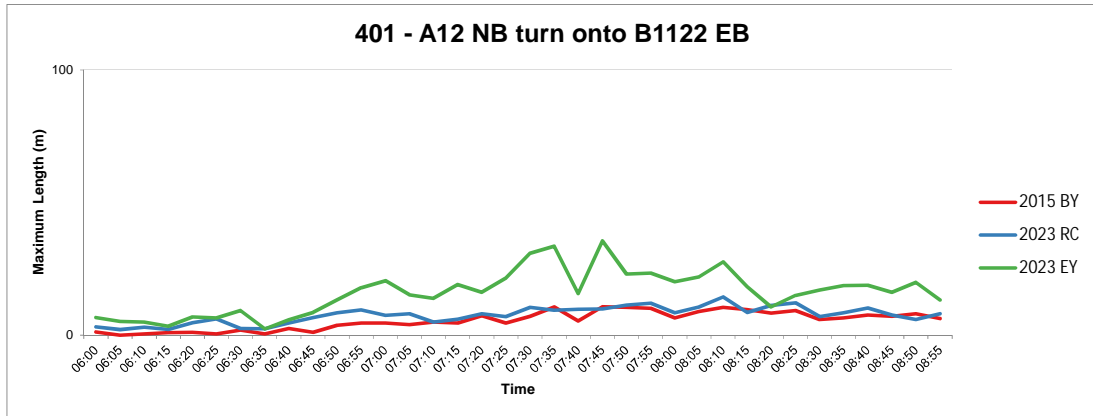
Route Names	2015 BY	2023 RC	2023 EY
1 - Section 1 NB	14	14	14
2 - Section 2 NB	68	68	68
3 - Section 3 NB	68	68	69
4 - Section 4 NB	60	61	61
NB	210	211	212
5 - Section 1 SB	55	55	55
6 - Section 2 SB	69	69	69
7 - Section 3 SB	67	67	67
8 - Section 4 SB	17	18	19
SB	208	210	211

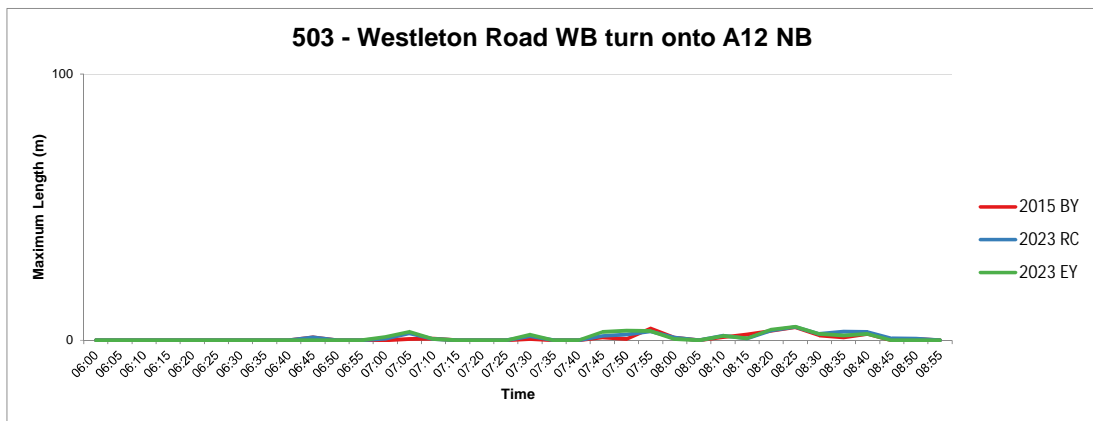
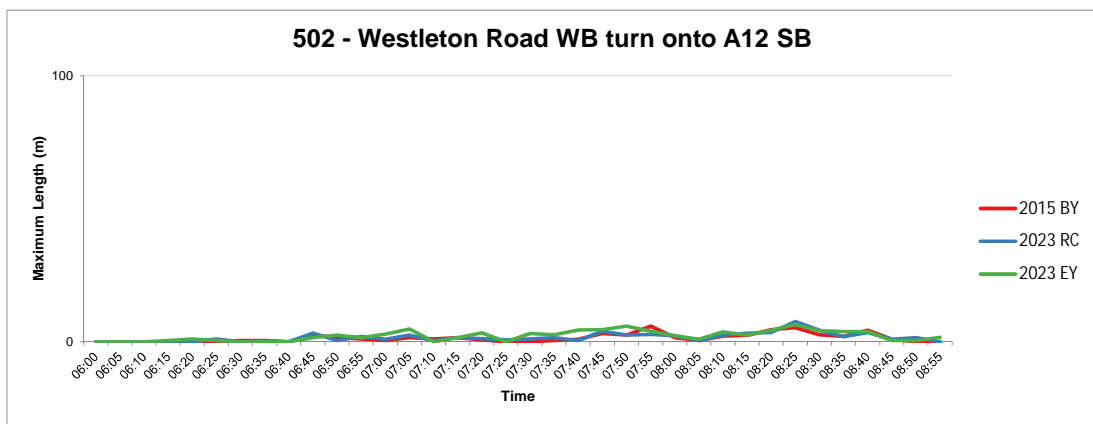
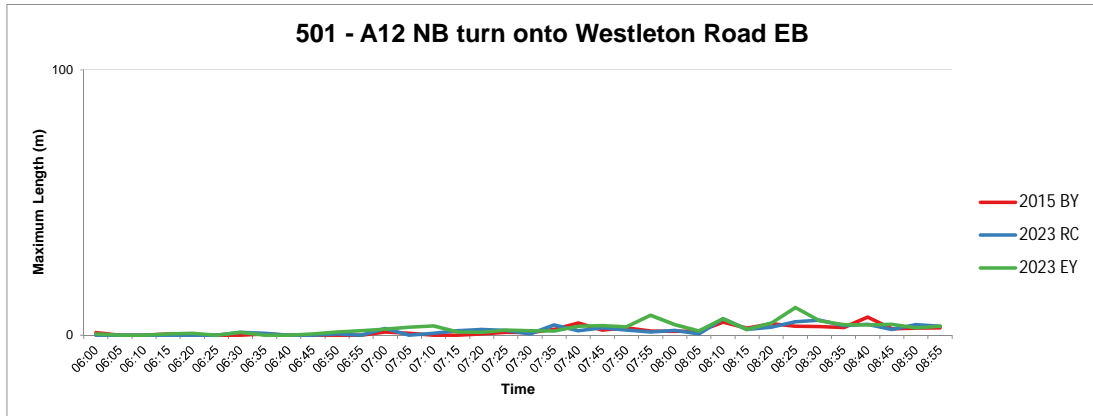


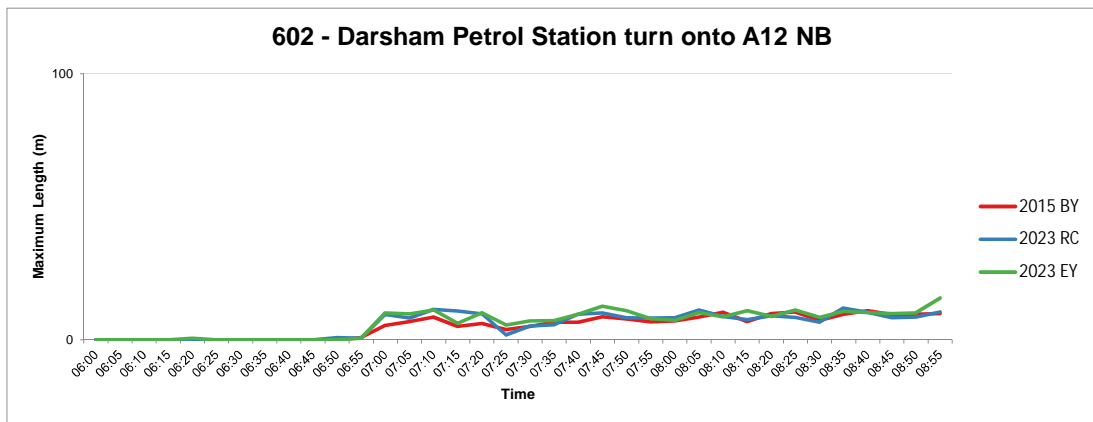
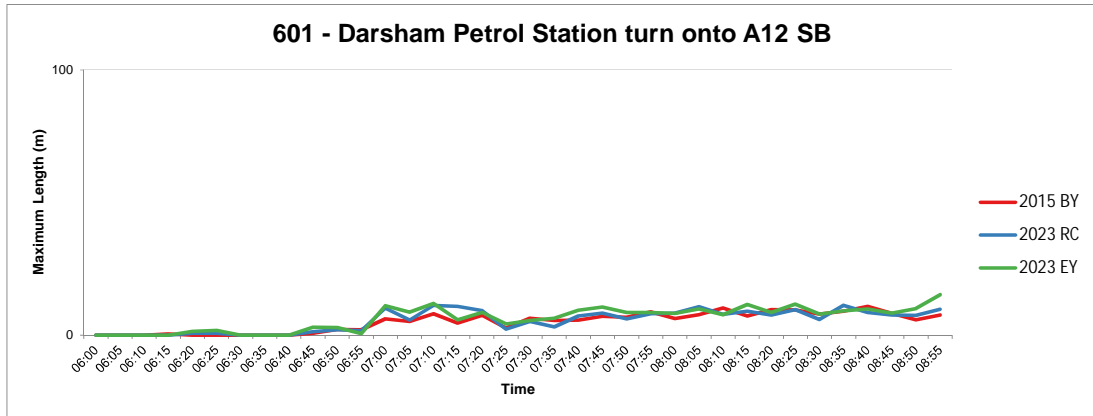
**Queue Comparison
AM
Maximum Length Summary
Maximum Length (m)**

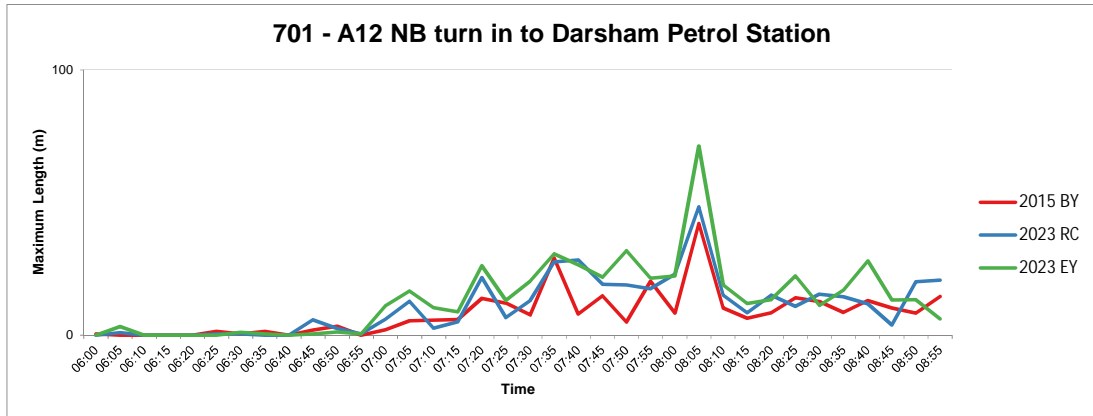
	2015 BY	2023 RC	2023 EY
301 - A12 NB turn onto High Stre	1.0	0.7	0.6
302 - A12 SB turn onto High Stre	26.8	39.0	40.4
303 - High Street(A1120) EB turn	14.6	18.8	21.6
304 - High Street(A1120) EB turn	11.5	10.4	14.0
401 - A12 NB turn onto B1122 EB	10.7	14.4	35.6
402 - B1122 WB turn onto A12 S	15.2	25.2	44.1
403 - B1122 WB turn onto A12 N	14.6	23.7	42.6
404 - A12 SB turn onto B1122 EB	0.0	1.6	0.0
501 - A12 NB turn onto Westleto	6.9	6.2	10.5
502 - Westleton Road WB turn o	5.9	7.6	6.4
503 - Westleton Road WB turn o	4.9	5.0	5.1
601 - Darsham Petrol Station turn	10.9	11.3	15.3
602 - Darsham Petrol Station turn	10.9	11.9	15.7
701 - A12 NB turn in to Darsham	42.1	48.4	71.4
801 - A12 NB turn on to The St E	13.3	19.1	18.4
802 - The St WB turn onto A12 S	4.2	4.3	5.5
803 - The St WB turn onto A12 N	6.2	7.5	7.6
901 - A12 SB turn onto Willow M	4.8	8.3	25.5
902 - Willow Marsh Lane EB turn	3.3	3.3	2.2
903 - Willow Marsh Lane EB turn	6.5	7.0	8.8
1001 - A12 NB turn onto Lymball	1.1	1.1	2.4
1002 - Lymballs Lane WB turn or	3.4	2.3	1.8
1003 - Lymballs Lane WB turn or	3.0	3.8	2.5
1101 - A12 SB turn onto A144 W	6.6	6.1	6.4
1102 - A144 EB turn onto A12 NB	59.1	58.5	72.2
1103 - A144 EB turn onto A12 SB	62.6	62.6	71.8
1104 - A12 SB turn onto A144 WB first queue			
1201 - Level Crossing A12 NB	101.8	111.7	114.5
1202 - Level Crossing A12 SB	161.6	185.9	214.9
1301 - Level Crossing B1122 EB	19.9	17.8	38.8
1302 - Level Crossing B1122 WB	5.6	10.1	16.7
1401 - PandR Roundabout A12 NB			
1402 - PandR Roundabout PandR Access			
1403 - PandR Roundabout A12 SB			
904 - PandR Access SB turn onto Willow Marsh Lane WB			
905 - Willow Marsh Lane EB turn onto PandR Access NB			
906 - Willow Marsh Lane EB turn onto PandR Access SB			

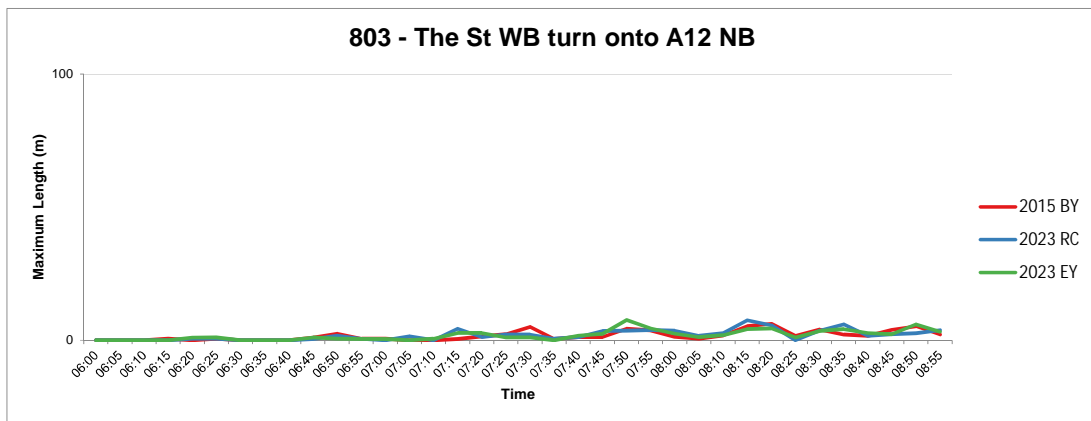
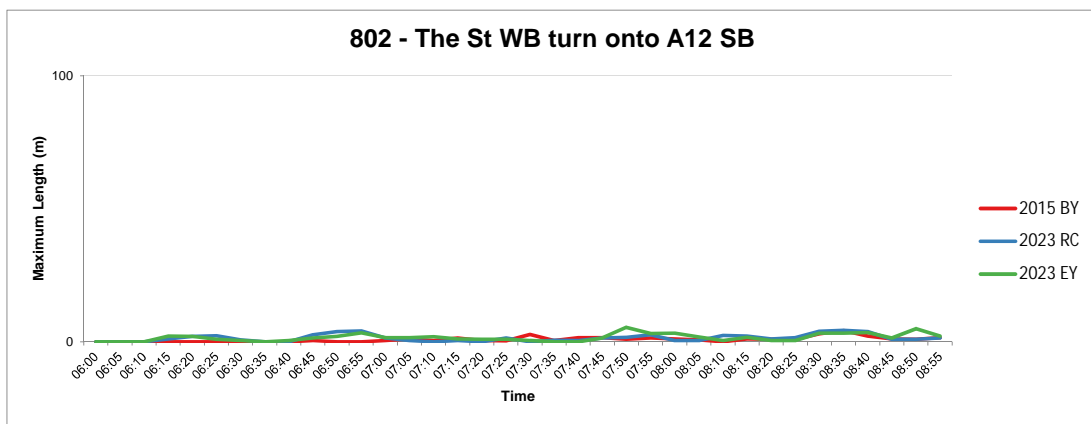
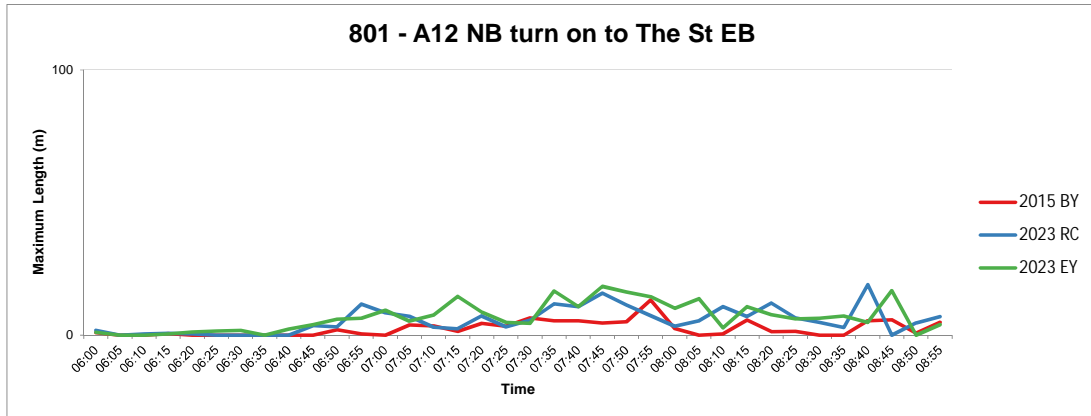


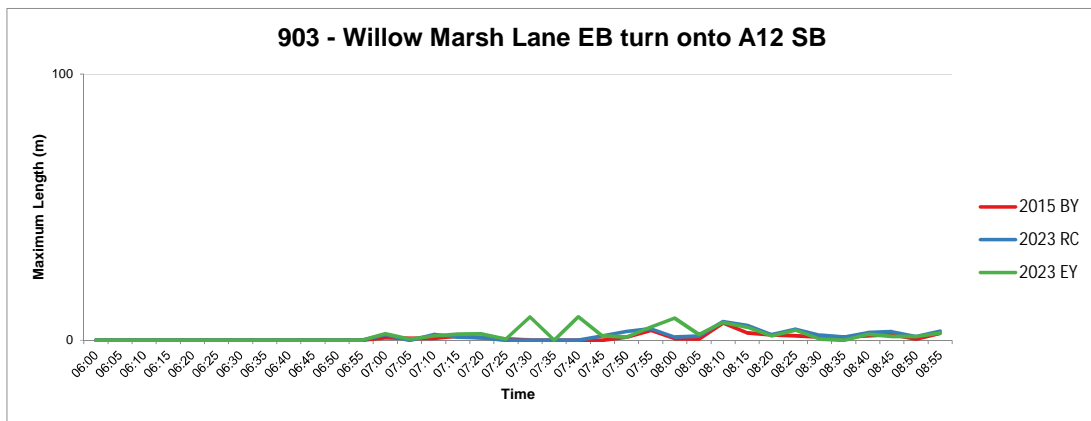
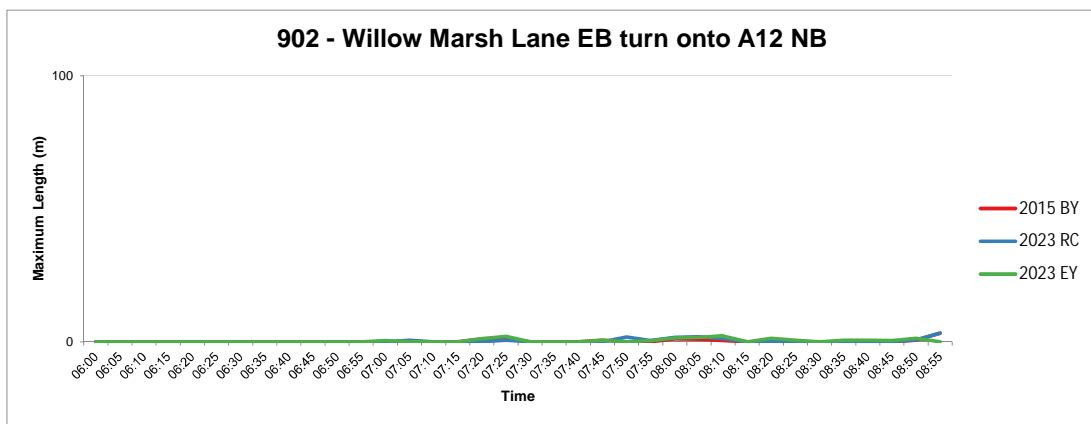
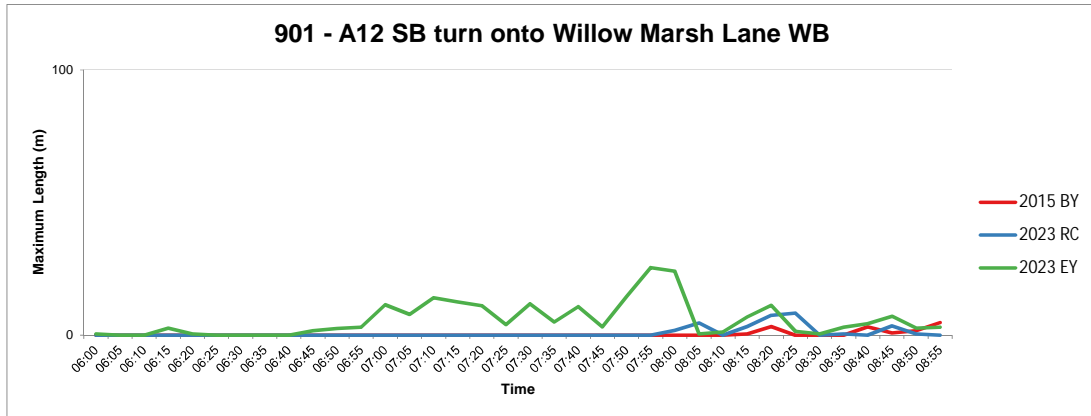


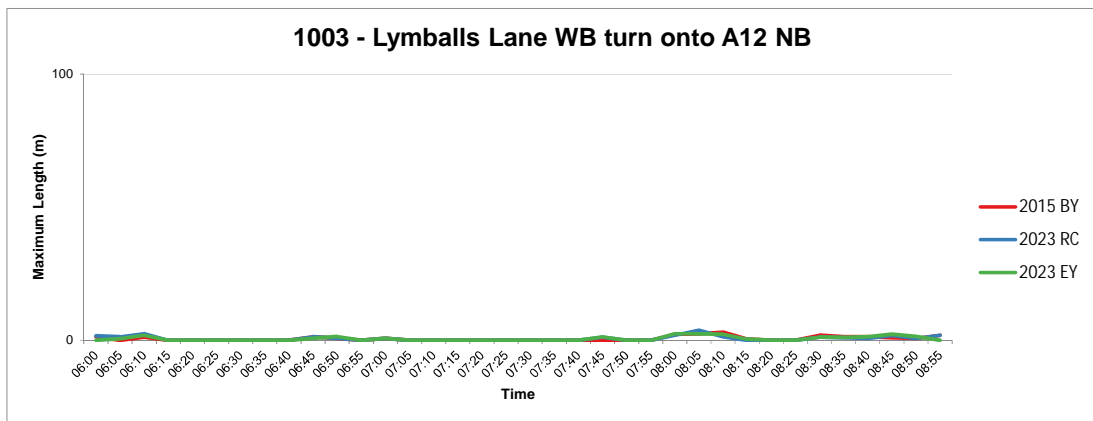
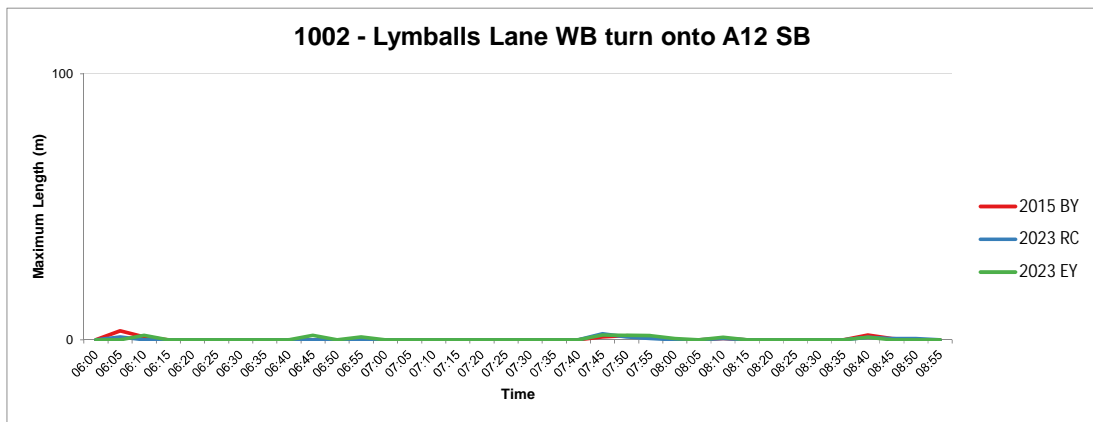
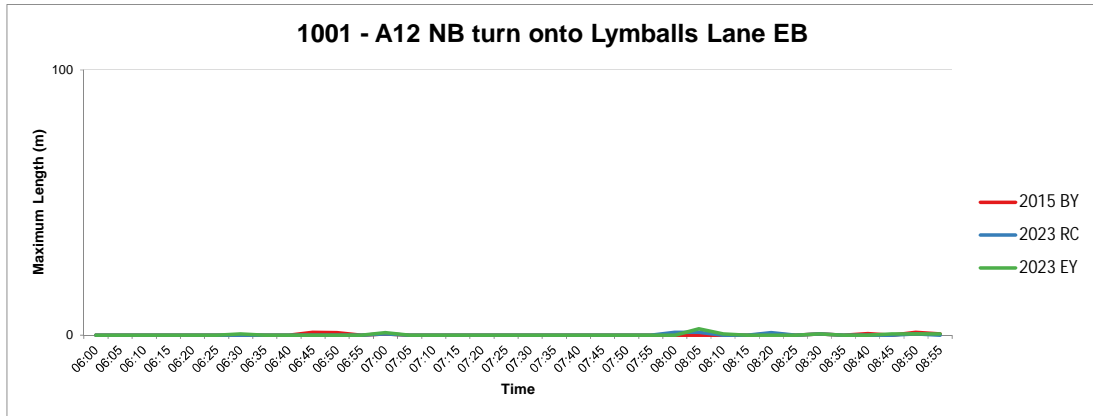


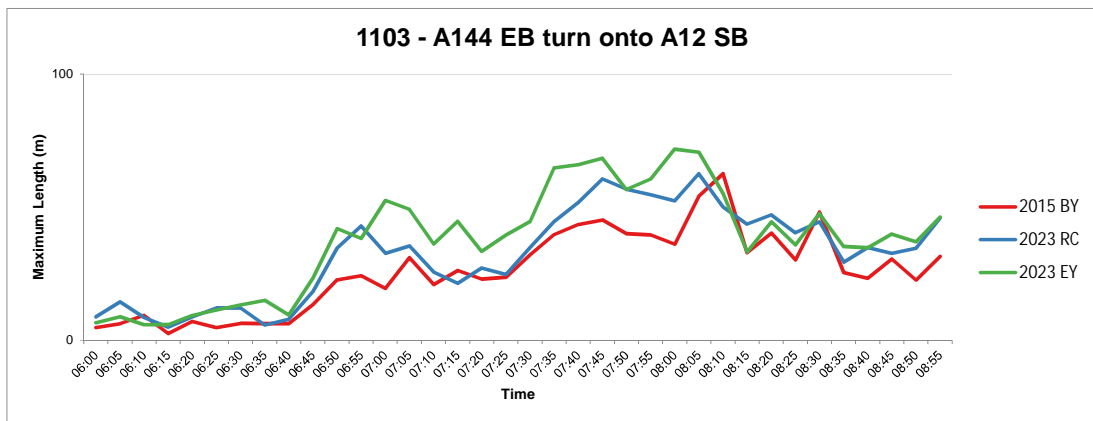
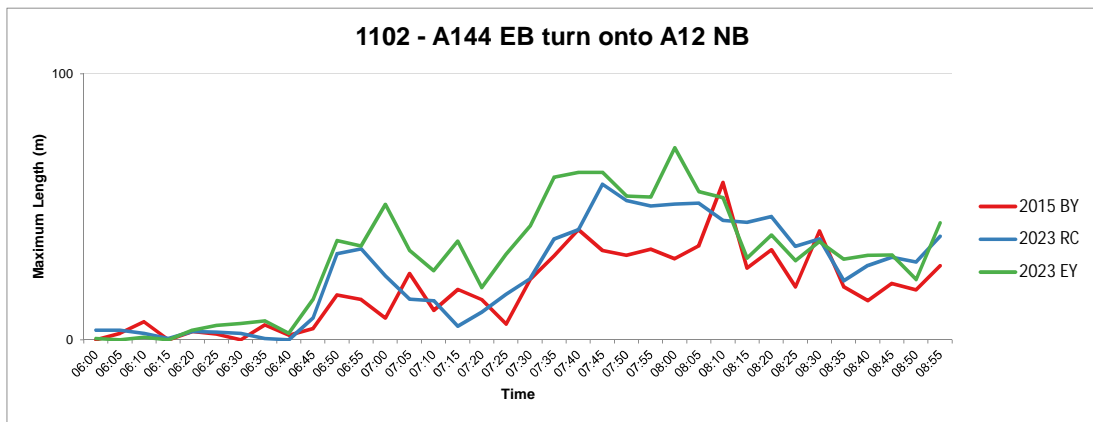
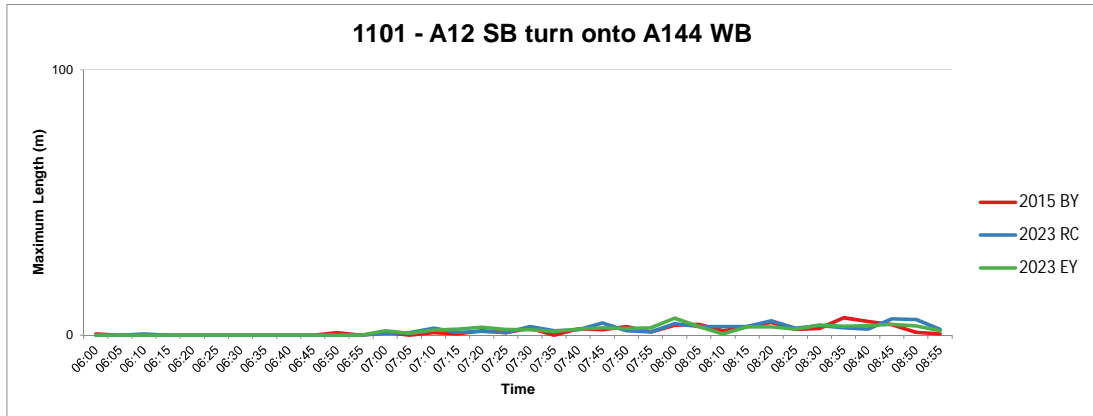


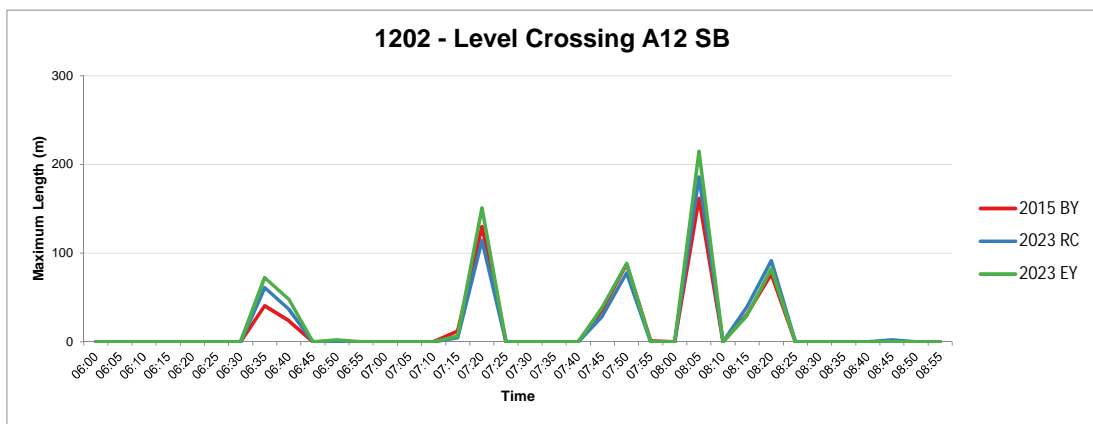
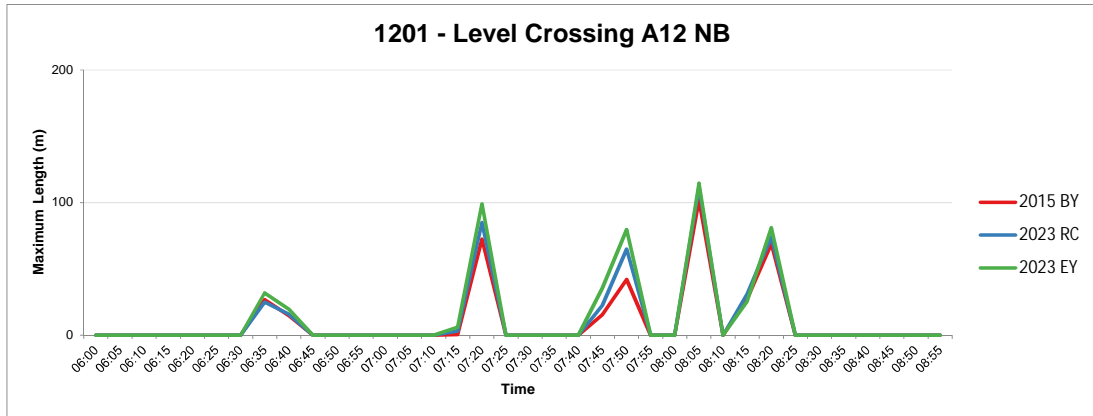


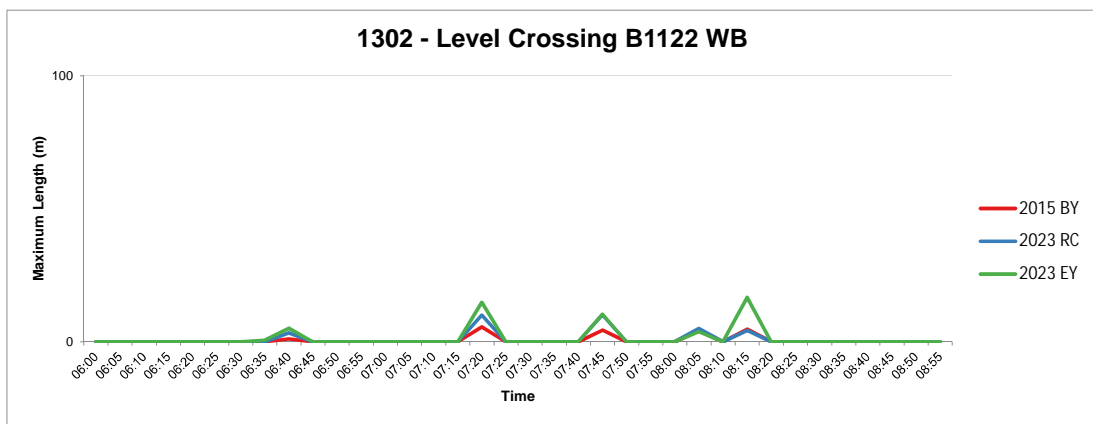
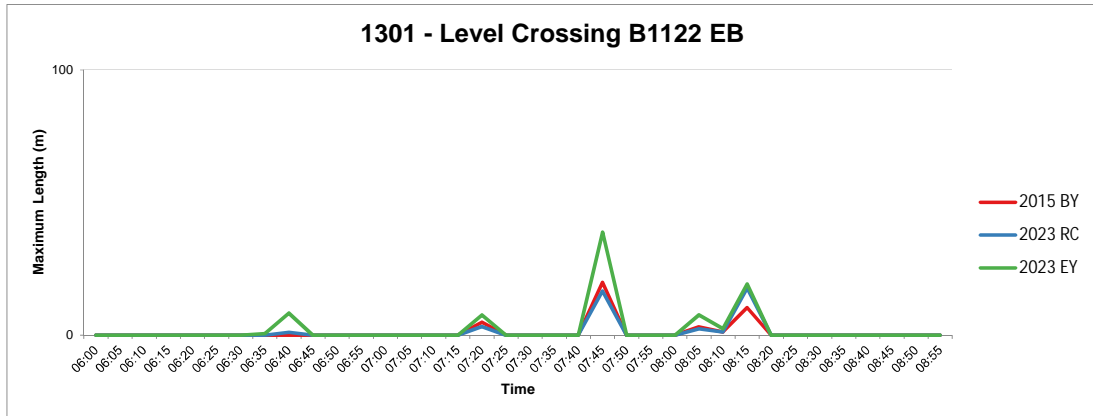








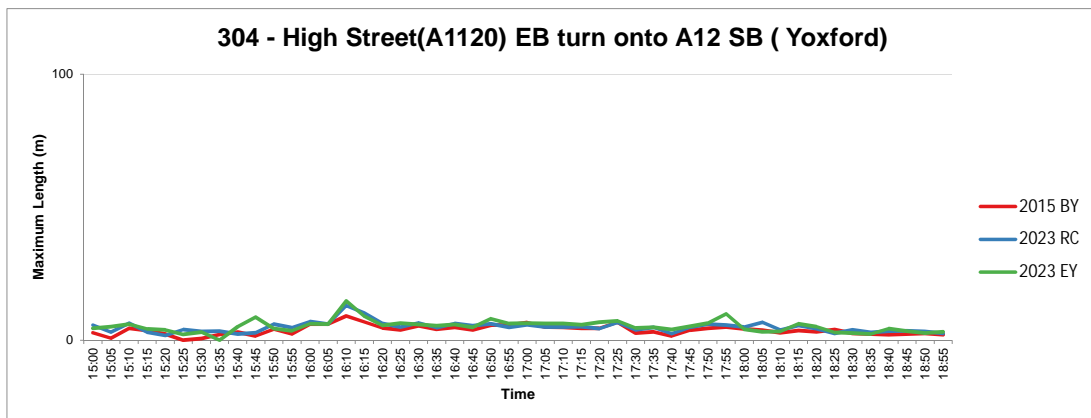
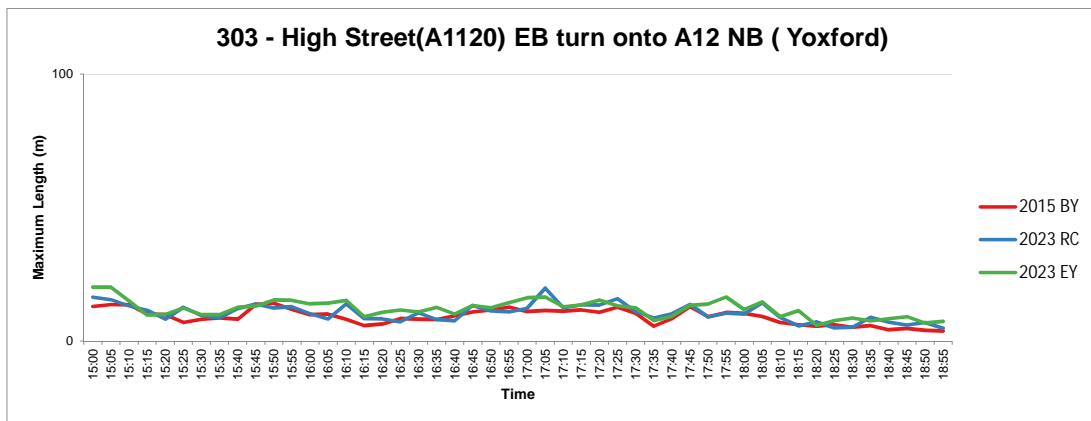
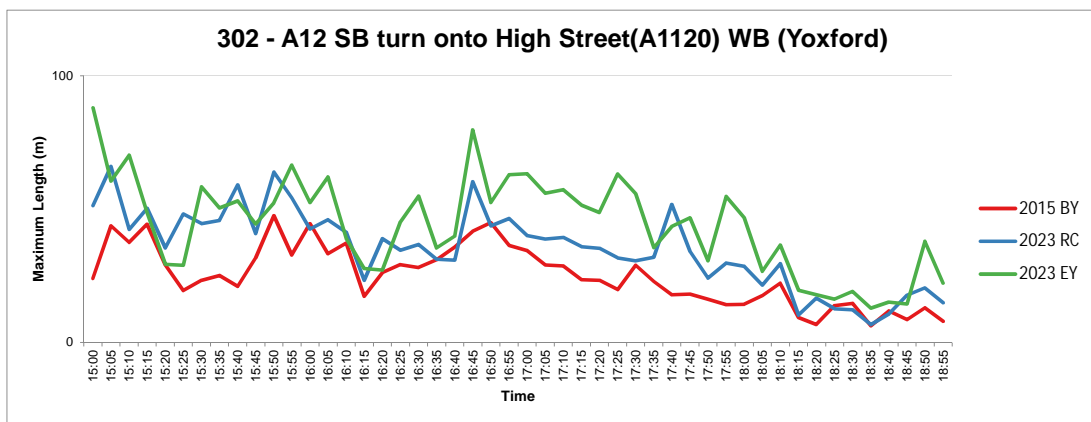
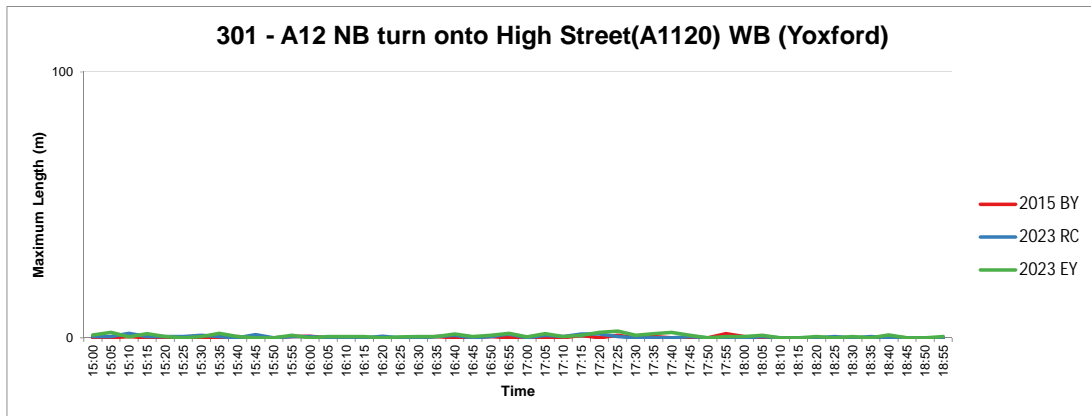


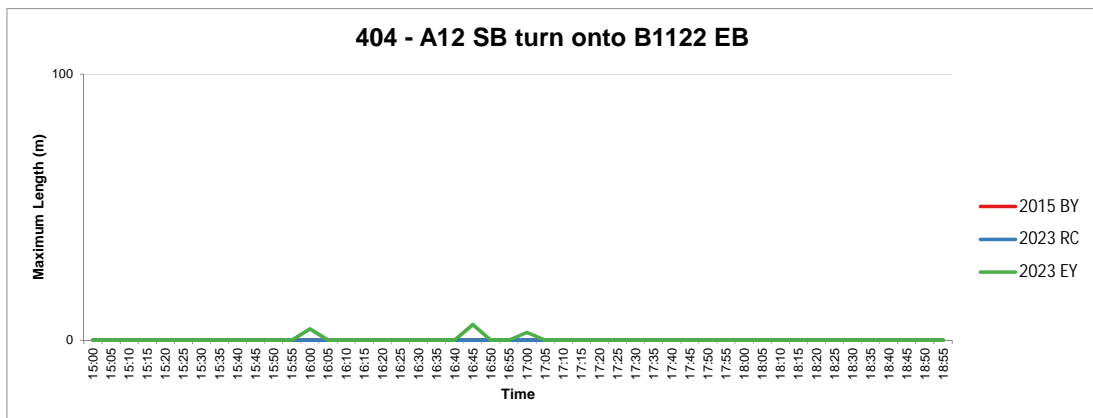
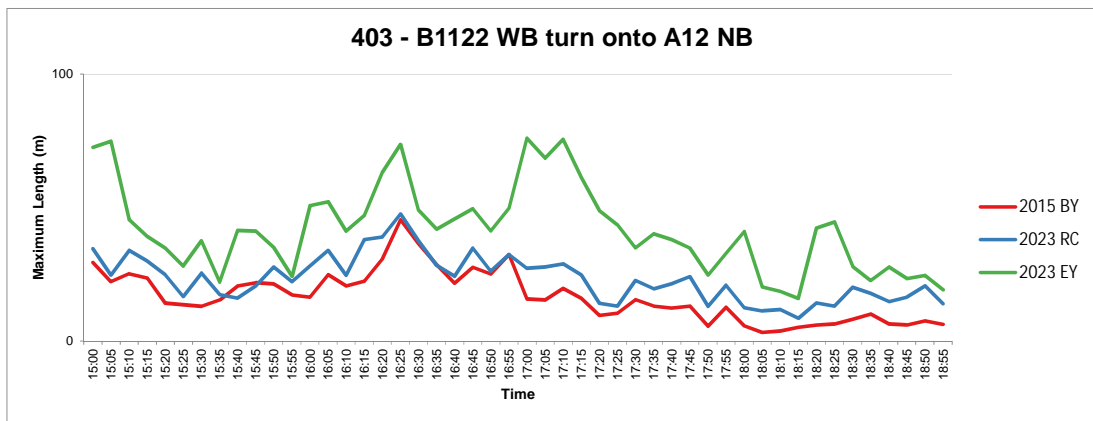
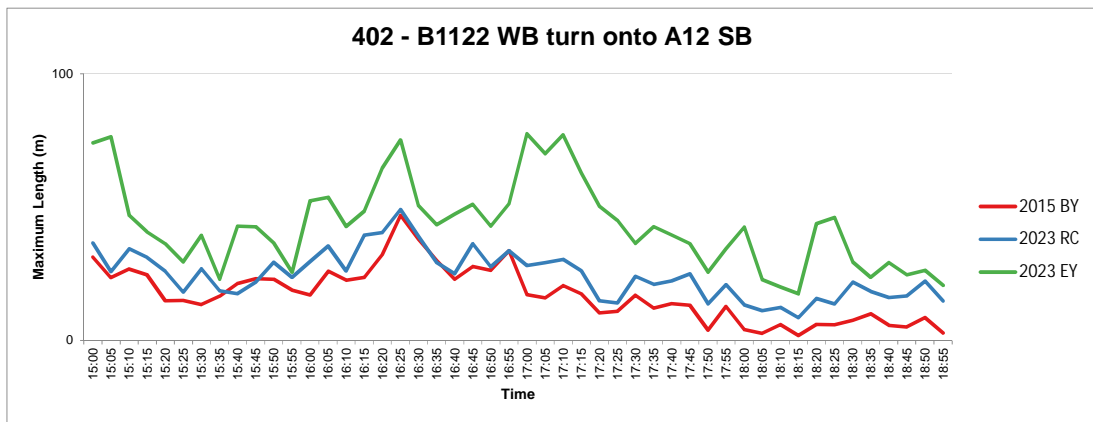
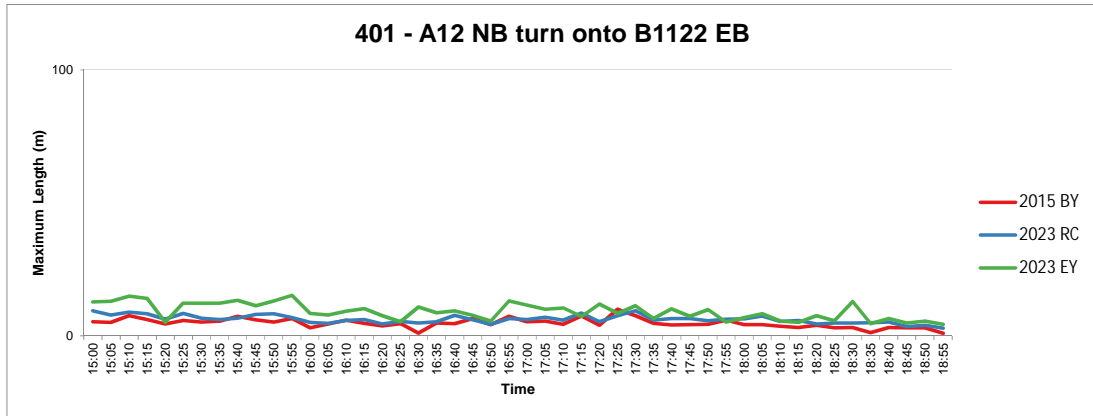


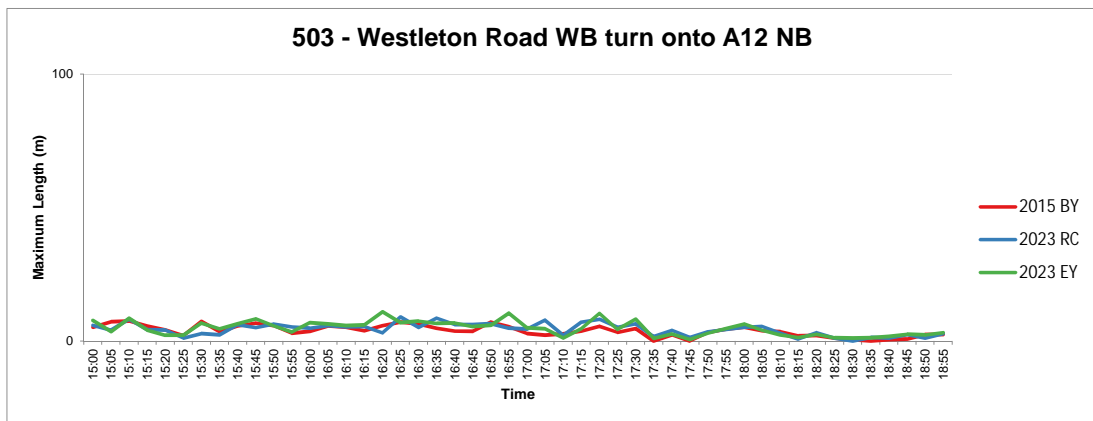
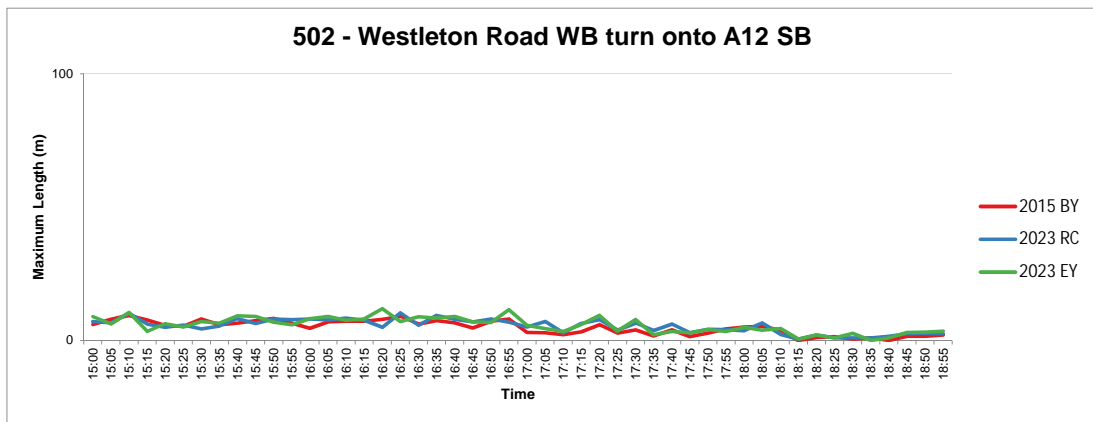
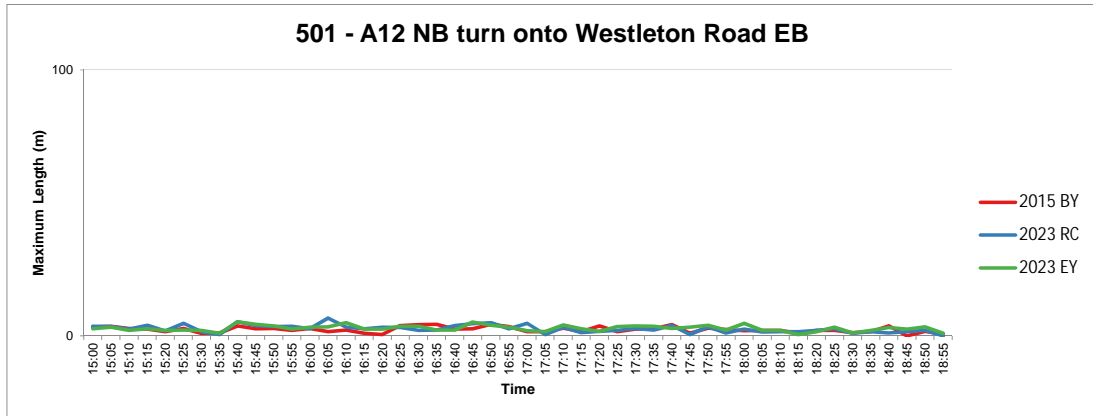


**Queue Comparison
PM
Maximum Length Summary
Maximum Length (m)**

	2015 BY	2023 RC	2023 EY
301 - A12 NB turn onto High Stre	1.6	1.7	2.6
302 - A12 SB turn onto High Stre	47.6	66.0	88.0
303 - High Street(A1120) EB turn	14.1	19.8	20.2
304 - High Street(A1120) EB turn	9.1	13.0	14.7
401 - A12 NB turn onto B1122 EB	10.0	9.5	15.2
402 - B1122 WB turn onto A12 S	46.9	49.1	77.5
403 - B1122 WB turn onto A12 N	45.4	47.6	76.0
404 - A12 SB turn onto B1122 EB	0.0	0.0	5.9
501 - A12 NB turn onto Westleto	4.4	6.7	5.3
502 - Westleton Road WB turn o	9.4	10.4	11.9
503 - Westleton Road WB turn o	7.5	9.0	10.9
601 - Darsham Petrol Station turr	11.5	18.0	13.1
602 - Darsham Petrol Station turr	10.7	18.6	13.4
701 - A12 NB turn in to Darsham	38.9	73.2	92.5
801 - A12 NB turn on to The St E	12.1	24.8	46.2
802 - The St WB turn onto A12 S	9.2	11.7	13.4
803 - The St WB turn onto A12 N	11.9	10.9	10.1
901 - A12 SB turn onto Willow Ma	6.4	6.9	13.0
902 - Willow Marsh Lane EB turn	2.6	2.9	21.1
903 - Willow Marsh Lane EB turn	3.8	3.2	23.0
1001 - A12 NB turn onto Lymball	12.6	8.8	19.2
1002 - Lymballs Lane WB turn or	5.6	3.3	3.9
1003 - Lymballs Lane WB turn or	4.3	4.4	4.3
1101 - A12 SB turn onto A144 W	8.4	9.0	7.3
1102 - A144 EB turn onto A12 NB	27.7	43.7	40.3
1103 - A144 EB turn onto A12 SB	30.7	46.2	47.0
1104 - A12 SB turn onto A144 WB first queue			
1201 - Level Crossing A12 NB	155.0	160.7	180.6
1202 - Level Crossing A12 SB	109.1	101.4	106.0
1301 - Level Crossing B1122 EB	8.9	8.7	16.8
1302 - Level Crossing B1122 WB	15.6	16.2	30.6
1401 - PandR Roundabout A12 NB			
1402 - PandR Roundabout PandR Access			
1403 - PandR Roundabout A12 SB			
904 - PandR Access SB turn onto Willow Marsh Lane WB			
905 - Willow Marsh Lane EB turn onto PandR Access NB			
906 - Willow Marsh Lane EB turn onto PandR Access SB			

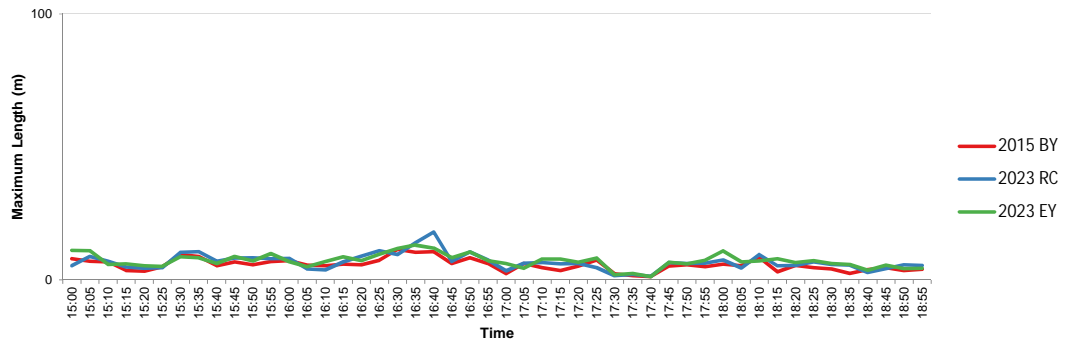




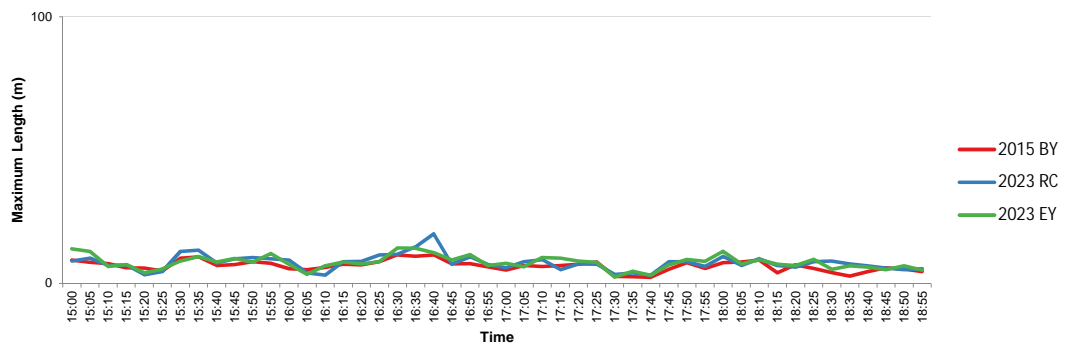


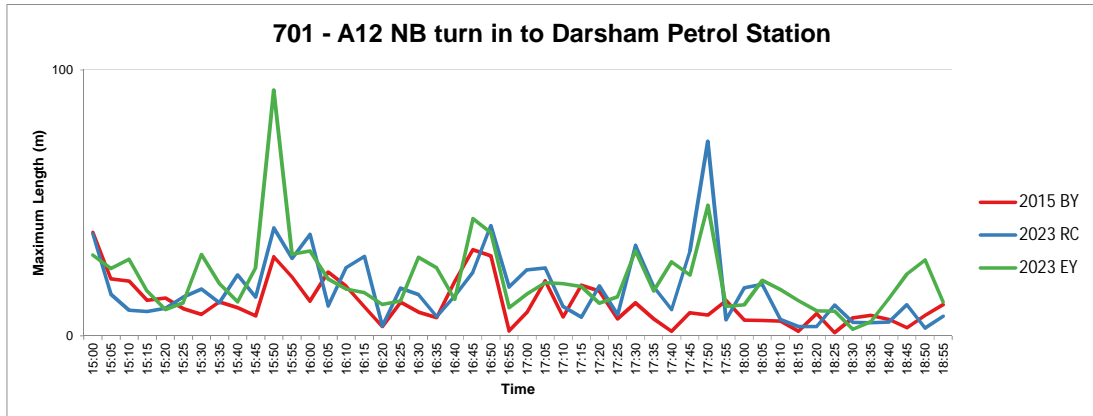


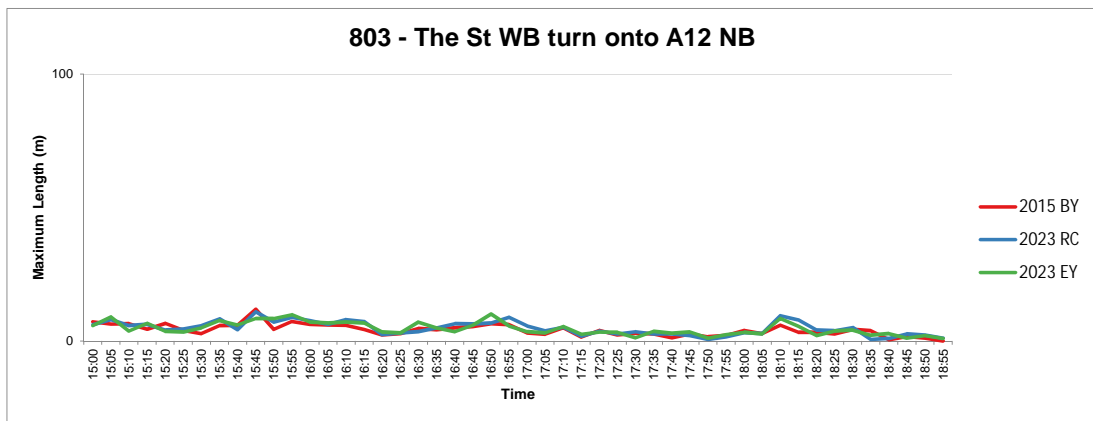
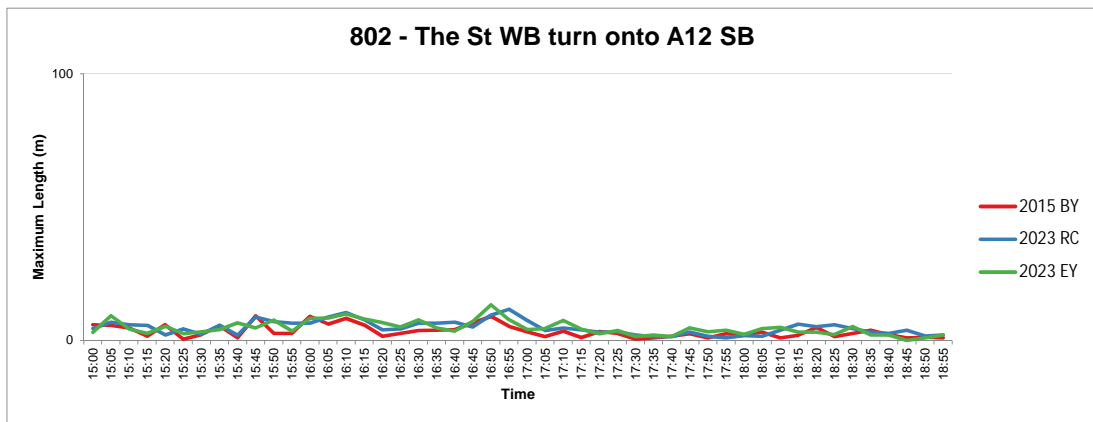
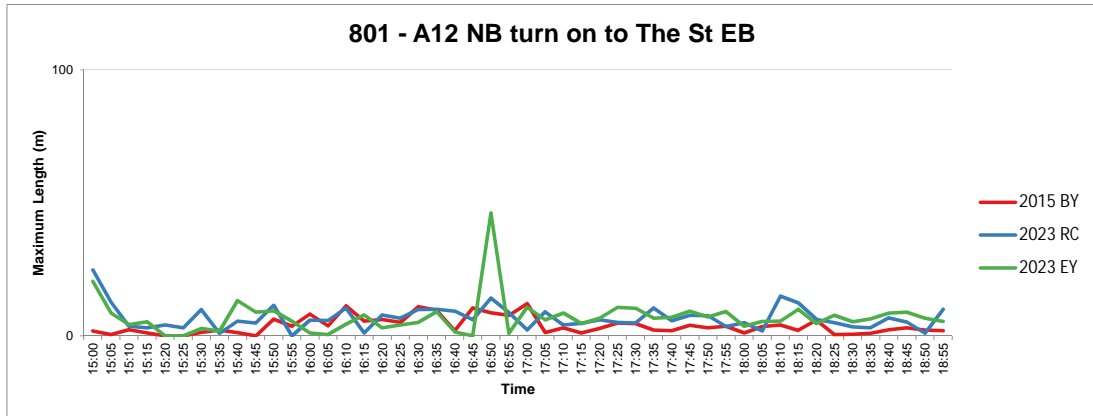
601 - Darsham Petrol Station turn onto A12 SB

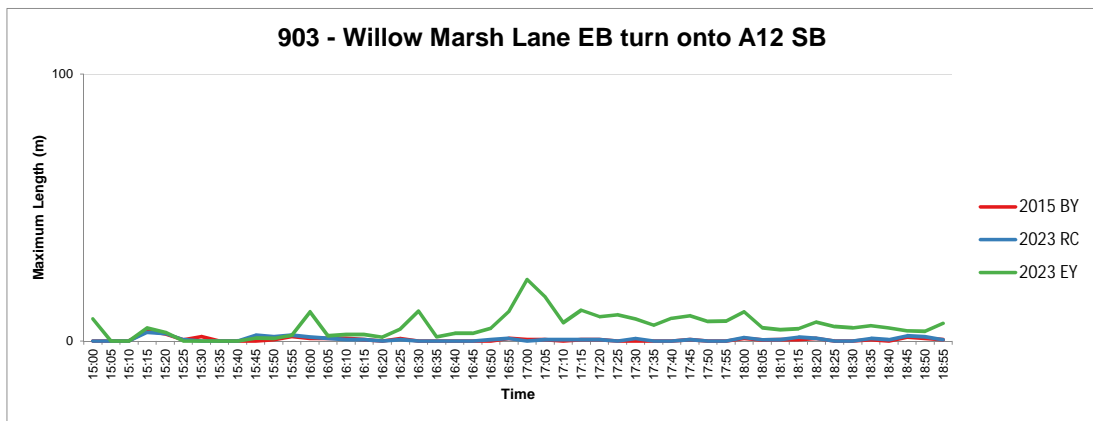
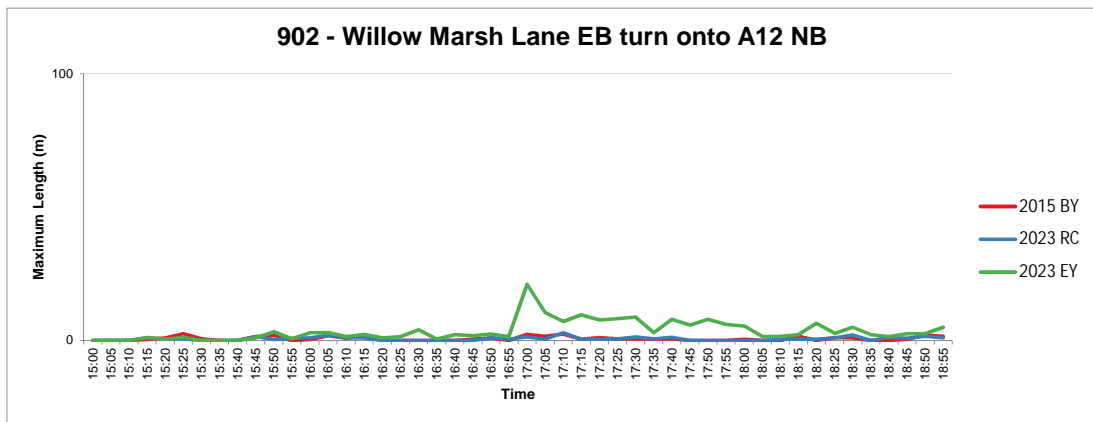
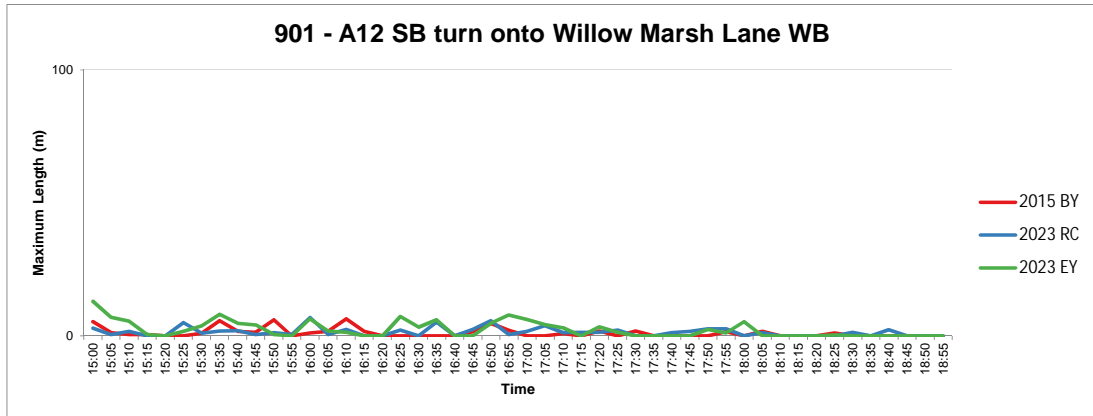


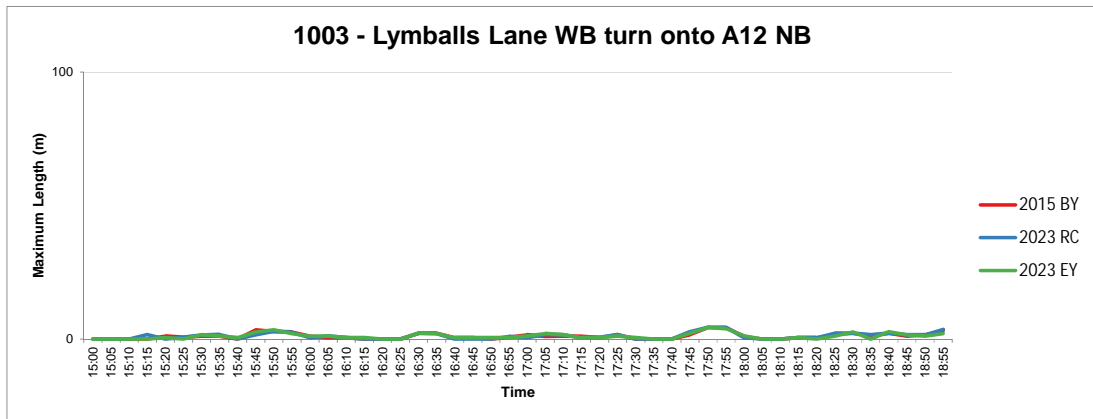
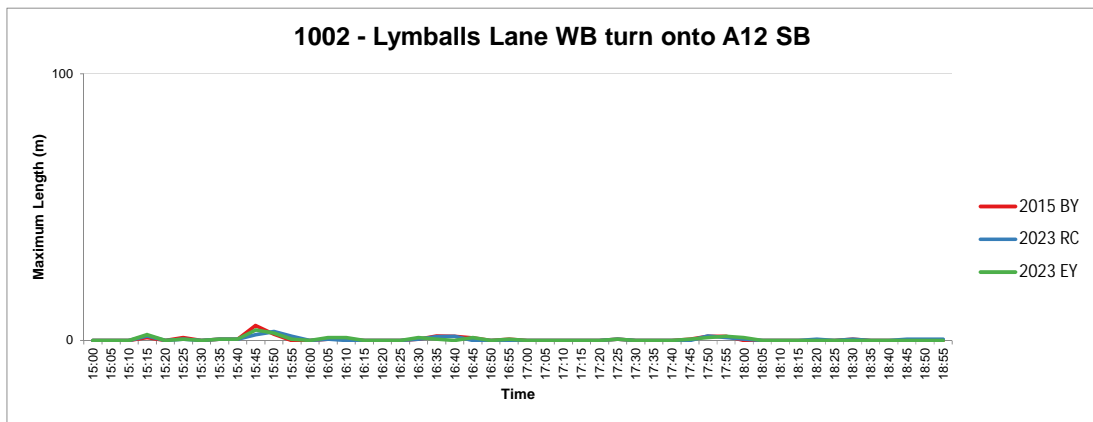
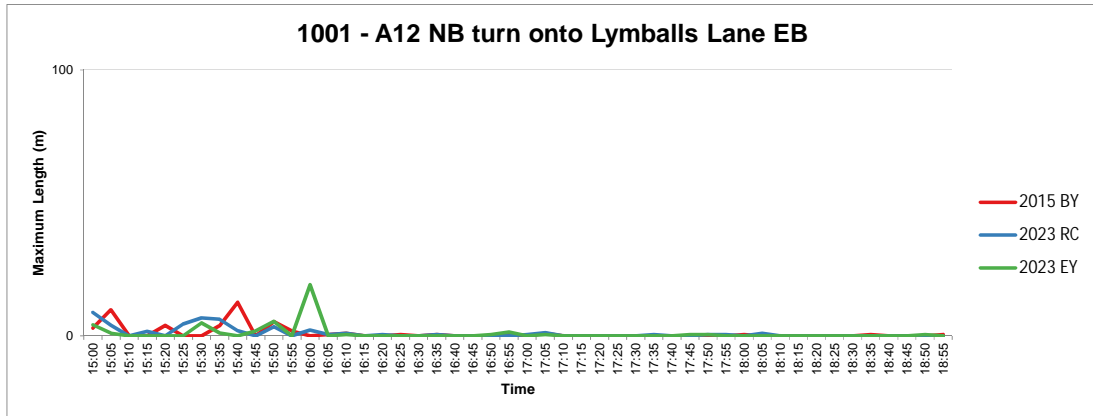
602 - Darsham Petrol Station turn onto A12 NB

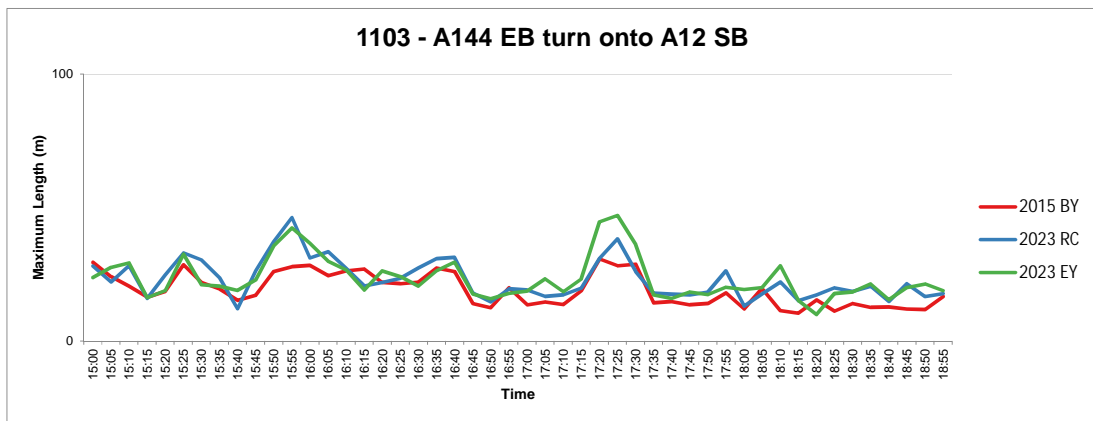
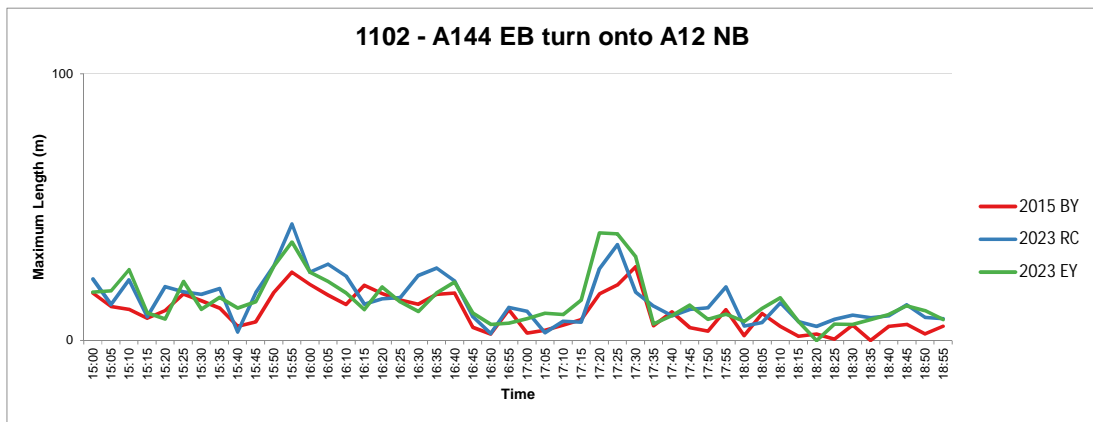
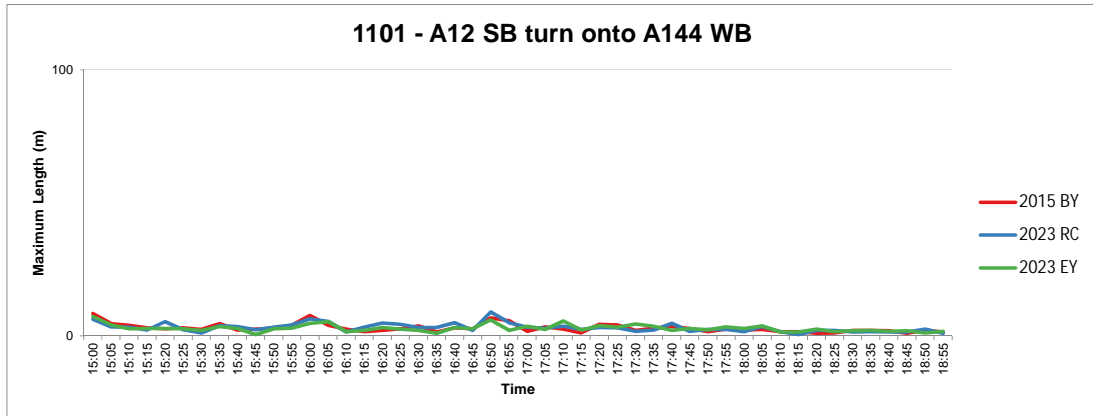


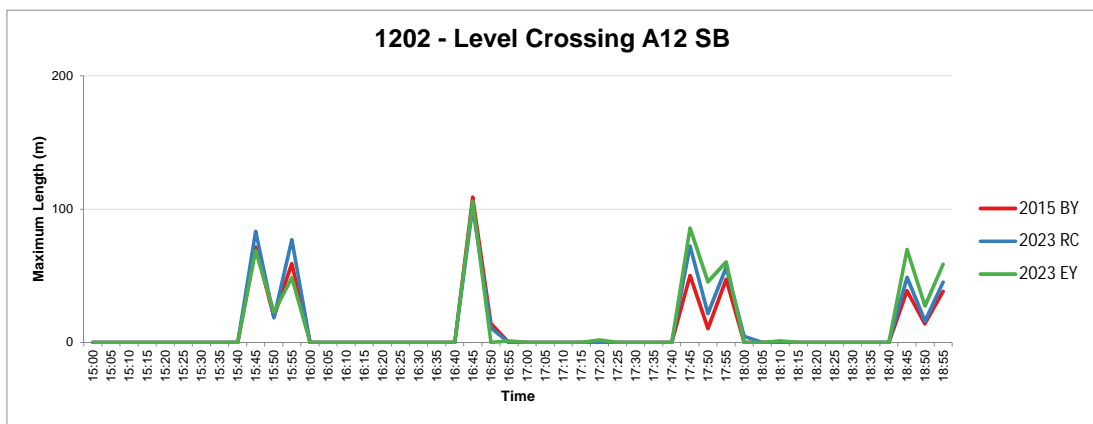
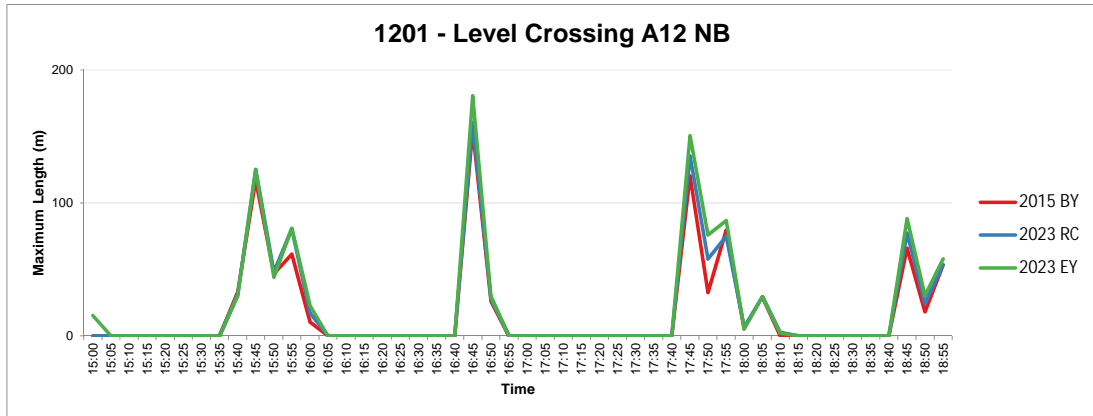


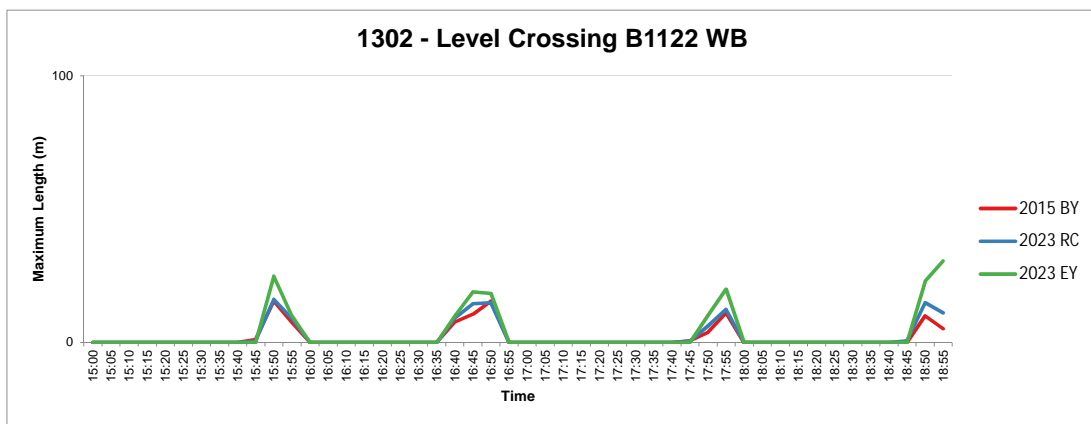
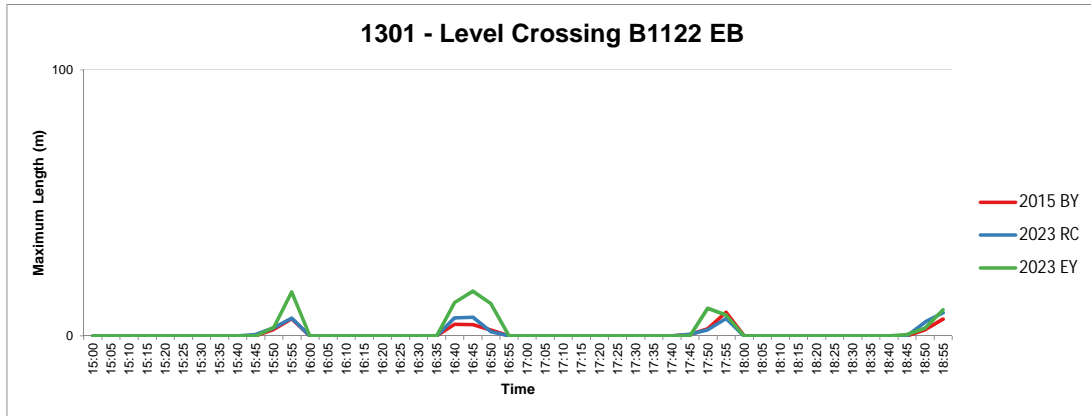












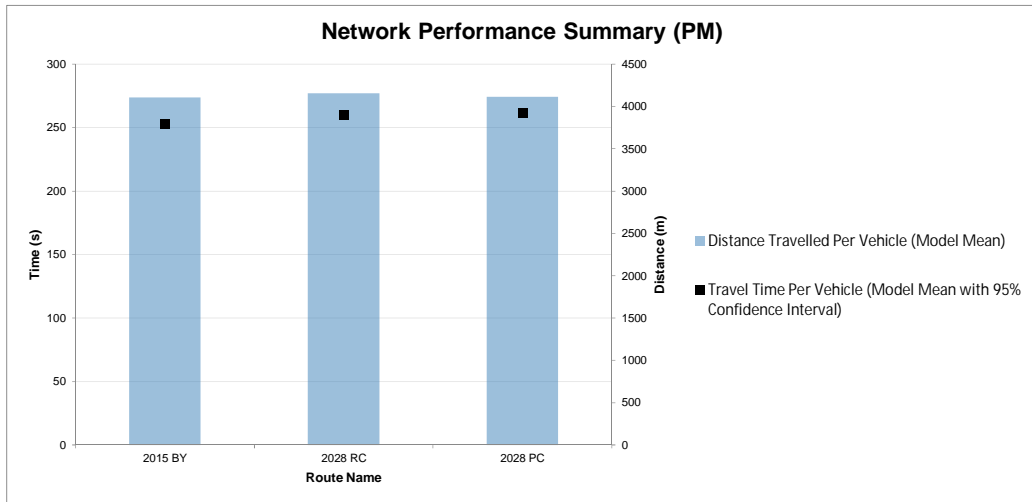
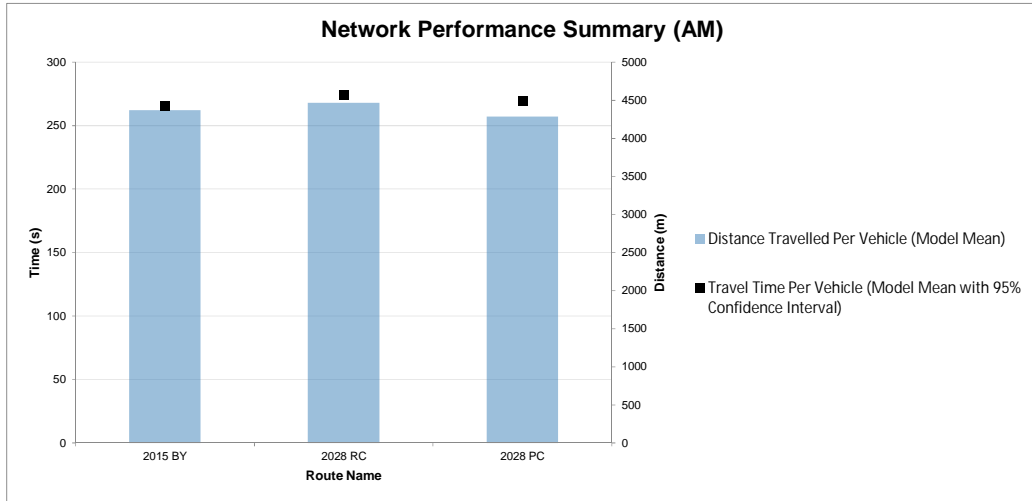
Appendix D

2028 FORECAST MODEL RESULTS



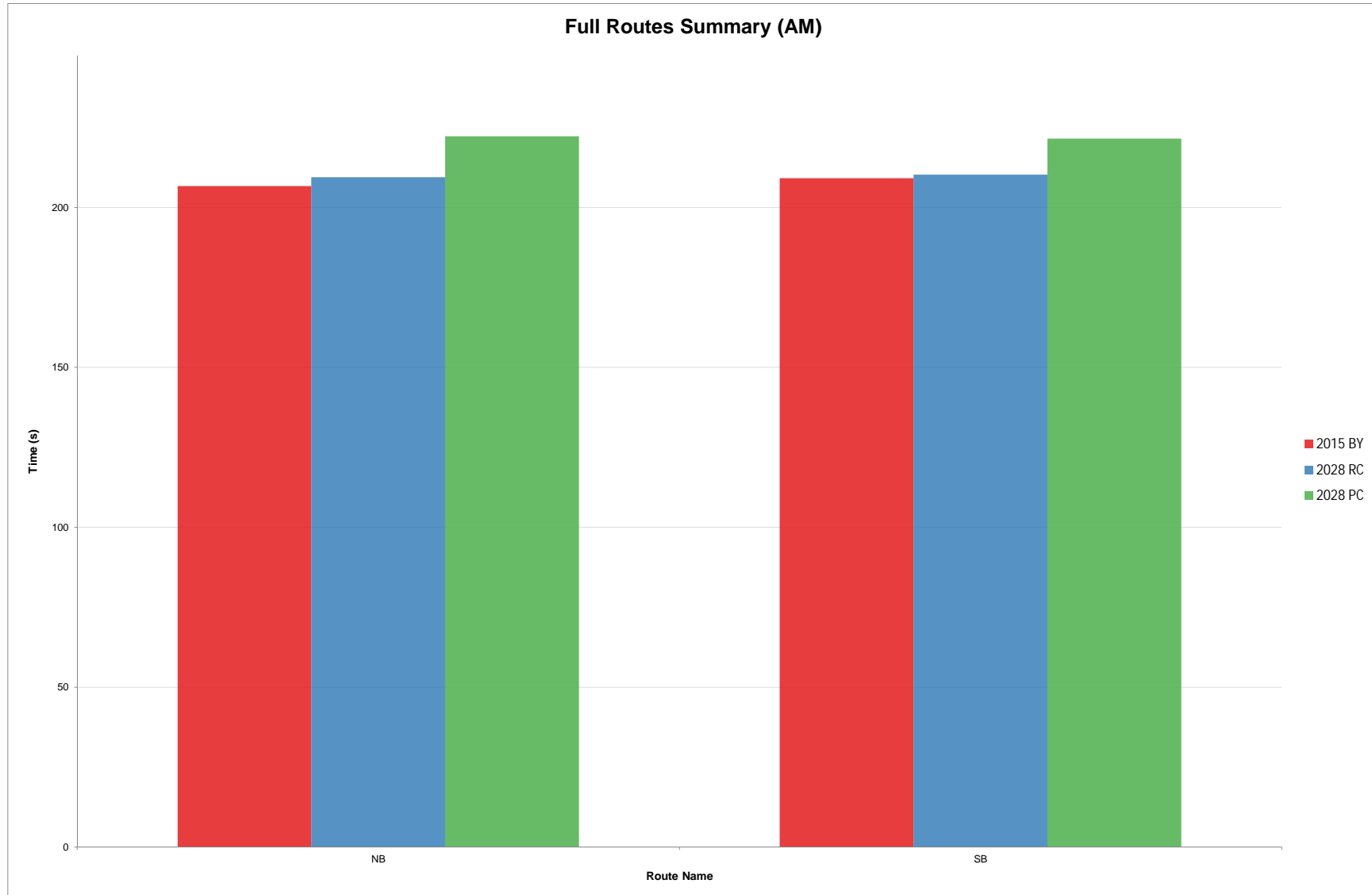


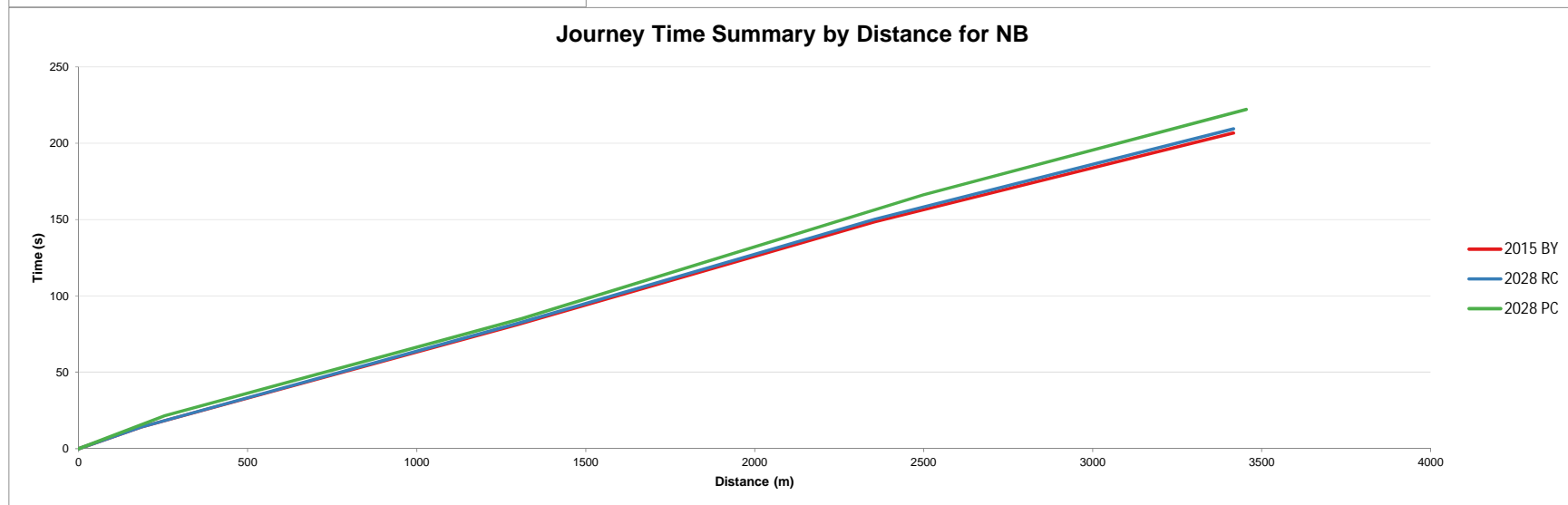
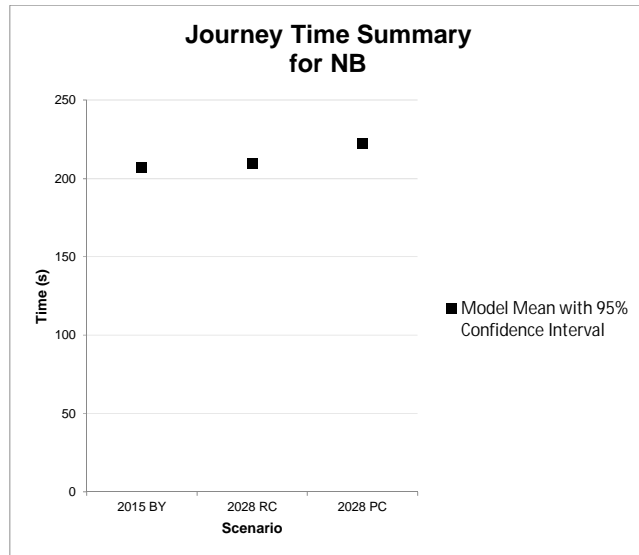
	2015 BY (AM)	2028 RC (AM)	2028 PC (AM)	2015 BY (PM)	2028 RC (PM)	2028 PC (PM)
Total Time Taken (s)	827774	1026128	1191870	1472571	1752590	1937560
Total Distance (m)	13622319	16724237	18965785	23940671	28064897	30516344
Total Vehicles	3118	3745	4428	5831	6751	7421
Total Delay (s)	82029	109991	146681	153475	203077	236513
Average Time (s) / Vehicle	266	274	269	253	260	261
Average Time (s) / Mile	98	99	101	99	101	102
Average Distance (m) / Vehicle	4370	4466	4284	4105	4157	4112
Average Speed (mph)	37	36	36	36	36	35
Average Speed (kph)	59	59	57	59	58	57
Average Delay / Vehicle	26	29	33	26	30	32

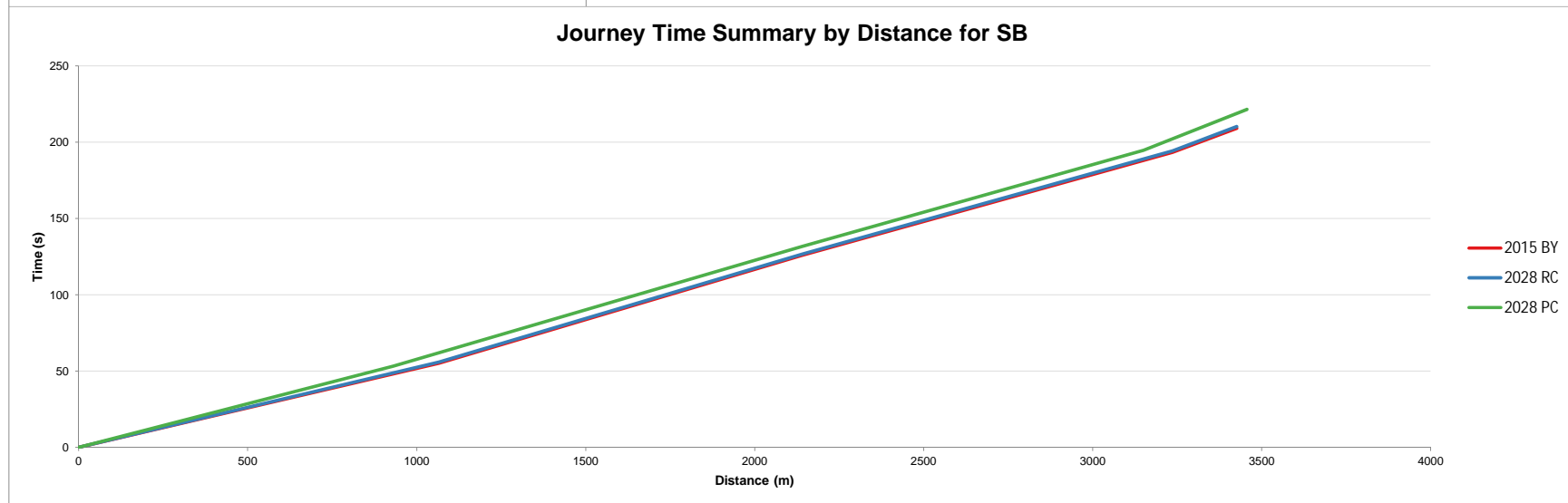
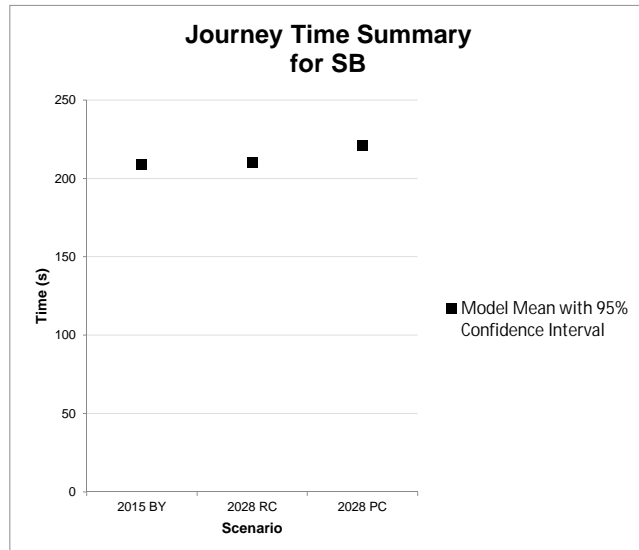




Full Routes Summary (AM)

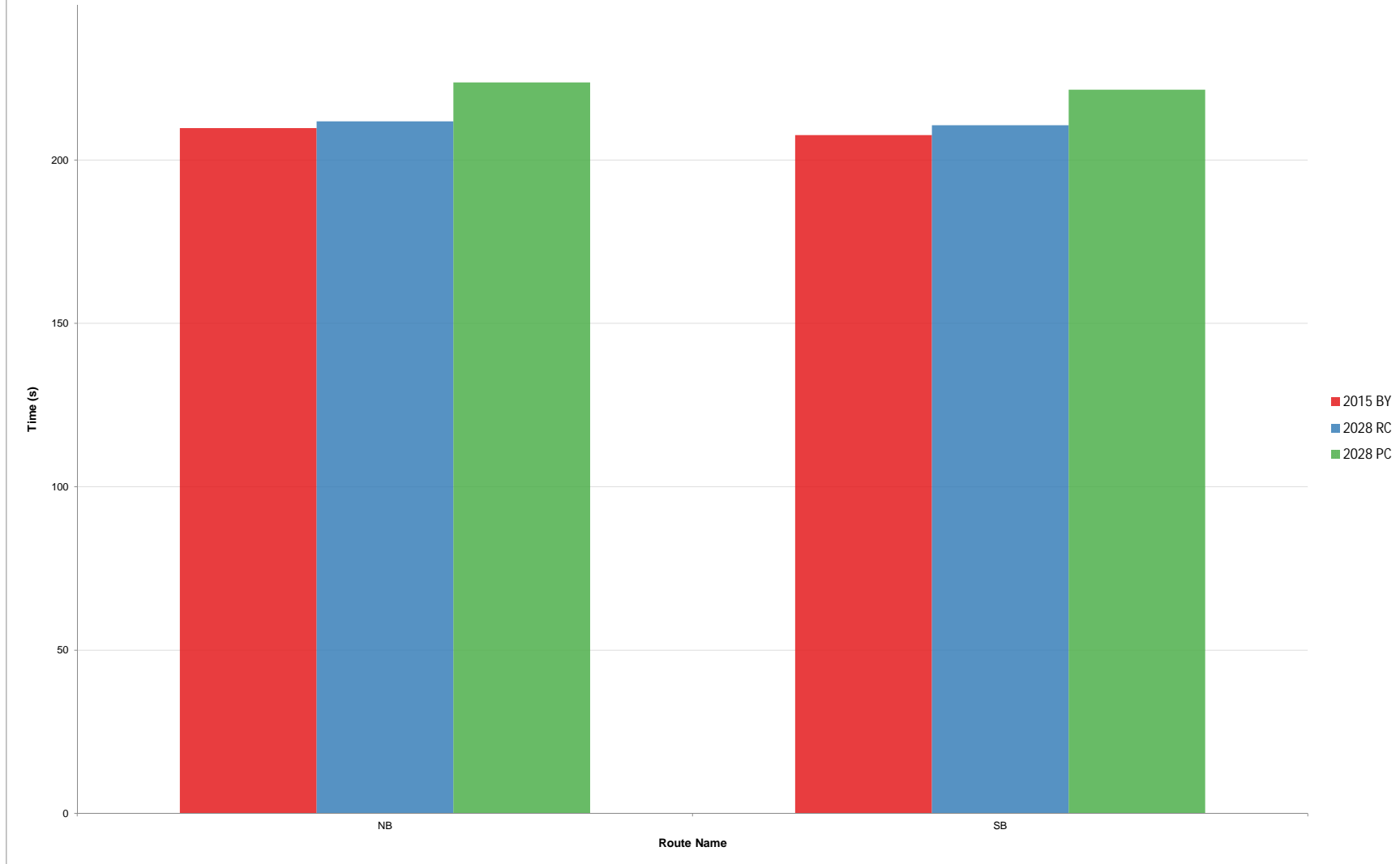


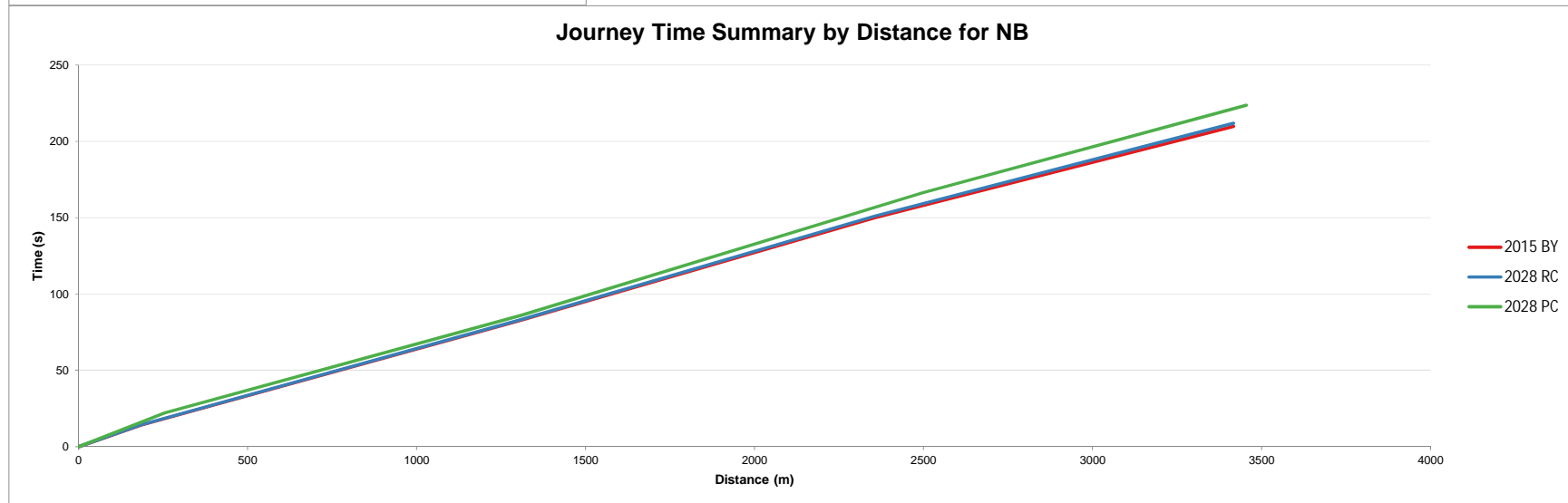
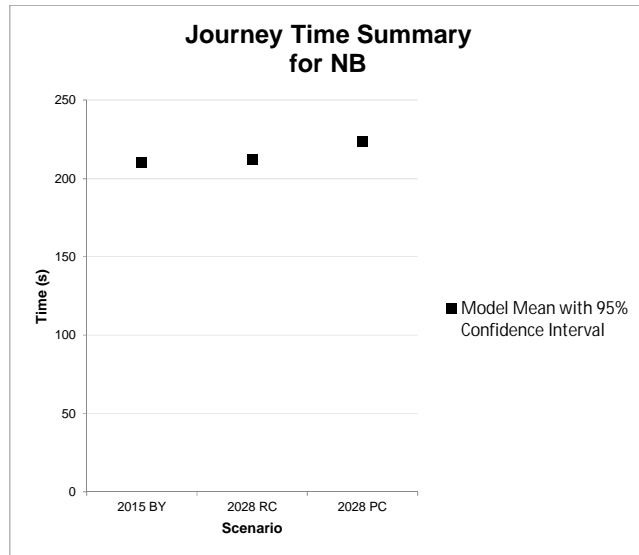


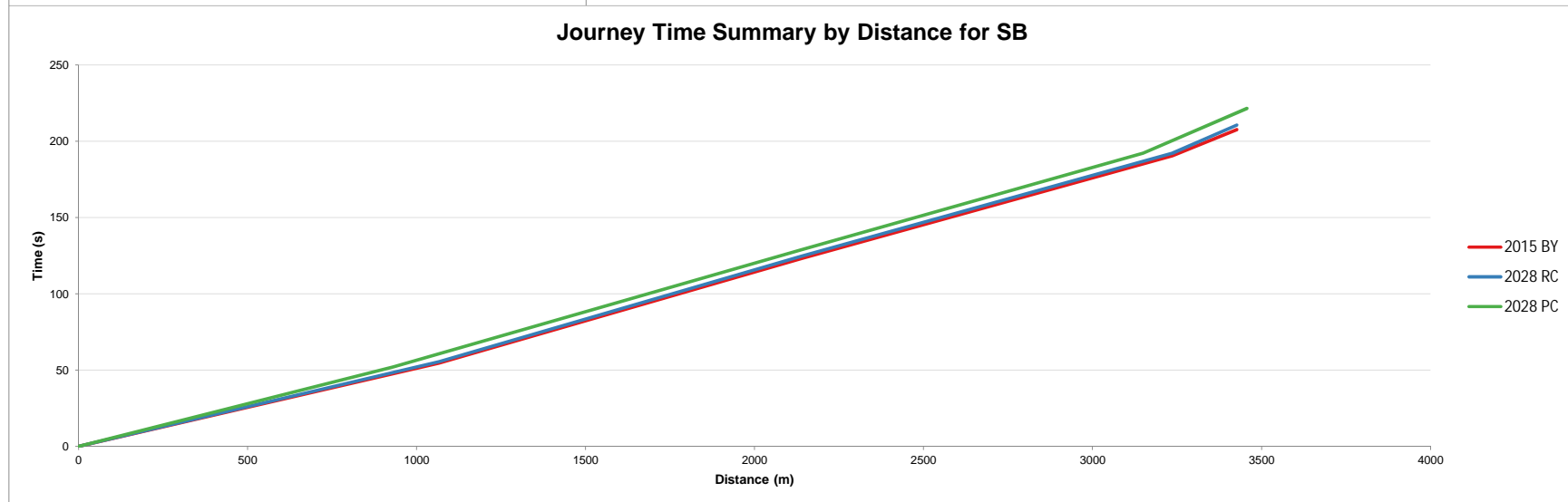
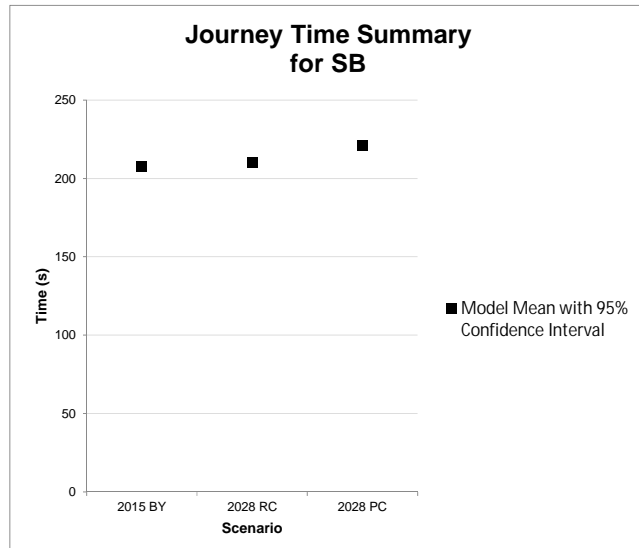




Full Routes Summary (PM)









Journey Time Table
AM
2028

Route Names	2015 BY	2028 RC	2028 PC
1 - Section 1 NB	14	14	21
2 - Section 2 NB	67	68	64
3 - Section 3 NB	67	68	81
4 - Section 4 NB	58	59	56
NB	207	209	222
5 - Section 1 SB	55	56	53
6 - Section 2 SB	71	71	78
7 - Section 3 SB	68	68	63
8 - Section 4 SB	16	16	27
SB	209	210	222



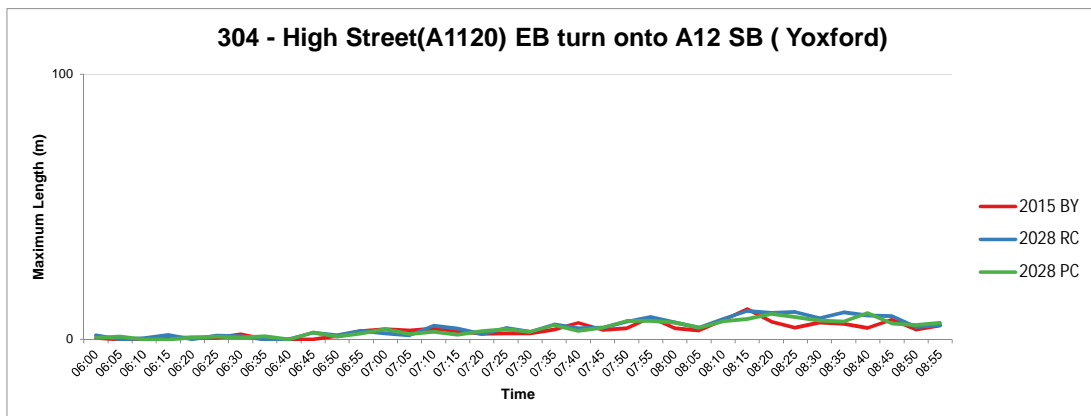
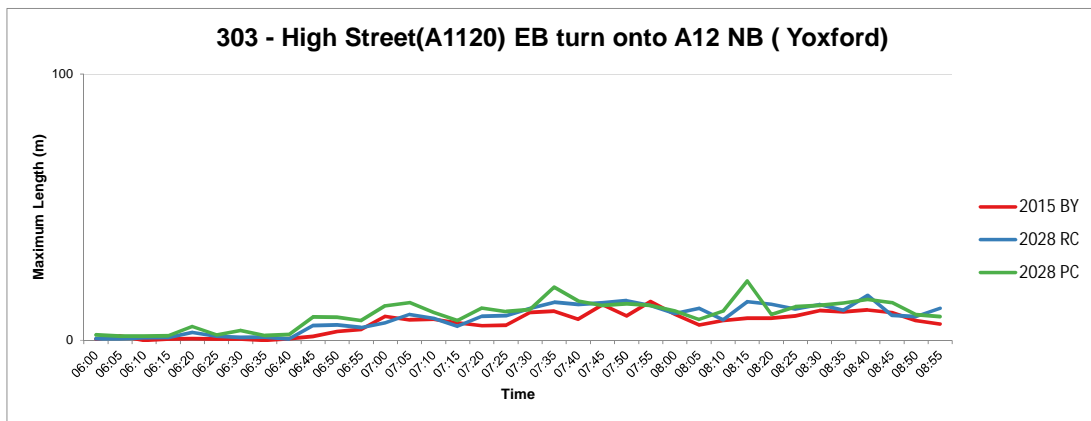
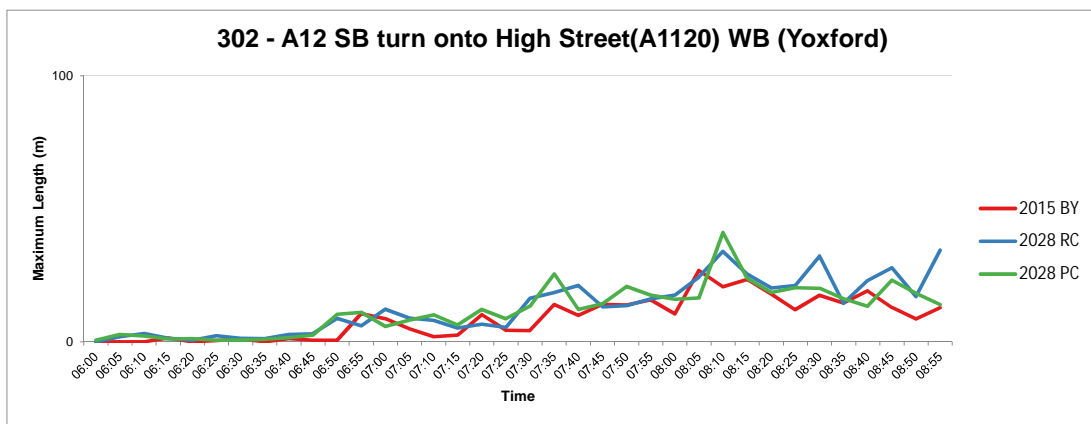
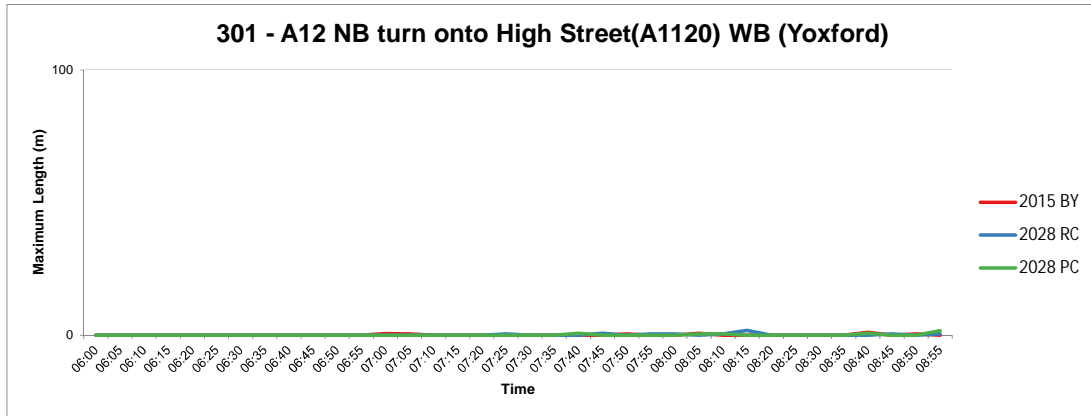
Journey Time Table
PM
2028

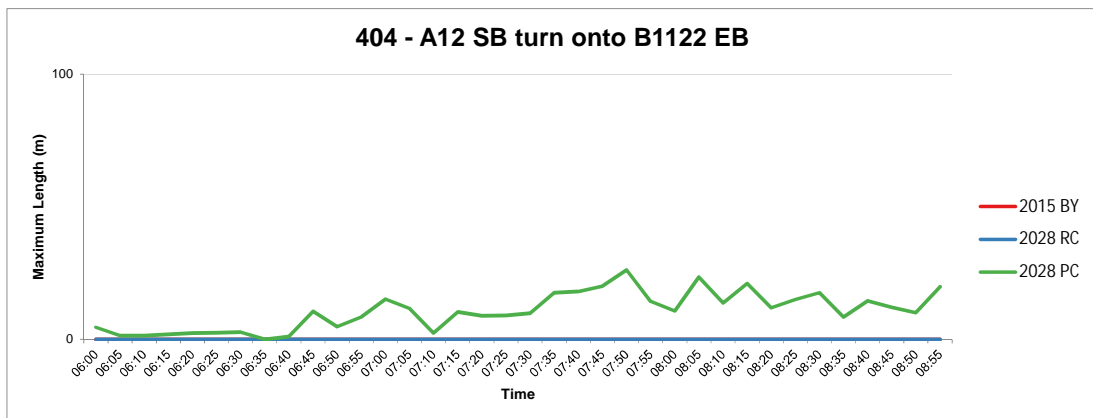
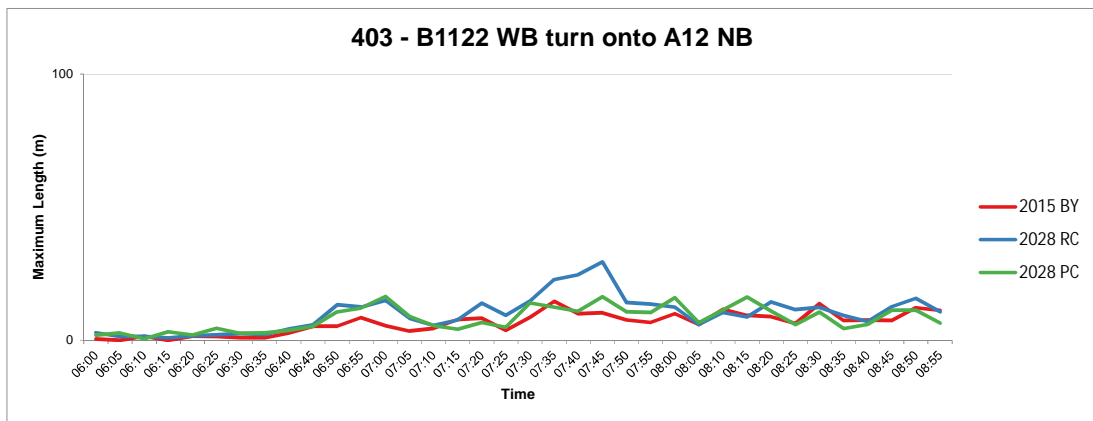
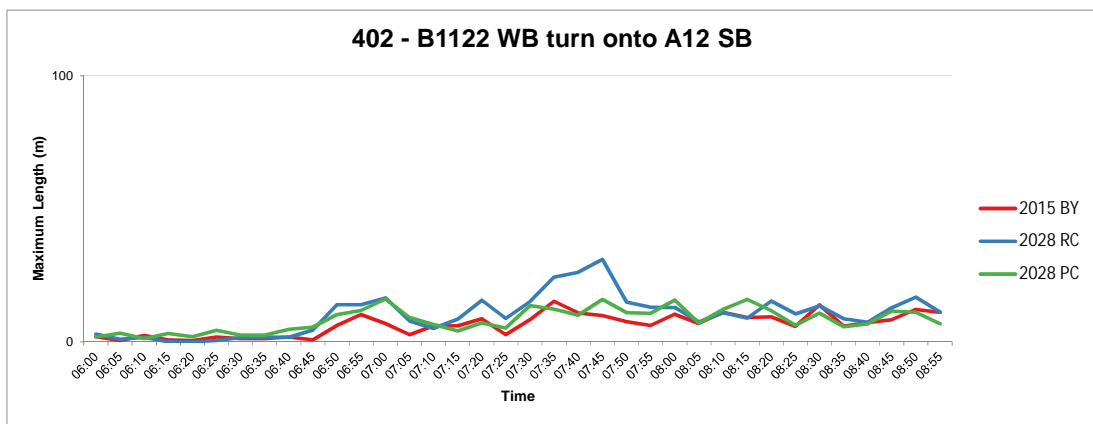
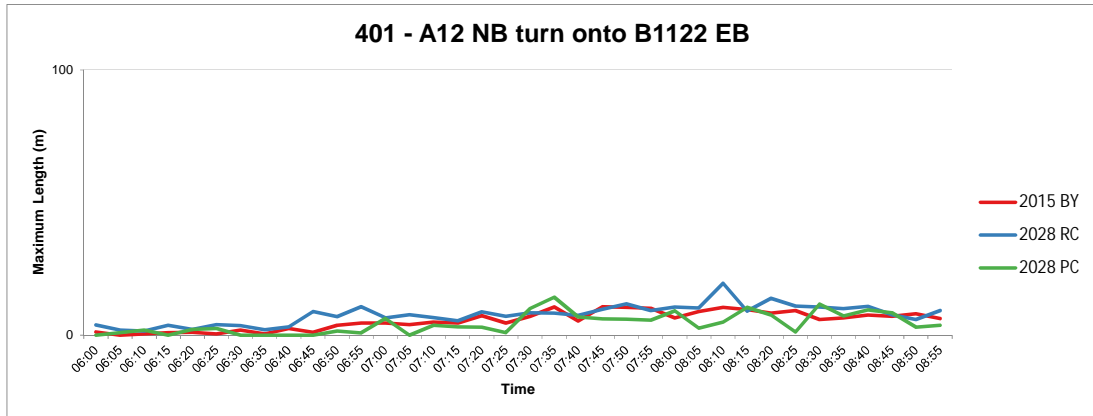
Route Names	2015 BY	2028 RC	2028 PC
1 - Section 1 NB	14	14	22
2 - Section 2 NB	68	68	64
3 - Section 3 NB	68	68	80
4 - Section 4 NB	60	61	57
NB	210	212	224
5 - Section 1 SB	55	56	52
6 - Section 2 SB	69	69	77
7 - Section 3 SB	67	67	63
8 - Section 4 SB	17	18	29
SB	208	211	222

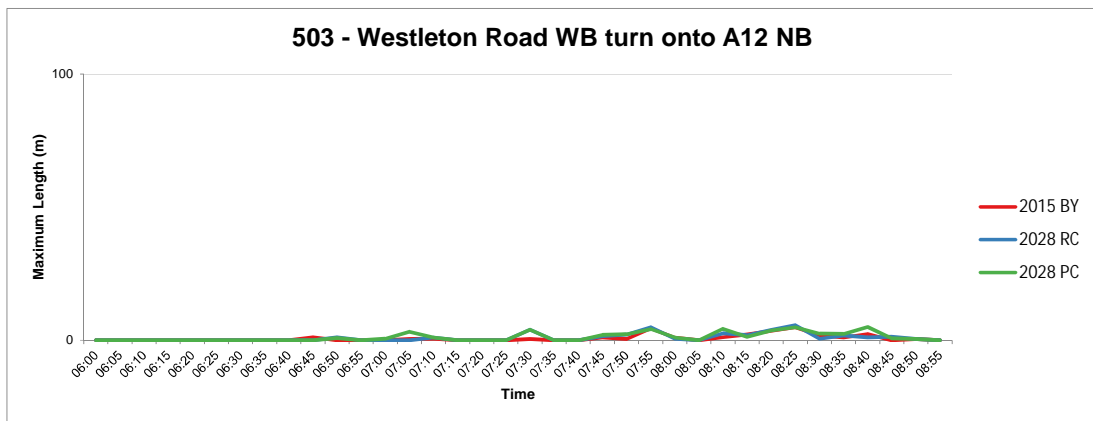
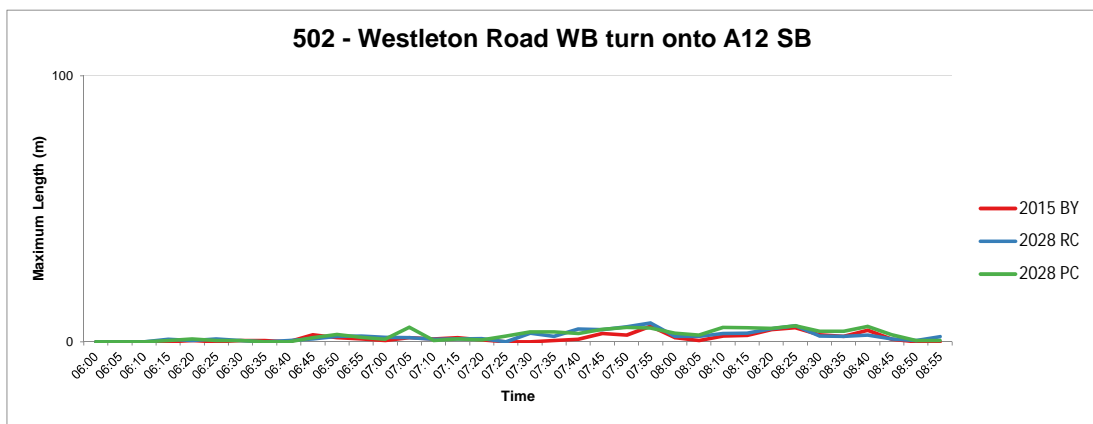
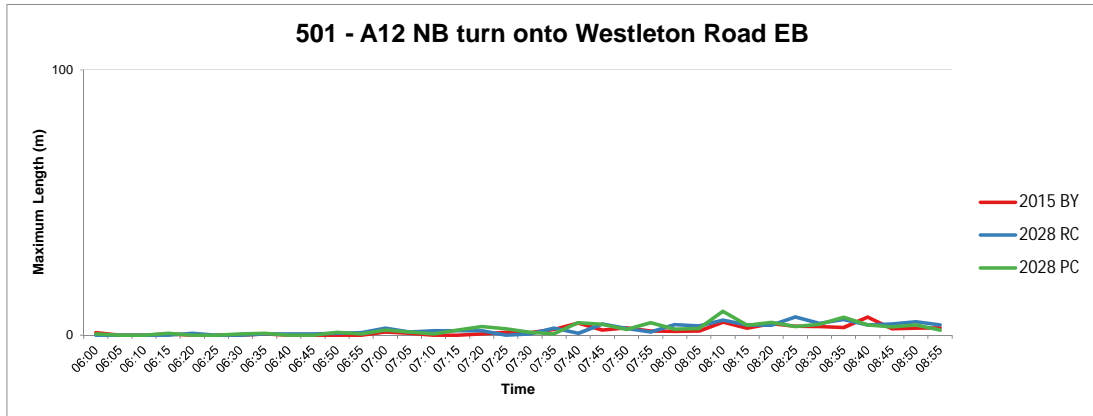


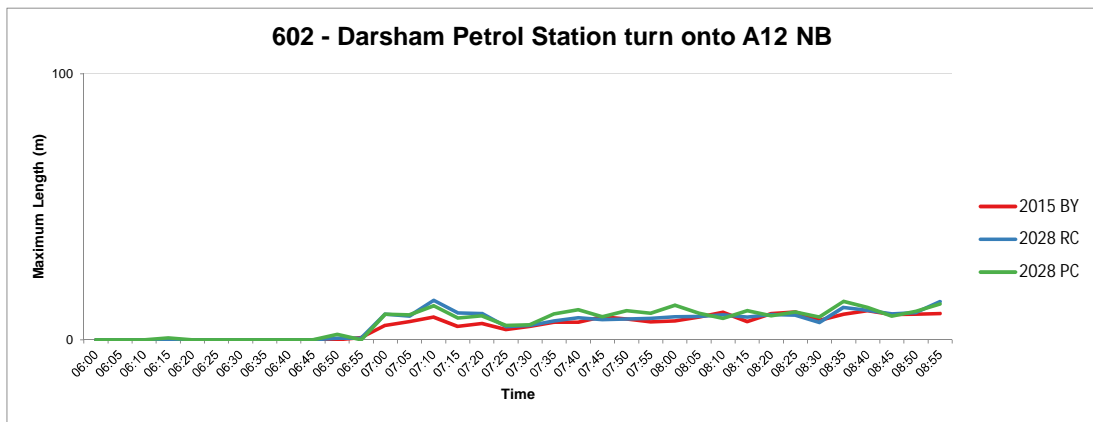
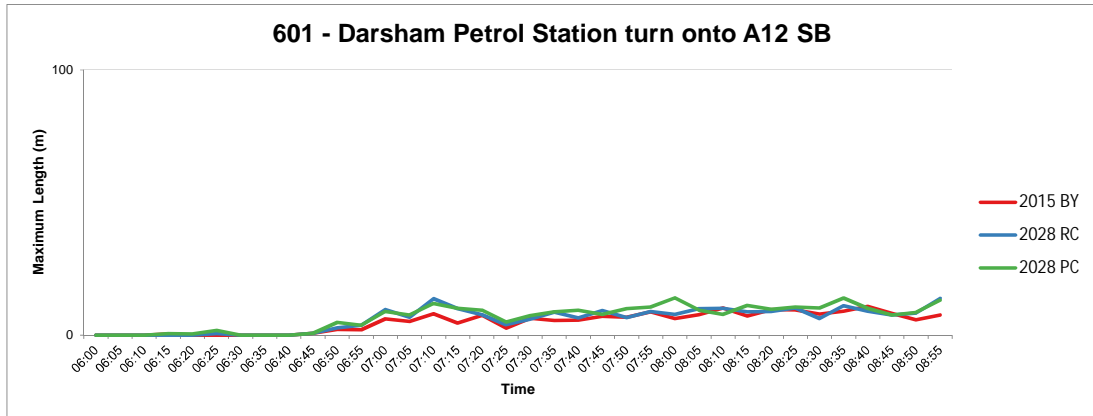
**Queue Comparison
AM
Maximum Length Summary
Maximum Length (m)**

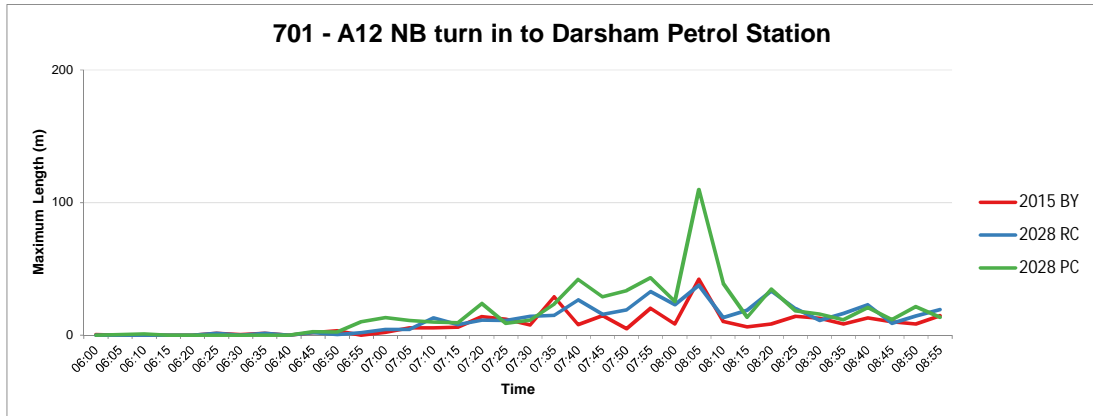
	2015 BY	2028 RC	2028 PC
301 - A12 NB turn onto High Stre	1.0	1.8	1.7
302 - A12 SB turn onto High Stre	26.8	34.5	41.1
303 - High Street(A1120) EB turn	14.6	16.9	22.3
304 - High Street(A1120) EB turn	11.5	10.7	9.9
401 - A12 NB turn onto B1122 EB	10.7	19.6	14.3
402 - B1122 WB turn onto A12 S	15.2	31.0	16.1
403 - B1122 WB turn onto A12 N	14.6	29.4	16.5
404 - A12 SB turn onto B1122 EB	0.0	0.0	26.2
501 - A12 NB turn onto Westleto	6.9	6.9	9.0
502 - Westleton Road WB turn o	5.9	7.0	6.0
503 - Westleton Road WB turn o	4.9	5.7	5.0
601 - Darsham Petrol Station turn	10.9	13.9	14.0
602 - Darsham Petrol Station turn	10.9	14.8	14.5
701 - A12 NB turn in to Darsham	42.1	37.7	109.9
801 - A12 NB turn on to The St E	13.3	24.2	33.9
802 - The St WB turn onto A12 S	4.2	6.3	7.0
803 - The St WB turn onto A12 N	6.2	6.2	7.1
901 - A12 SB turn onto Willow Ma	4.8	10.1	
902 - Willow Marsh Lane EB turn	3.3	3.8	
903 - Willow Marsh Lane EB turn	6.5	7.0	
1001 - A12 NB turn onto Lymball	1.1	1.1	1.5
1002 - Lymballs Lane WB turn or	3.4	2.8	3.3
1003 - Lymballs Lane WB turn or	3.0	3.6	3.1
1101 - A12 SB turn onto A144 W	6.6	7.1	4.2
1102 - A144 EB turn onto A12 NB	59.1	64.1	94.7
1103 - A144 EB turn onto A12 SB	62.6	66.7	92.9
1104 - A12 SB turn onto A144 WB first queue			10.9
1201 - Level Crossing A12 NB	101.8	140.4	145.5
1202 - Level Crossing A12 SB	161.6	156.9	249.8
1301 - Level Crossing B1122 EB	19.9	25.1	24.7
1302 - Level Crossing B1122 WB	5.6	10.2	8.1
1401 - PandR Roundabout A12 NB			41.9
1402 - PandR Roundabout PandR Access			6.3
1403 - PandR Roundabout A12 SB			23.5
904 - PandR Access SB turn onto Willow Marsh Lane V			0.0
905 - Willow Marsh Lane EB turn onto PandR Access N			1.1
906 - Willow Marsh Lane EB turn onto PandR Access S			0.0

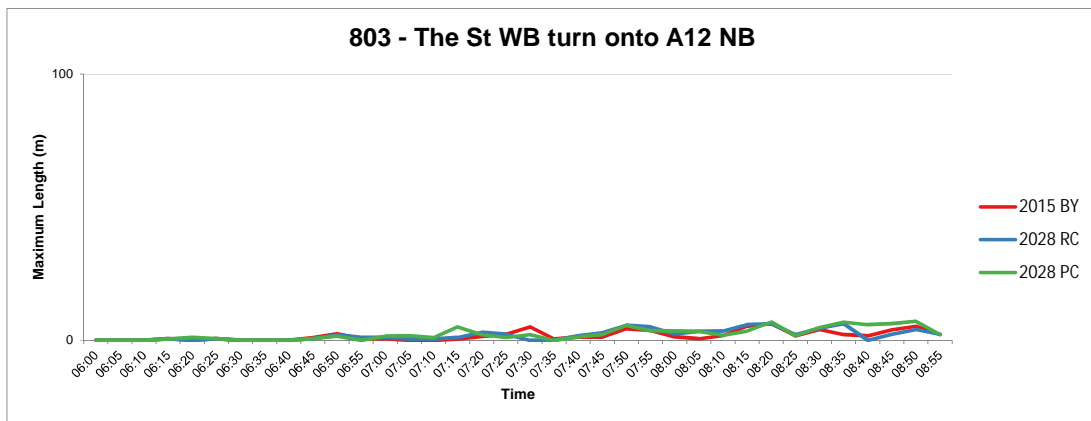
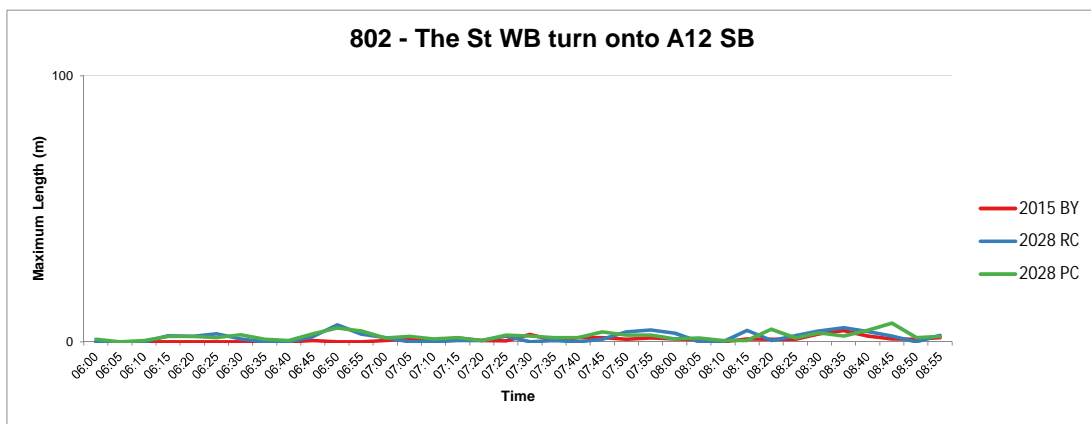
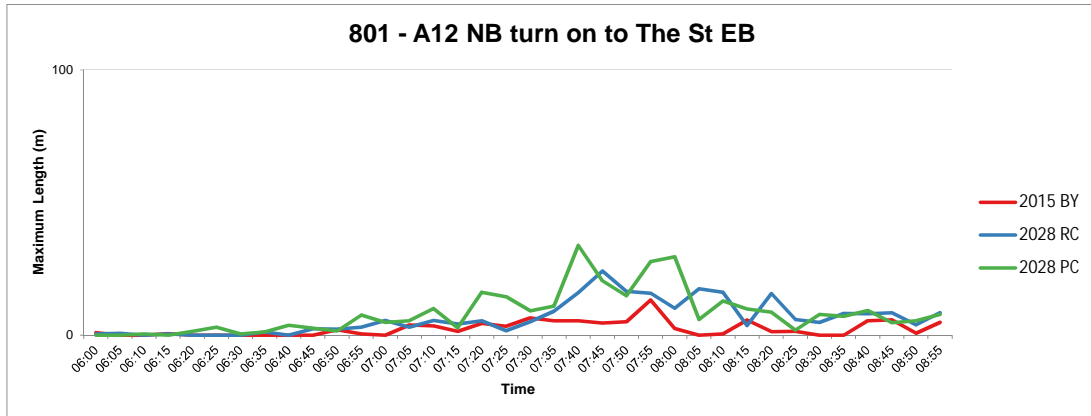


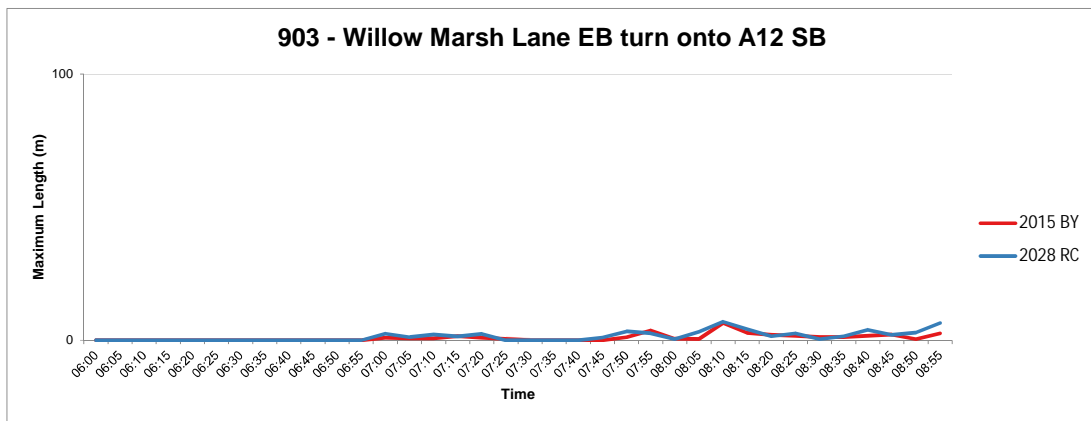
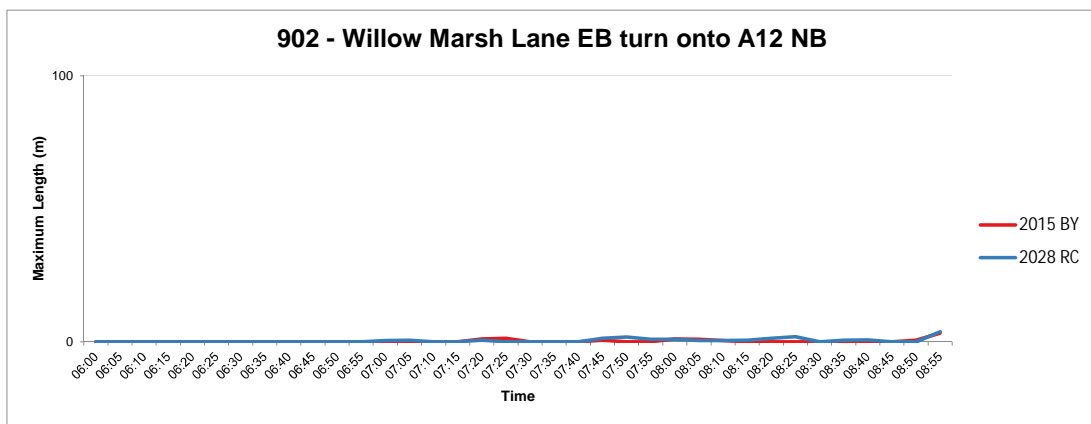
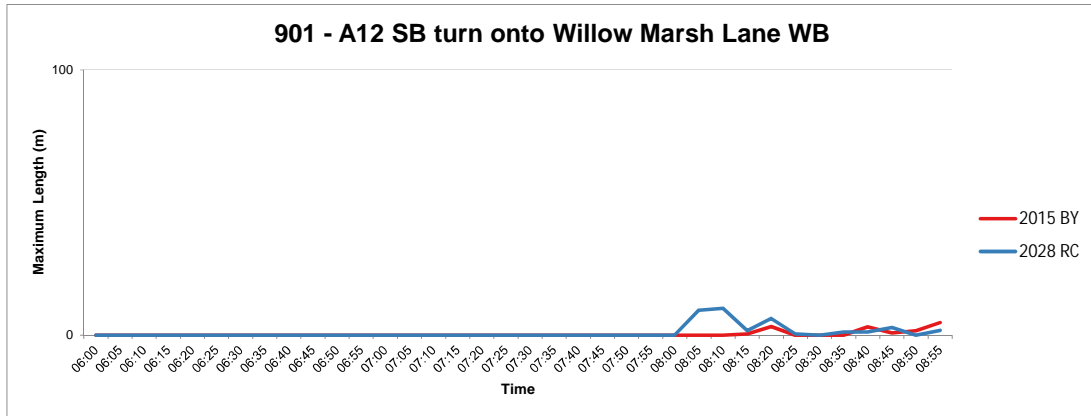


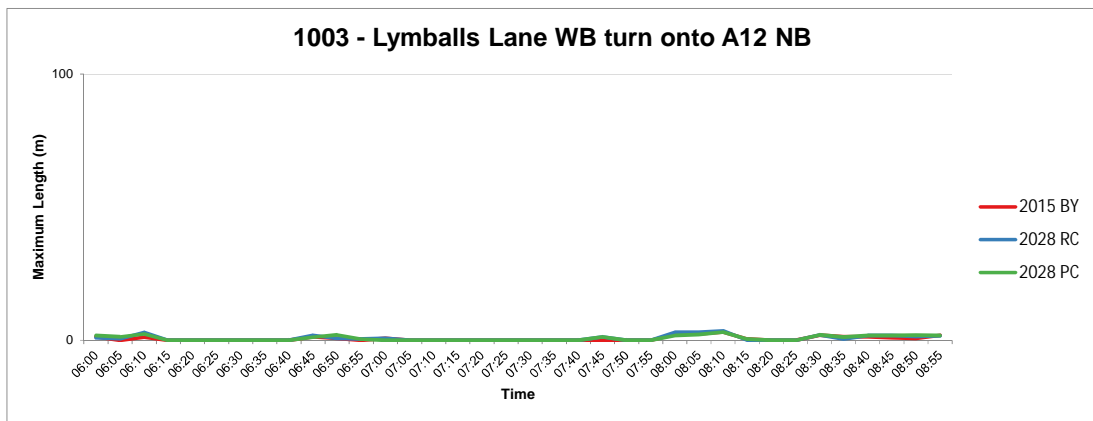
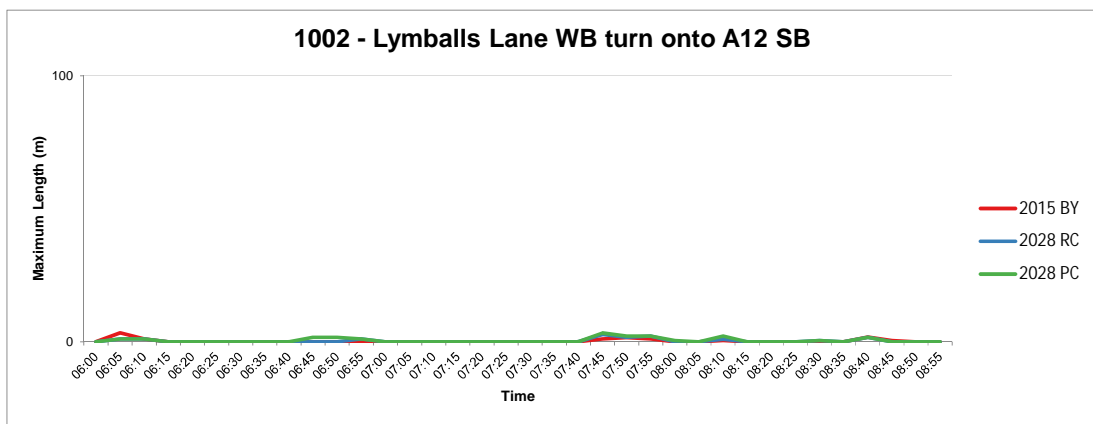
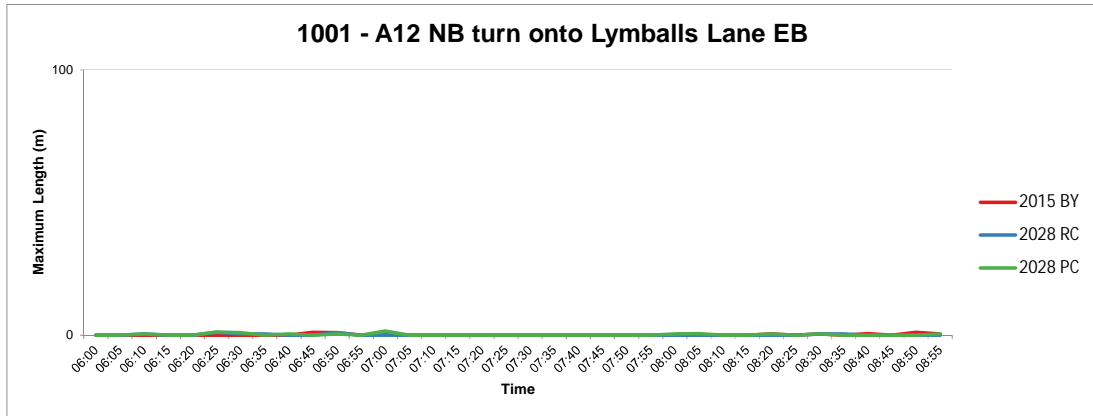


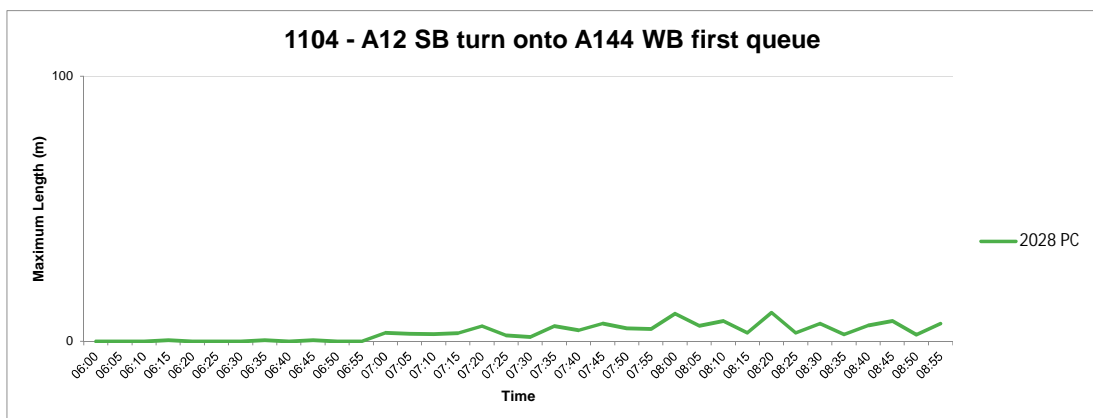
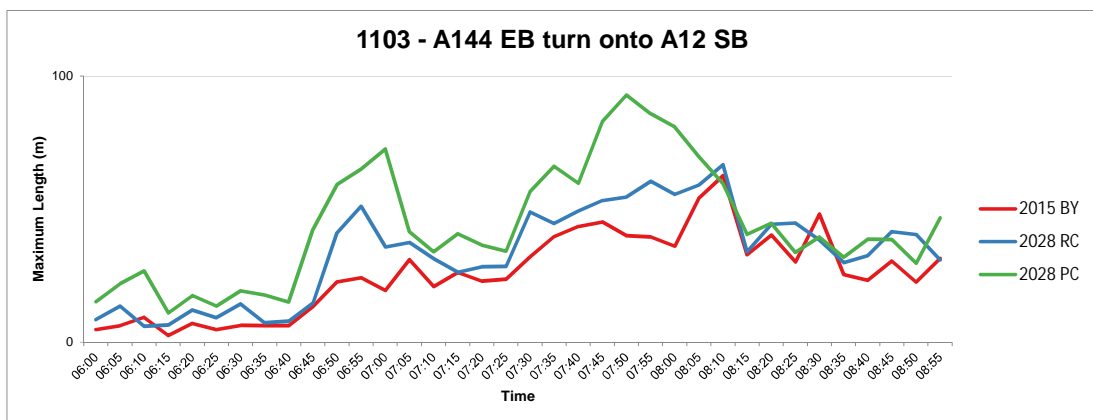
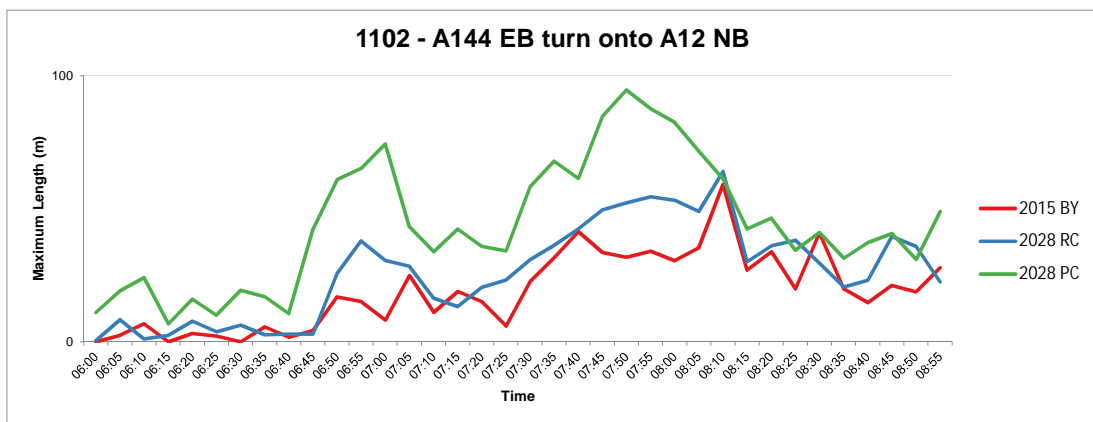
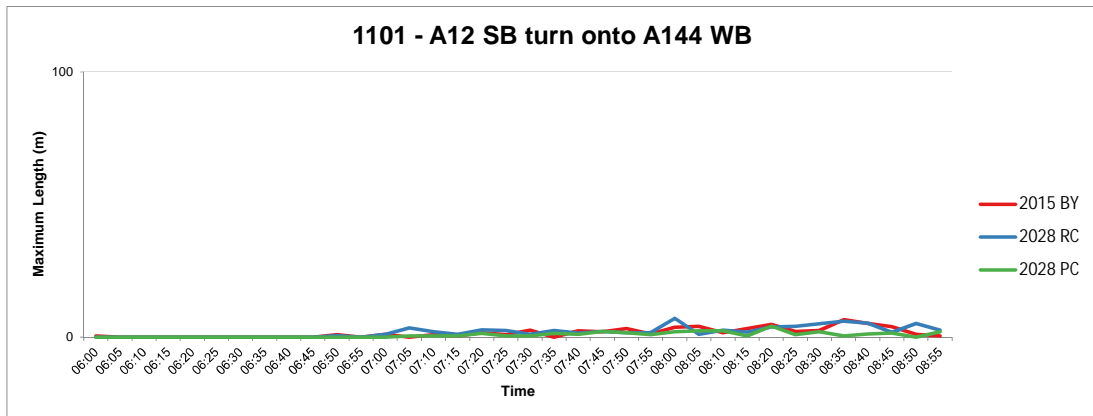


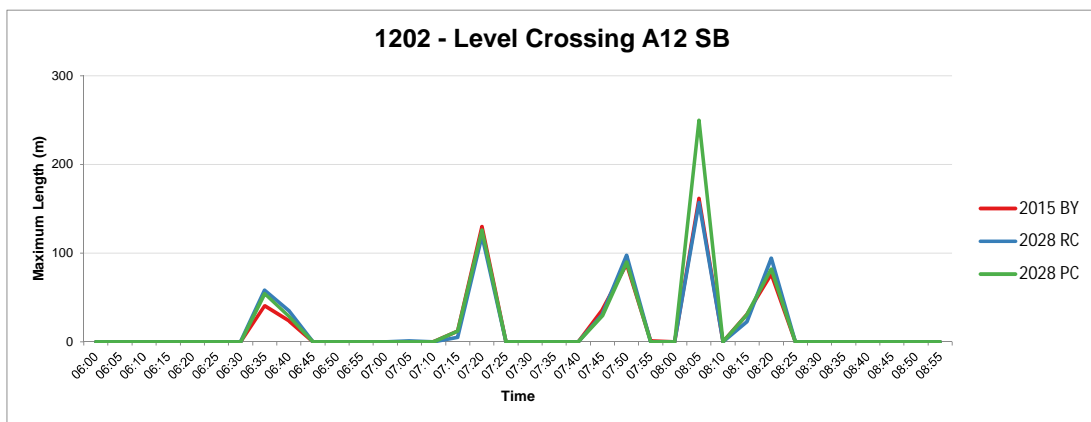
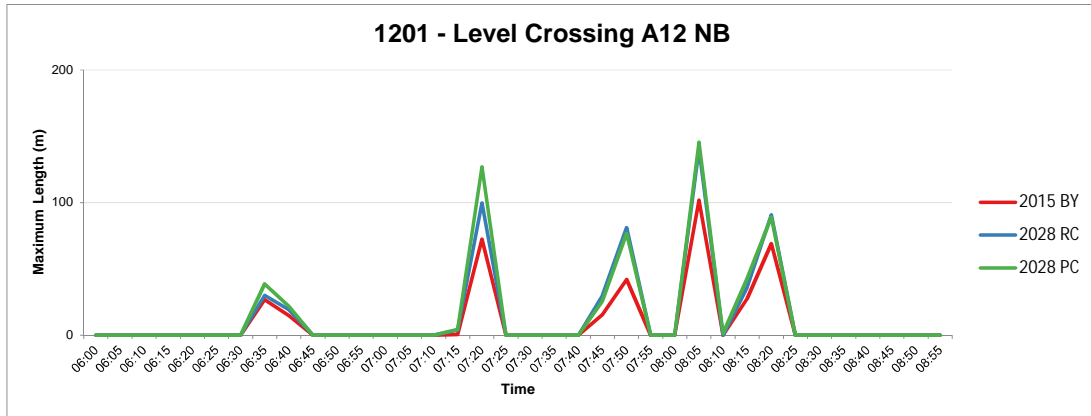


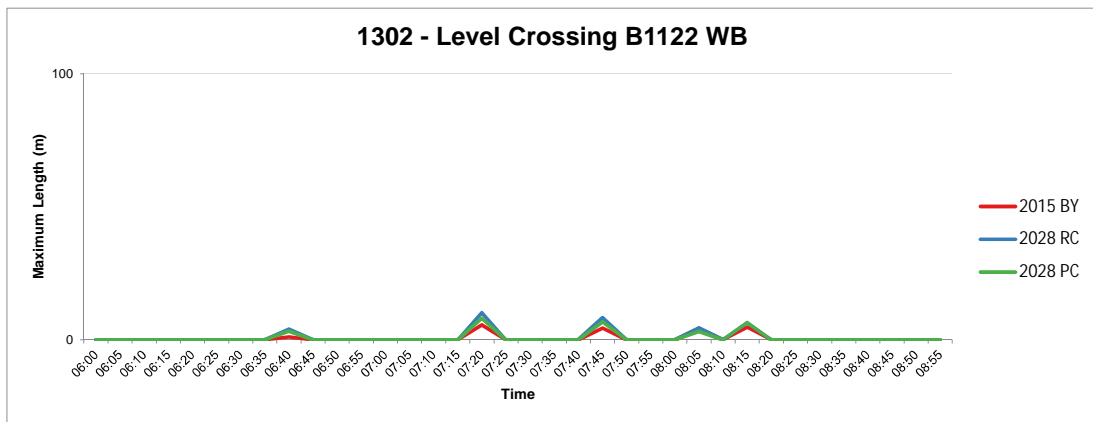
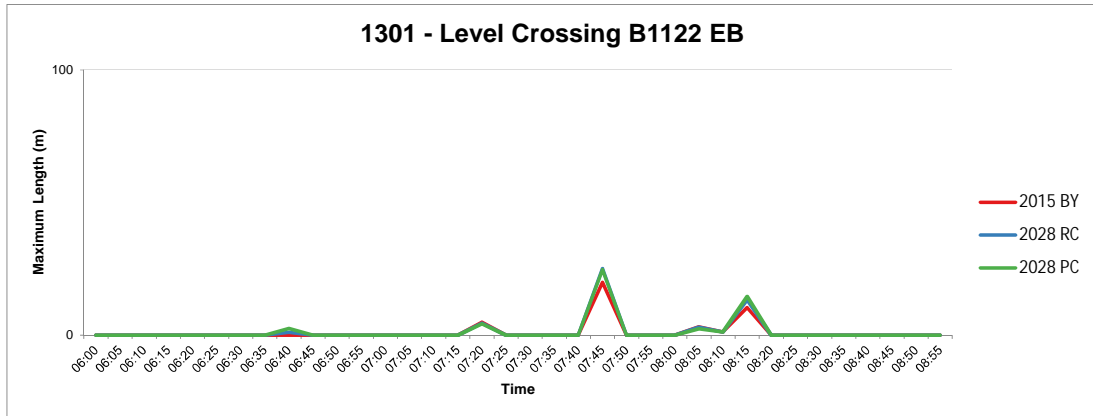


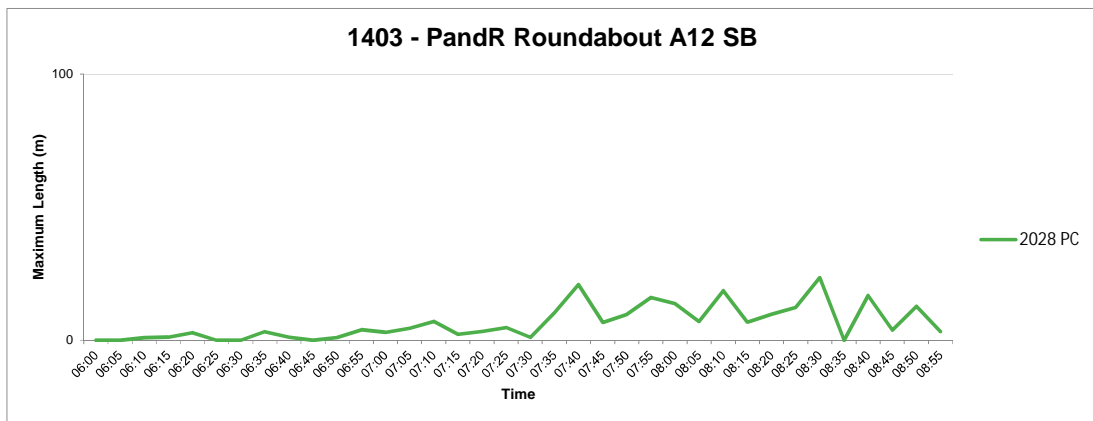
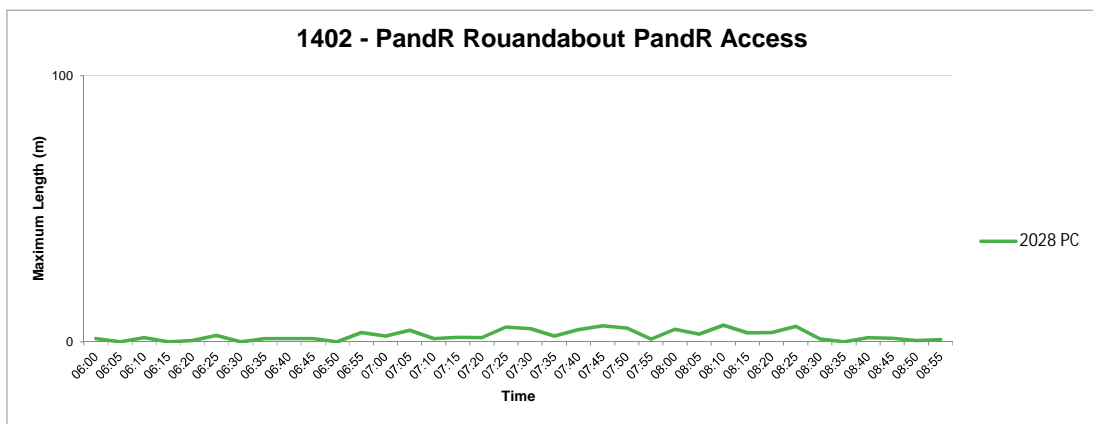
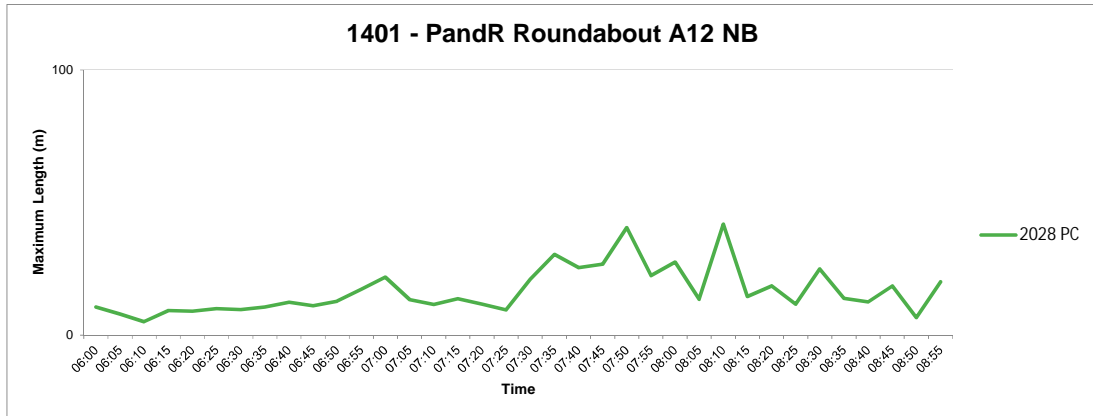








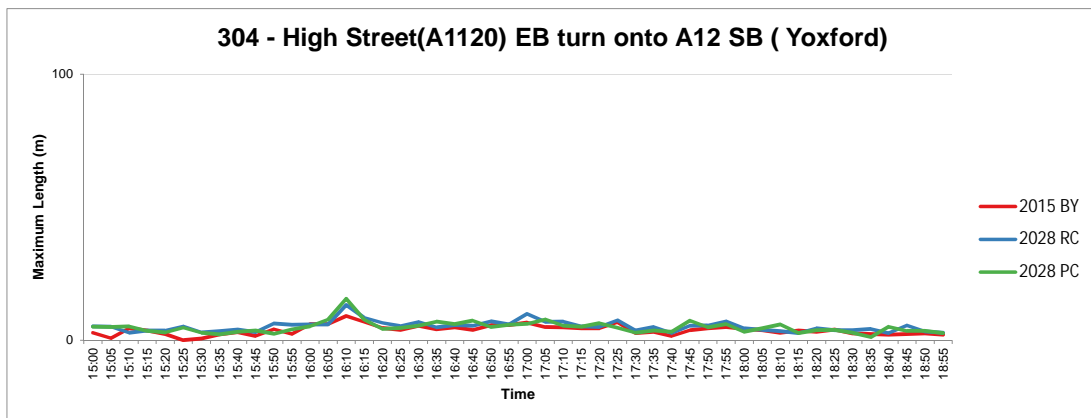
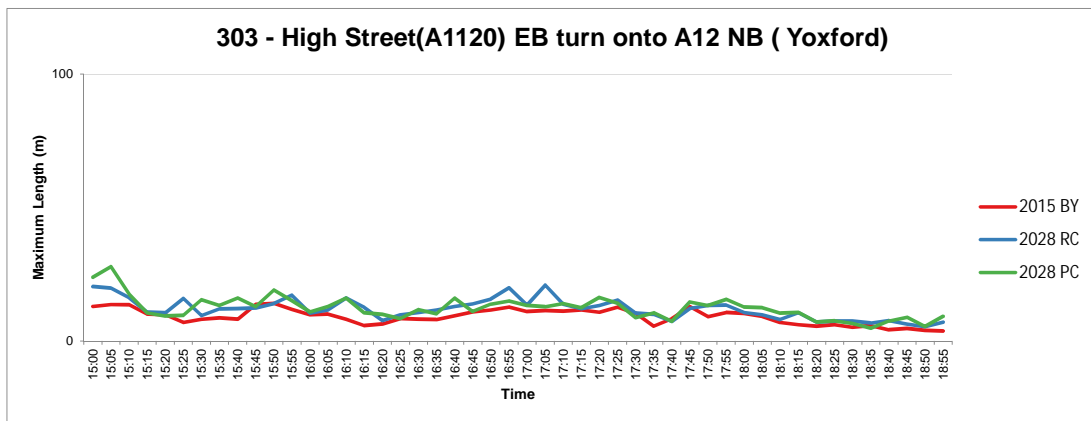
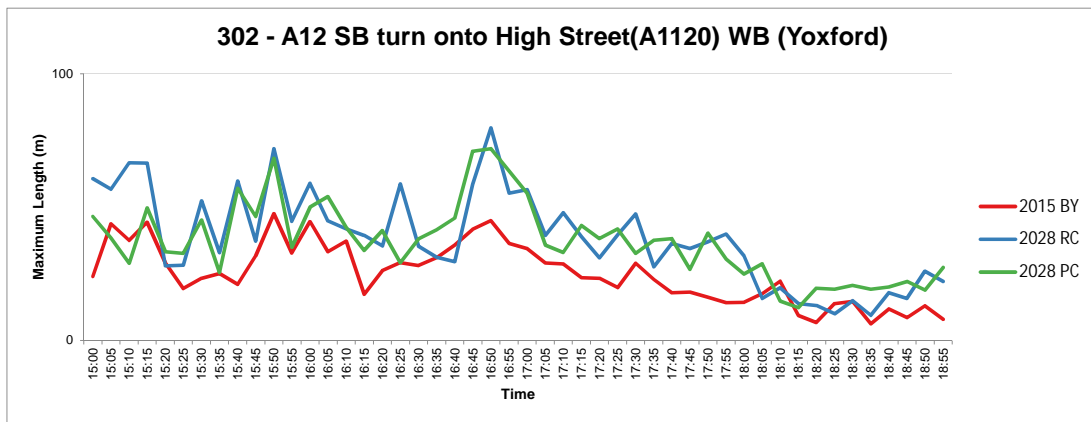
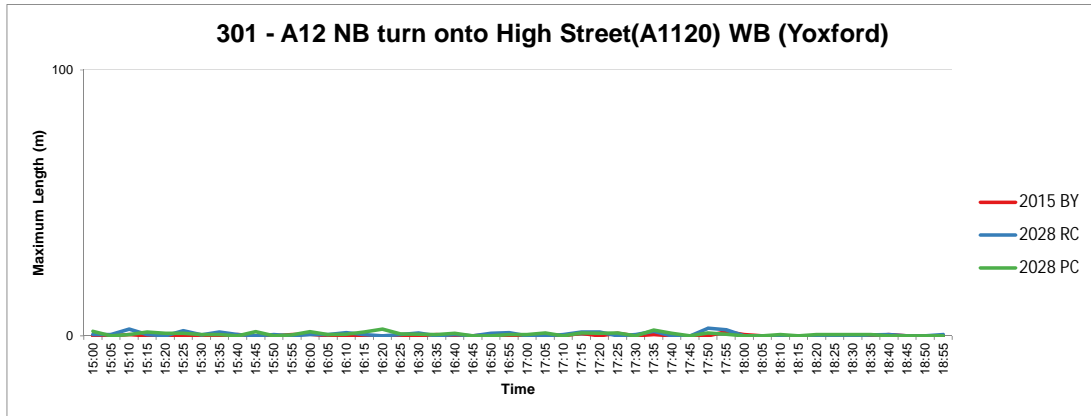


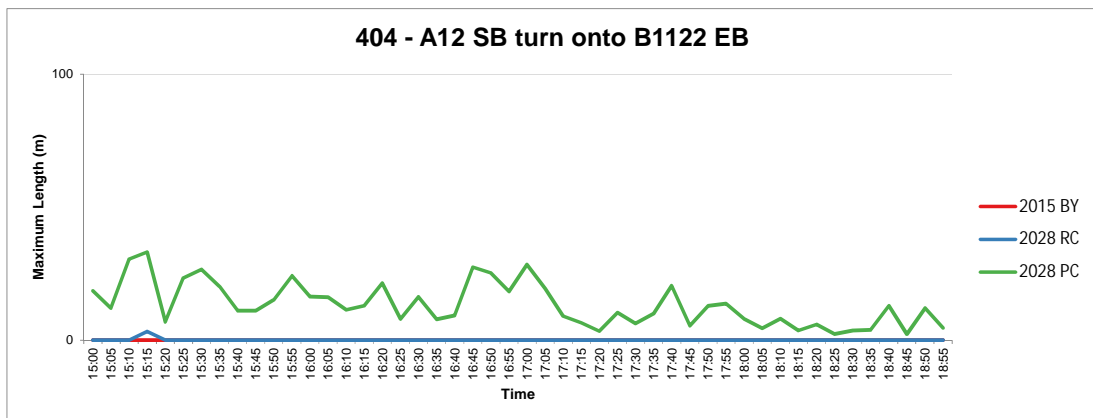
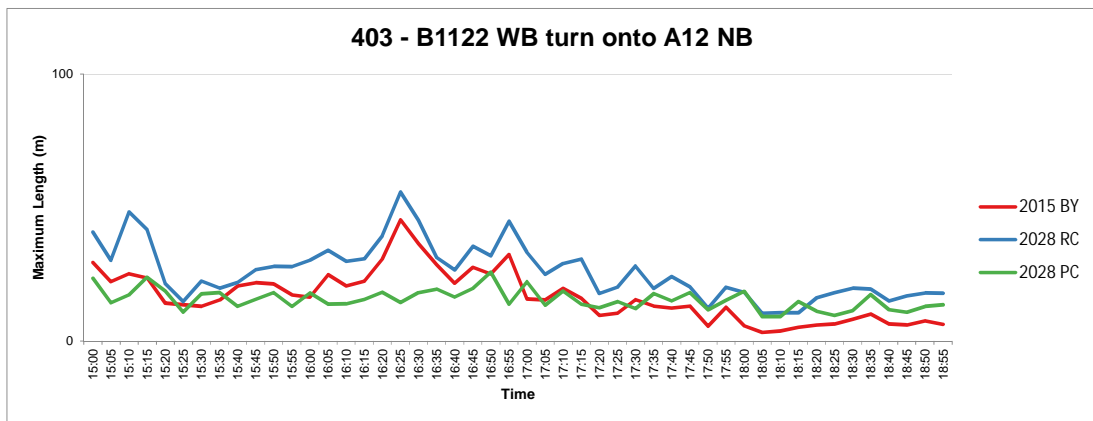
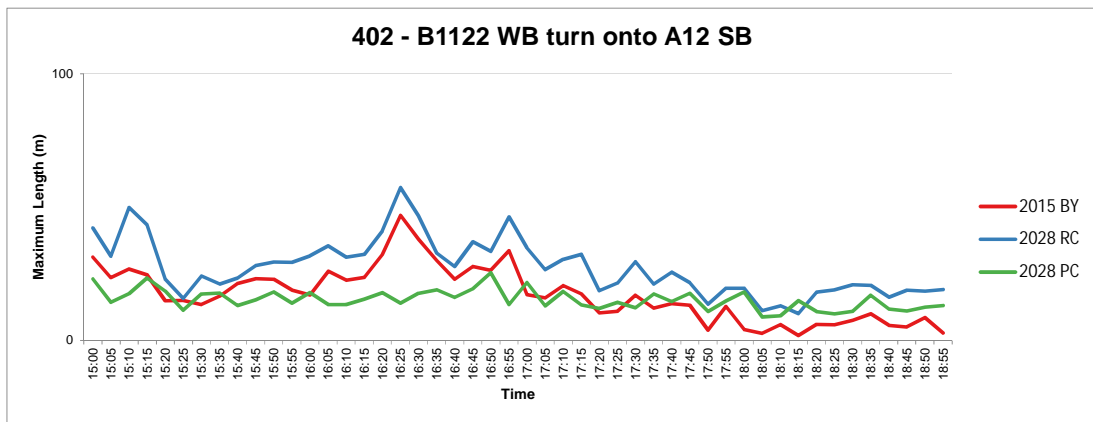
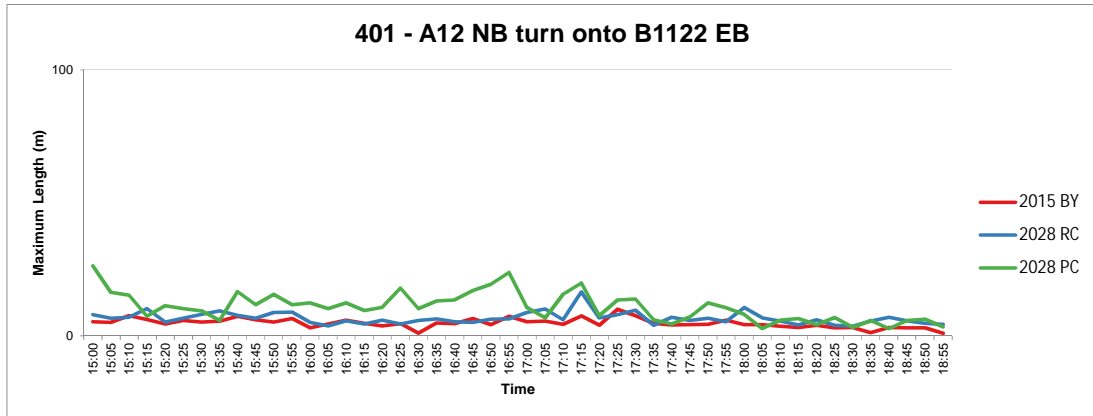


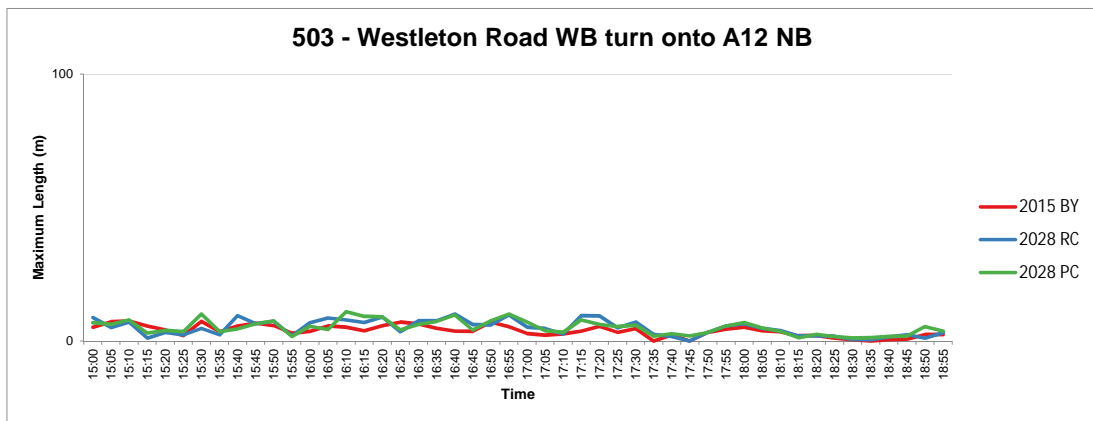
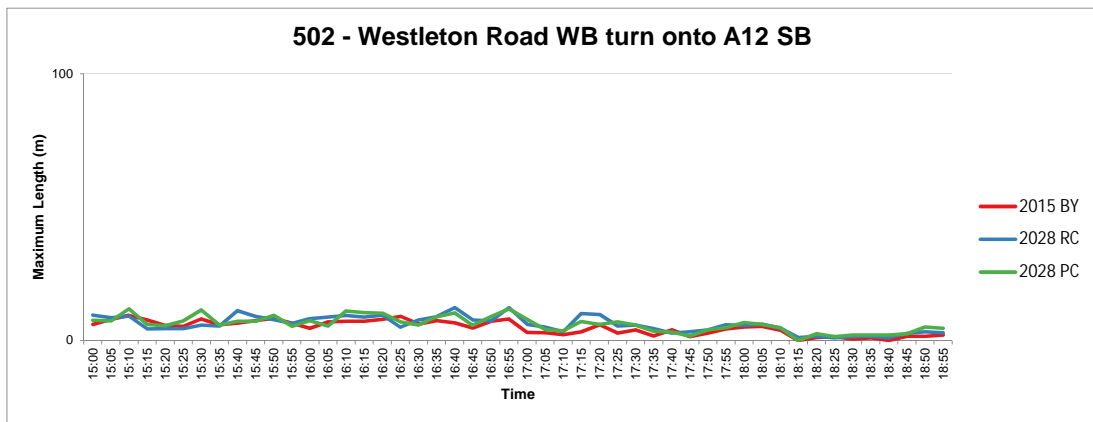
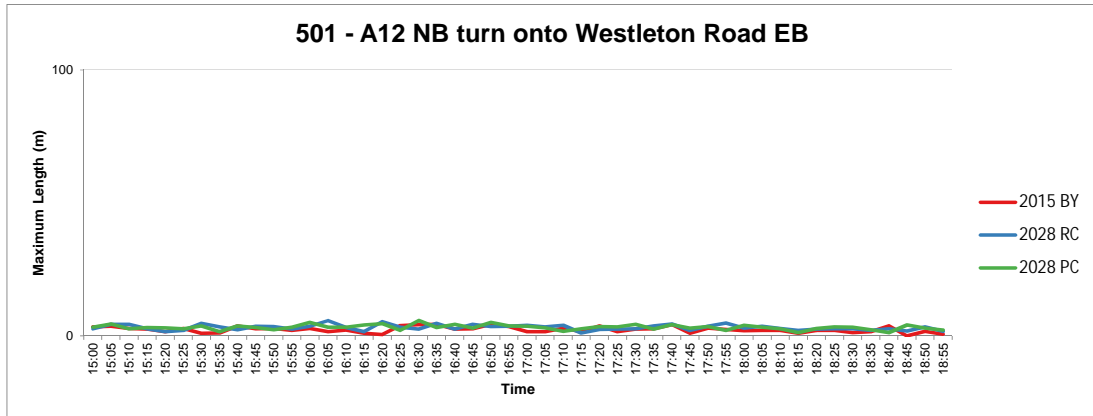


Queue Comparison
PM
Maximum Length Summary
Maximum Length (m)

	2015 BY	2028 RC	2028 PC
301 - A12 NB turn onto High Stre	1.6	2.9	2.5
302 - A12 SB turn onto High Stre	47.6	79.7	72.0
303 - High Street(A1120) EB turn	14.1	21.0	27.9
304 - High Street(A1120) EB turn	9.1	13.3	15.6
401 - A12 NB turn onto B1122 EB	10.0	16.5	26.3
402 - B1122 WB turn onto A12 S	46.9	57.3	25.4
403 - B1122 WB turn onto A12 N	45.4	55.8	25.8
404 - A12 SB turn onto B1122 EB	0.0	3.3	33.1
501 - A12 NB turn onto Westleto	4.4	5.7	5.8
502 - Westleton Road WB turn o	9.4	12.3	11.9
503 - Westleton Road WB turn o	7.5	10.1	11.0
601 - Darsham Petrol Station turn	11.5	17.7	20.0
602 - Darsham Petrol Station turn	10.7	18.8	20.6
701 - A12 NB turn in to Darsham	38.9	49.3	75.2
801 - A12 NB turn on to The St E	12.1	18.4	33.7
802 - The St WB turn onto A12 S	9.2	13.5	11.5
803 - The St WB turn onto A12 N	11.9	14.0	12.7
901 - A12 SB turn onto Willow M	6.4	14.2	
902 - Willow Marsh Lane EB turn	2.6	3.9	
903 - Willow Marsh Lane EB turn	3.8	4.9	
1001 - A12 NB turn onto Lymball	12.6	14.7	16.1
1002 - Lymballs Lane WB turn o	5.6	2.8	2.2
1003 - Lymballs Lane WB turn o	4.3	4.6	3.9
1101 - A12 SB turn onto A144 W	8.4	5.4	1.4
1102 - A144 EB turn onto A12 NB	27.7	36.0	53.7
1103 - A144 EB turn onto A12 SB	30.7	46.2	57.7
1104 - A12 SB turn onto A144 W B first queue			5.9
1201 - Level Crossing A12 NB	155.0	171.3	169.3
1202 - Level Crossing A12 SB	109.1	122.8	133.7
1301 - Level Crossing B1122 EB	8.9	7.9	12.2
1302 - Level Crossing B1122 WB	15.6	17.5	20.8
1401 - PandR Roundabout A12 NB			36.8
1402 - PandR Roundabout PandR Access			17.7
1403 - PandR Roundabout A12 SB			23.7
904 - PandR Access SB turn onto Willow Marsh Lane V			3.8
905 - Willow Marsh Lane EB turn onto PandR Access N			3.3
906 - Willow Marsh Lane EB turn onto PandR Access S			0.0

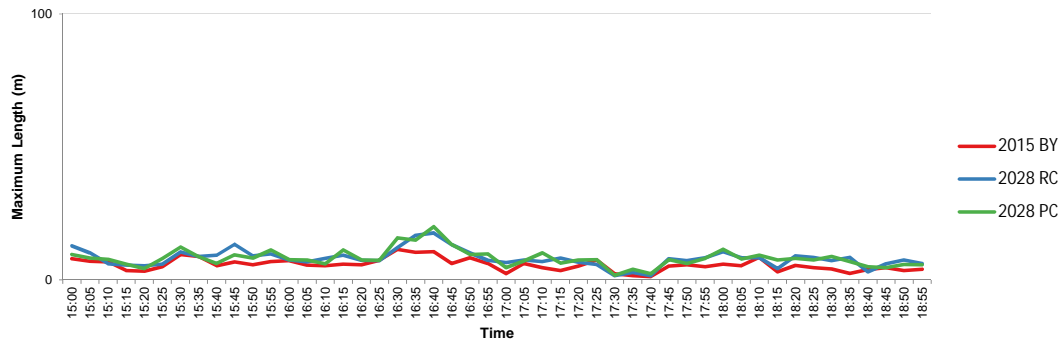




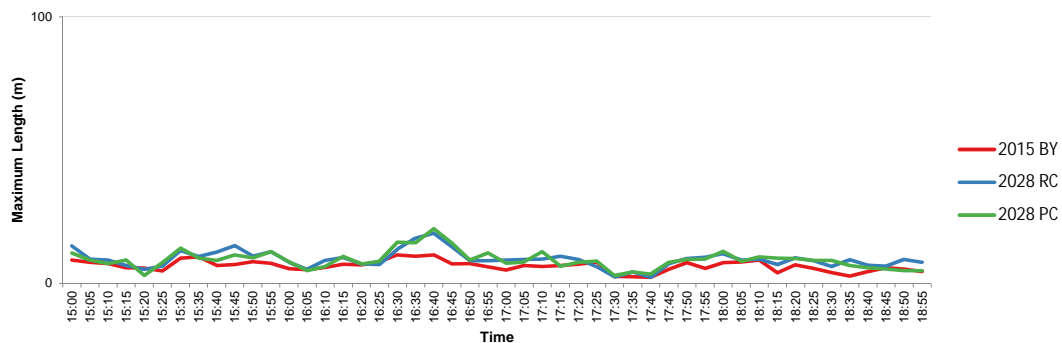




601 - Darsham Petrol Station turn onto A12 SB

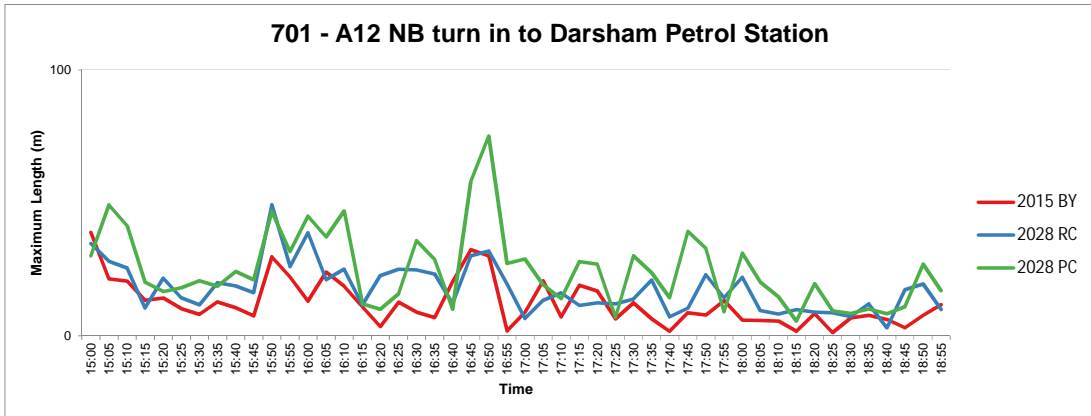


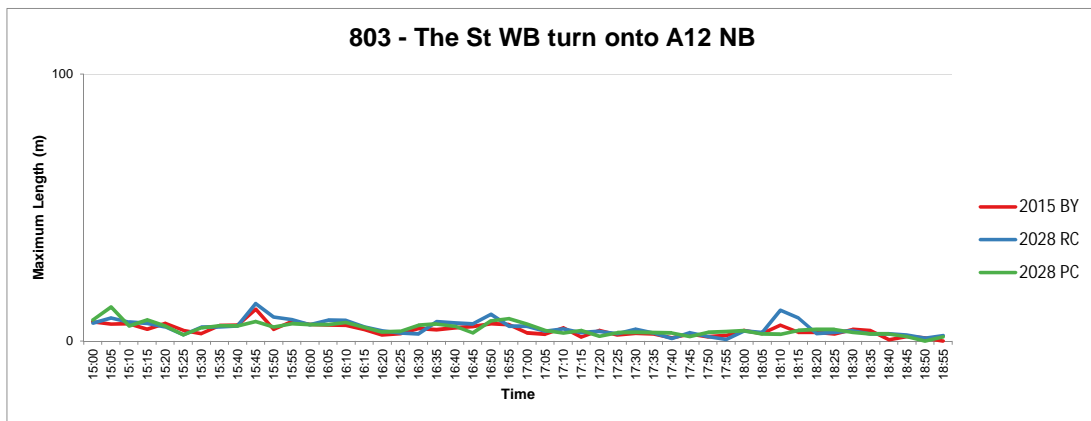
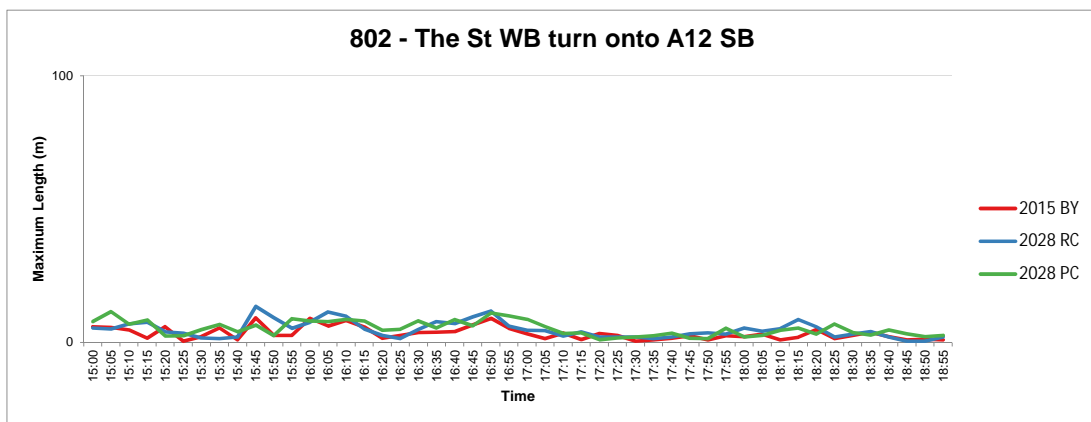
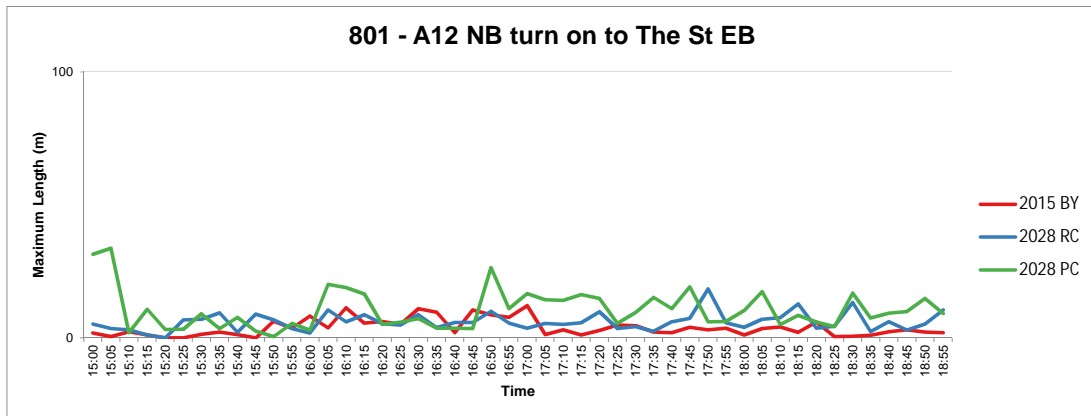
602 - Darsham Petrol Station turn onto A12 NB

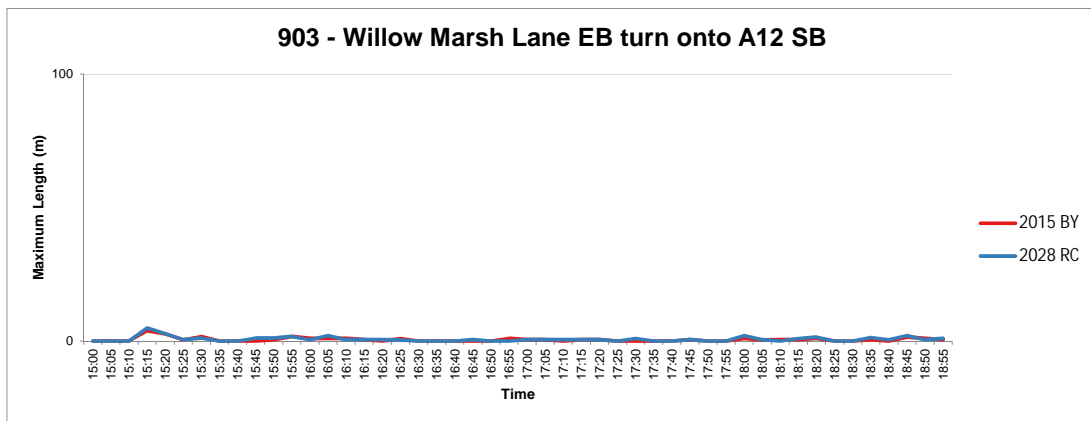
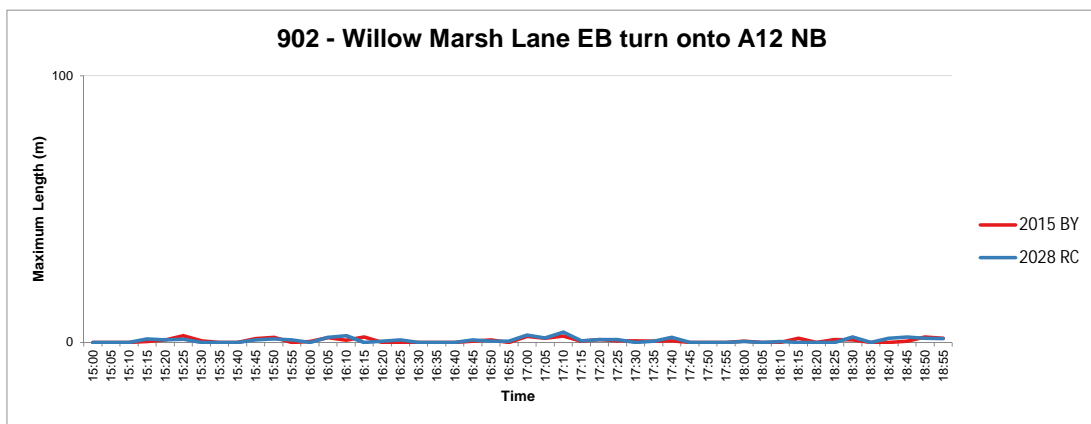
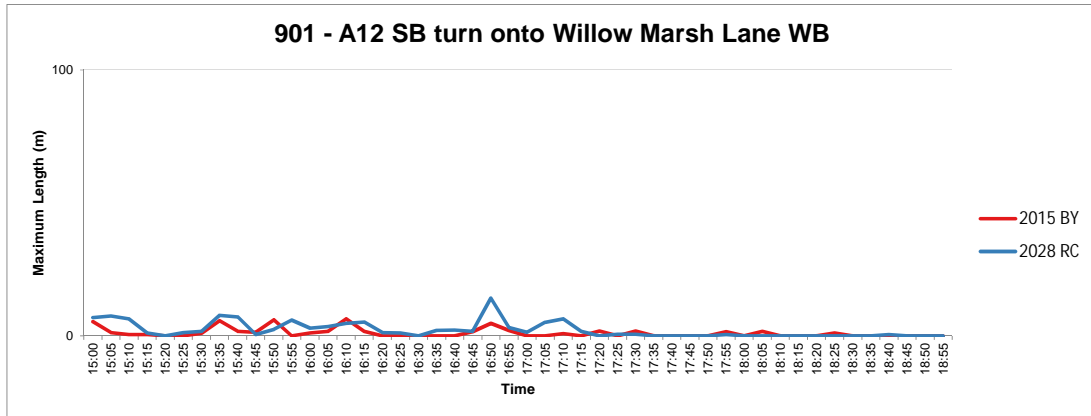


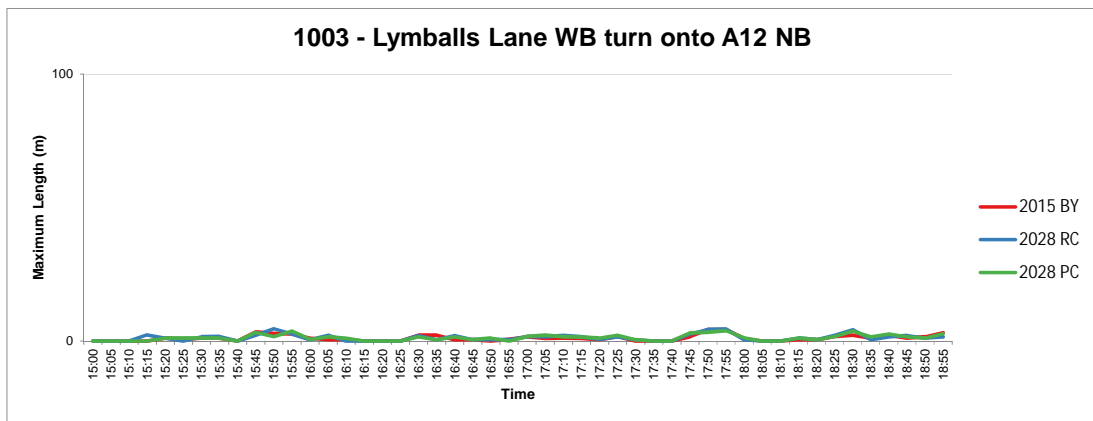
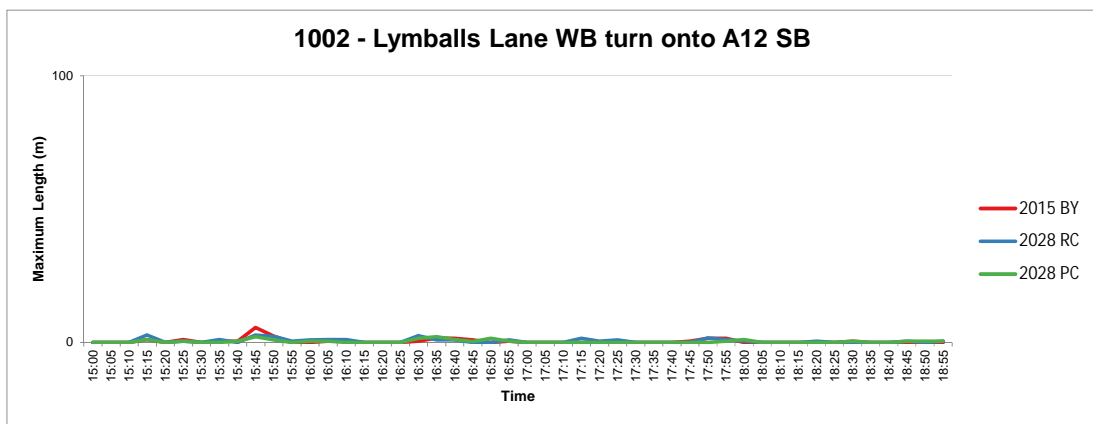
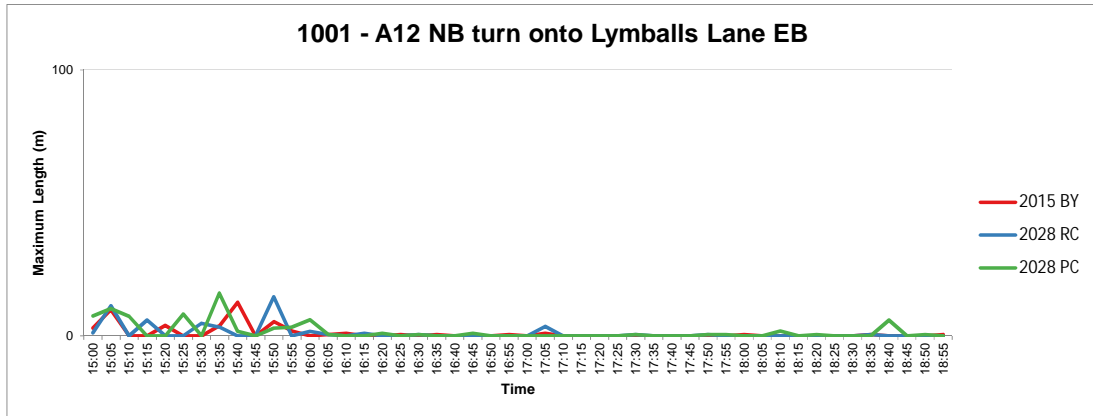


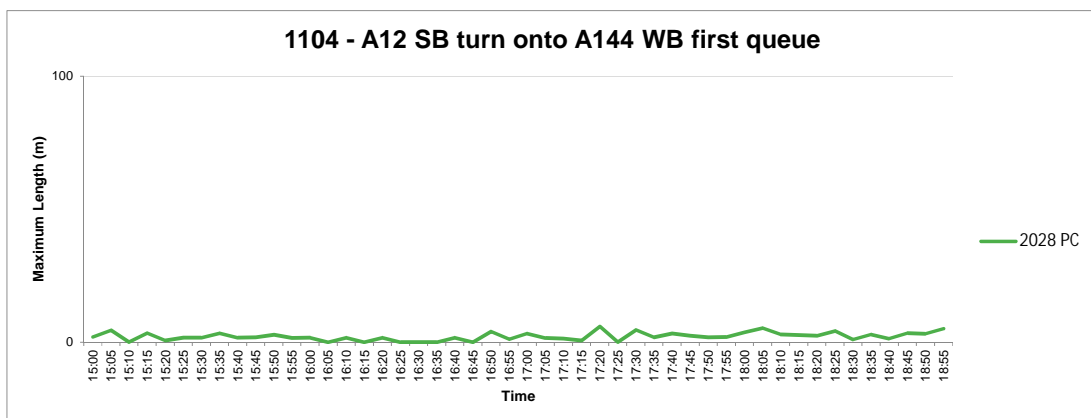
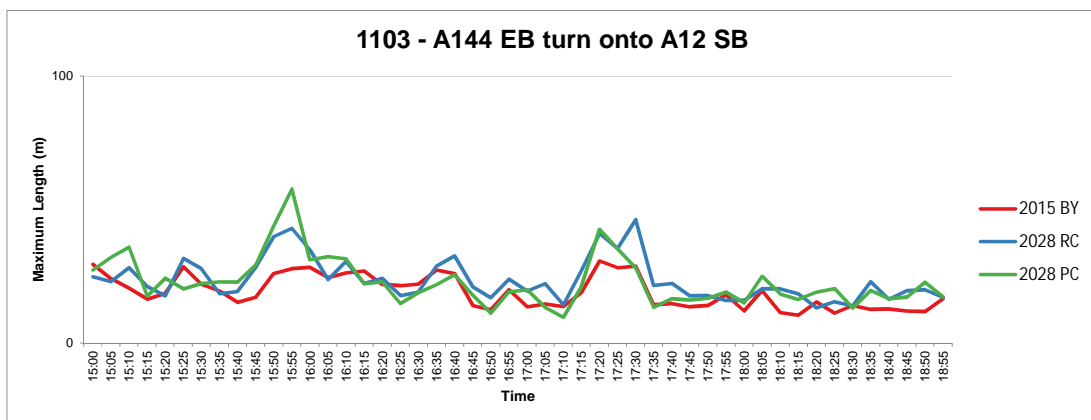
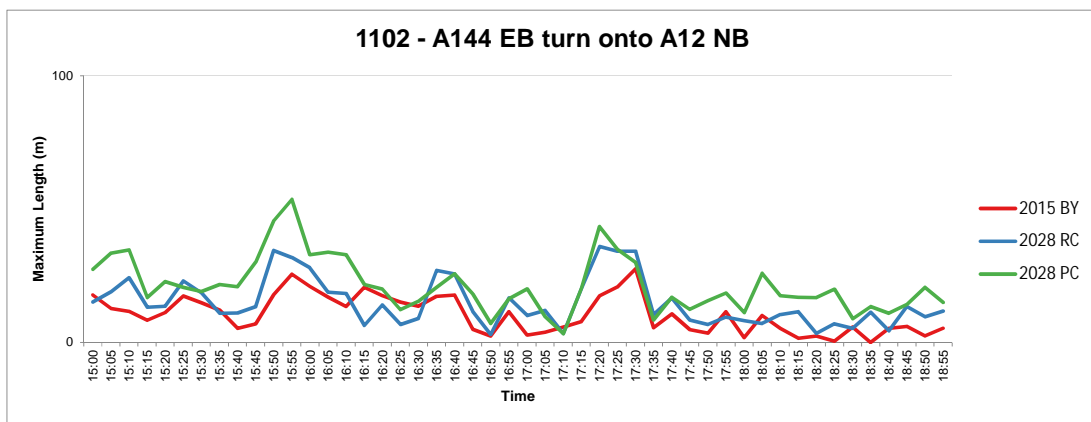
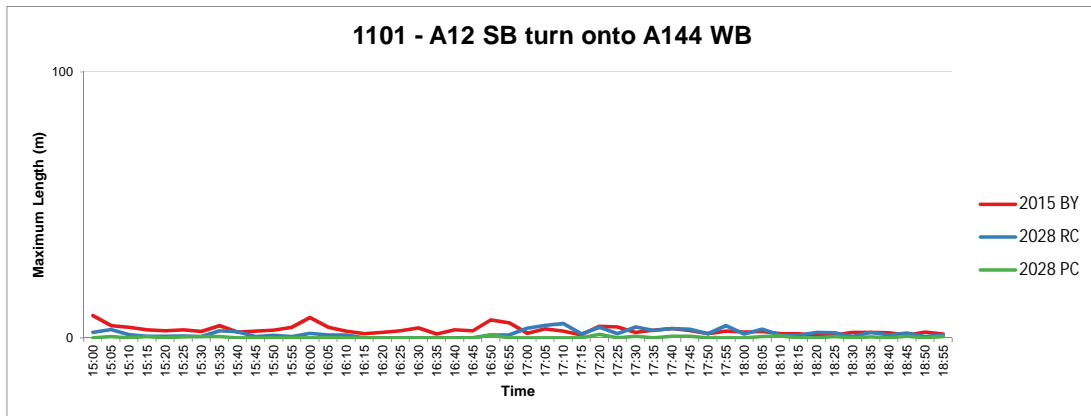
701 - A12 NB turn in to Darsham Petrol Station

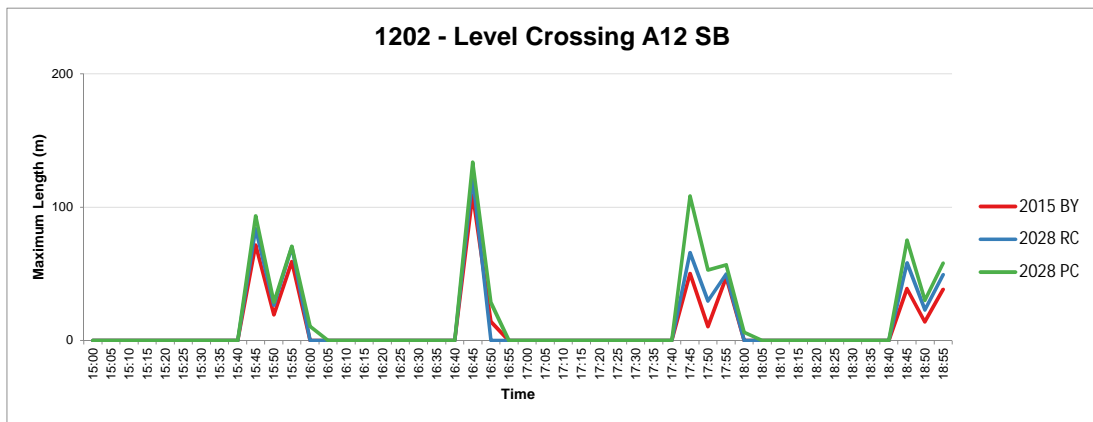
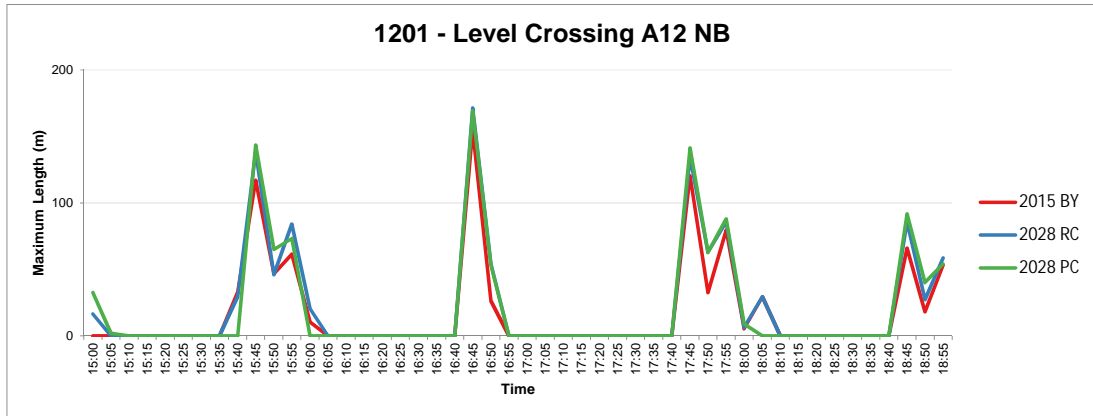


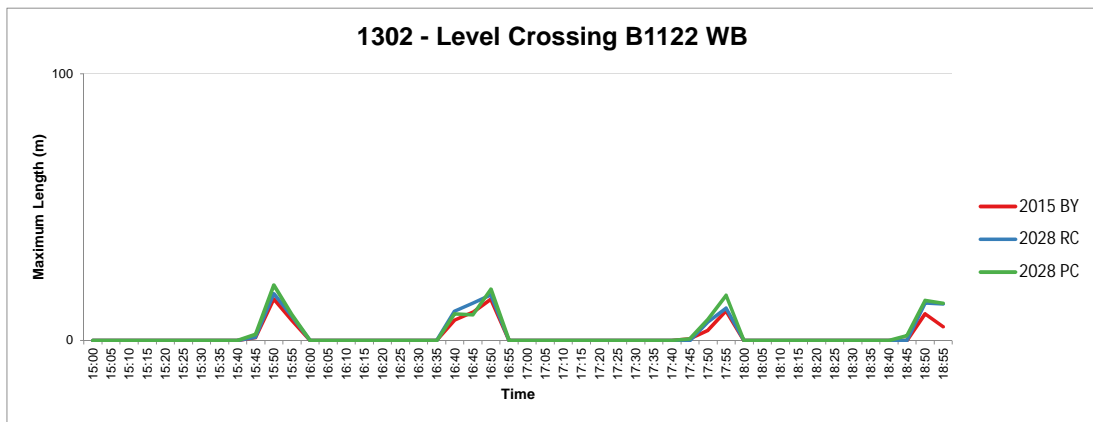
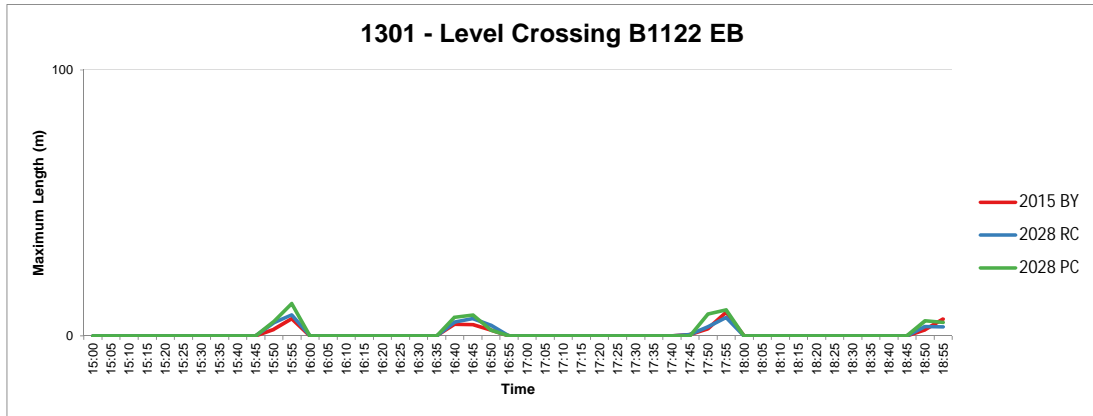


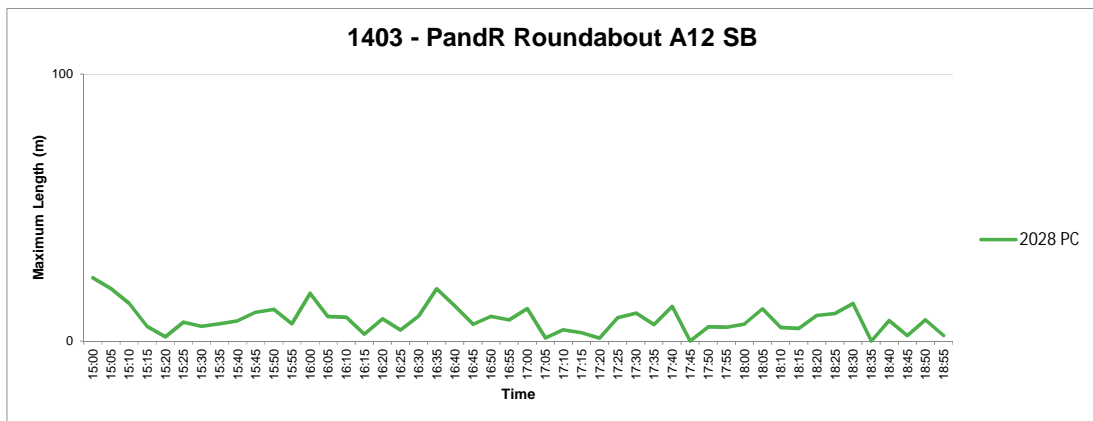
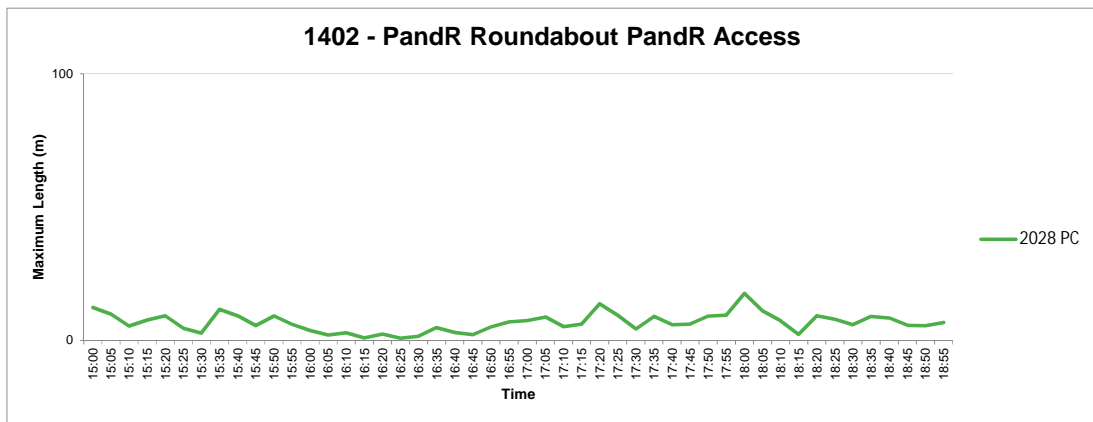
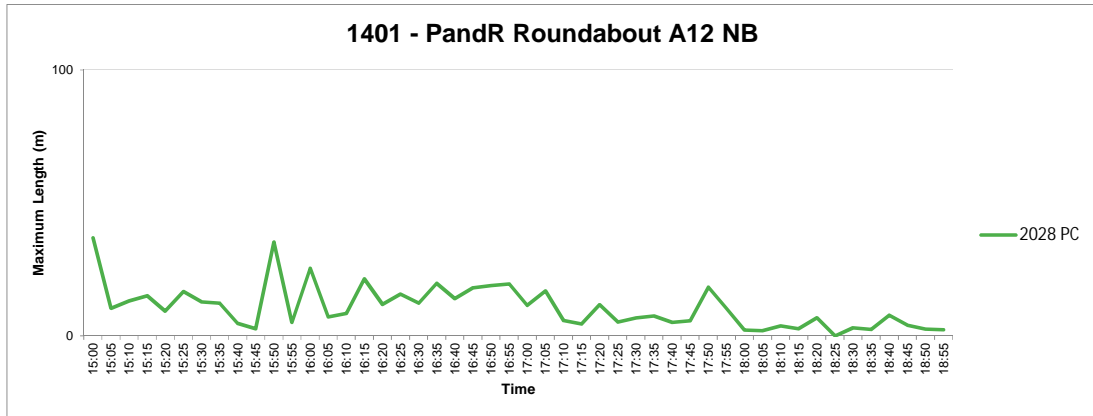






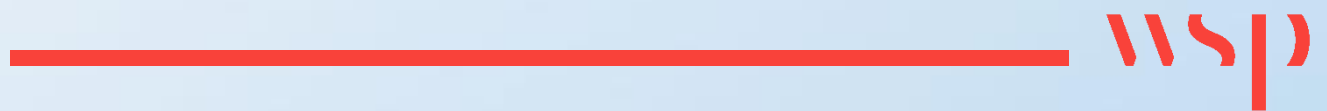






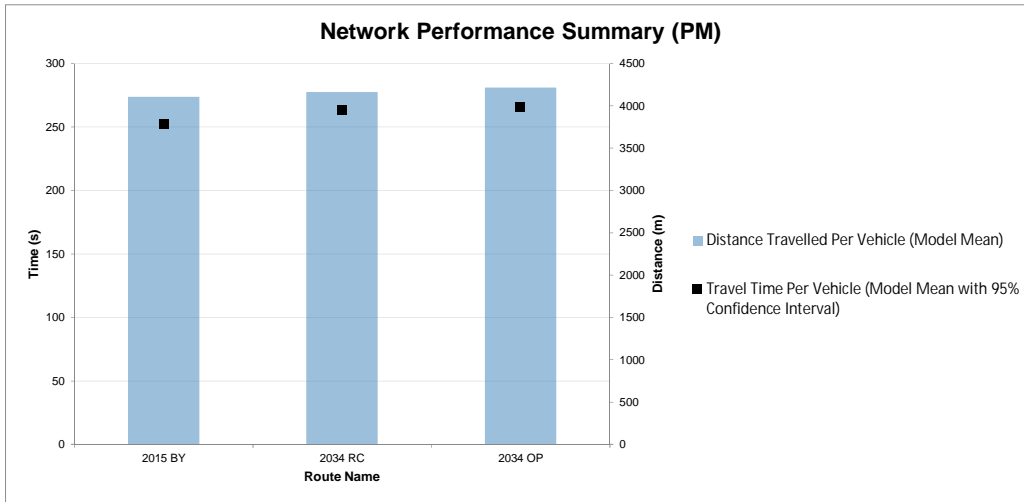
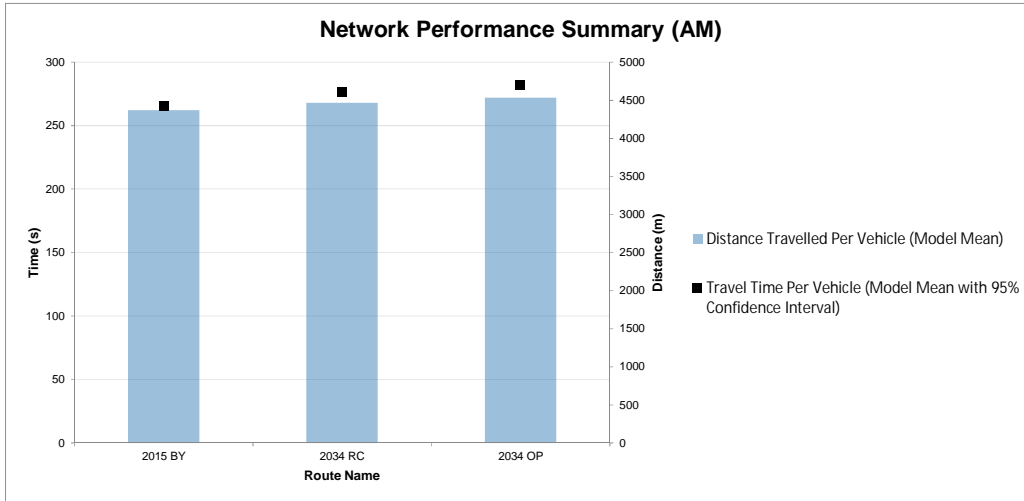
Appendix E

2034 FORECAST MODEL RESULTS



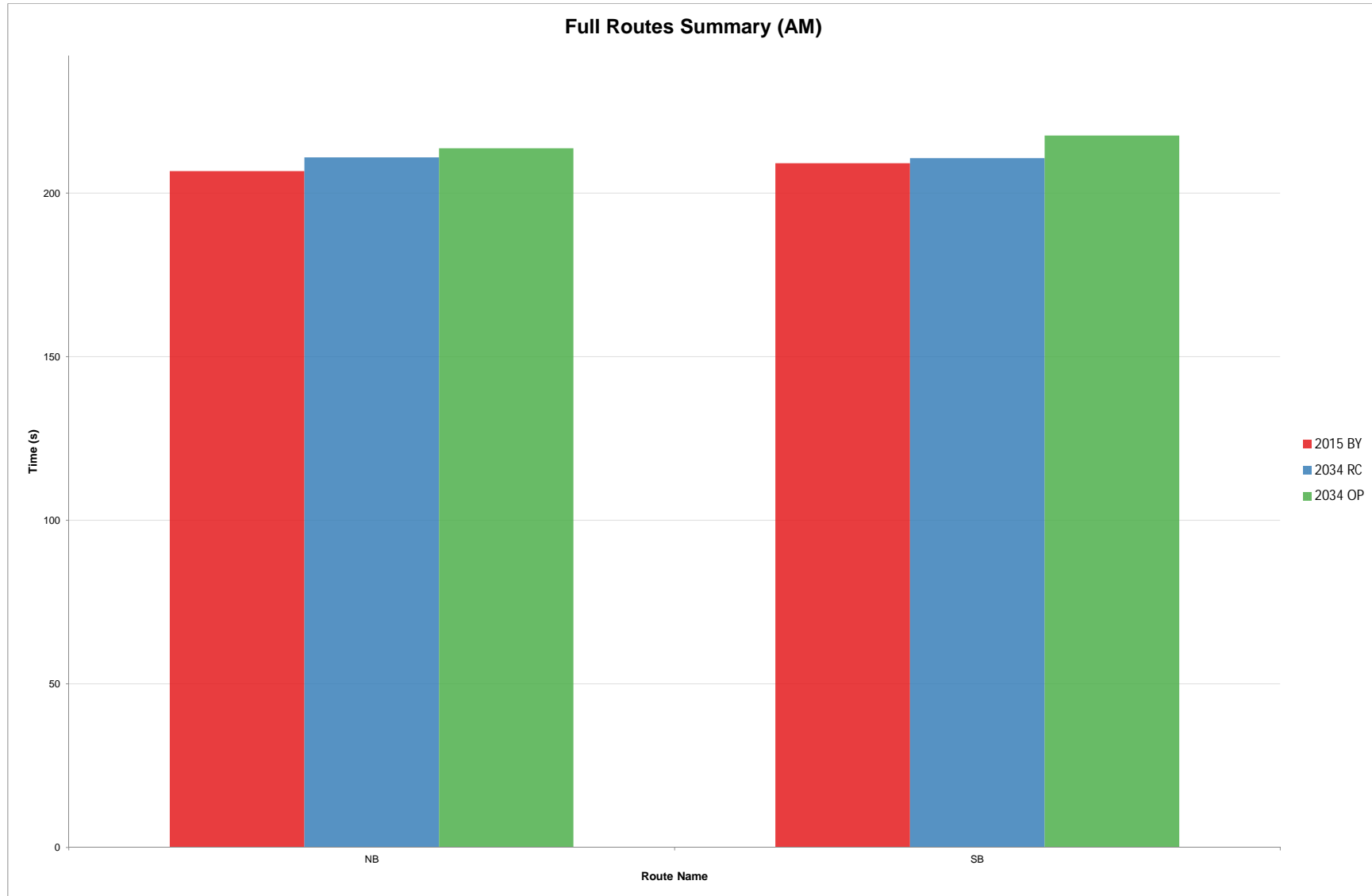


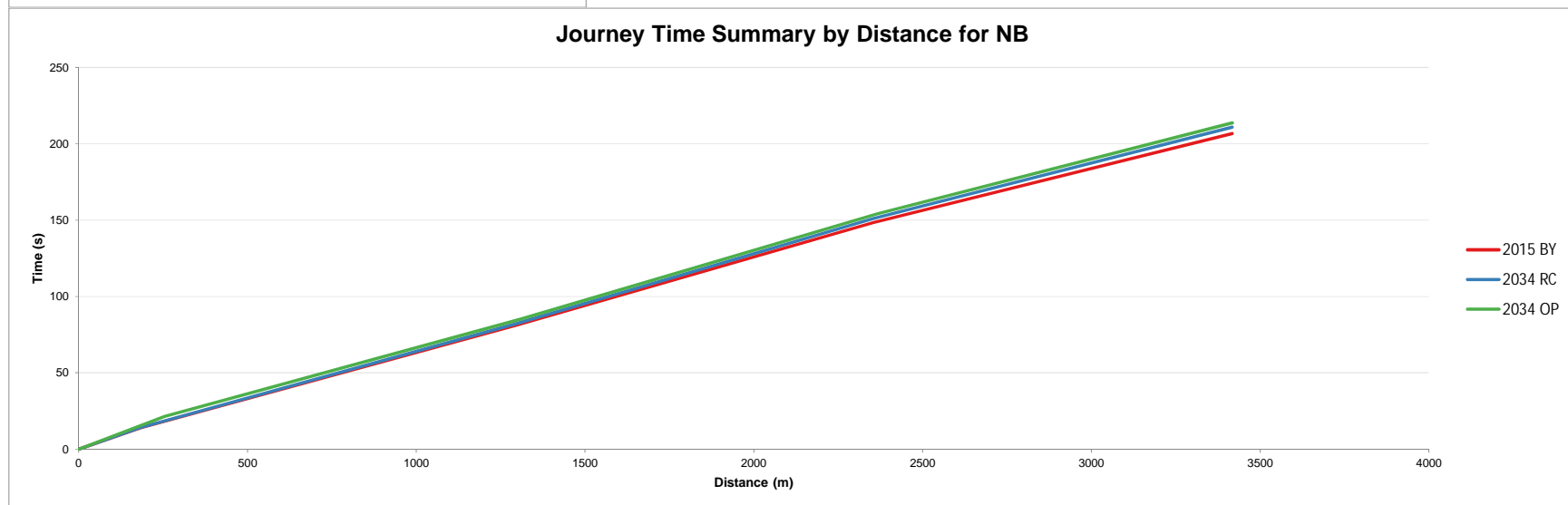
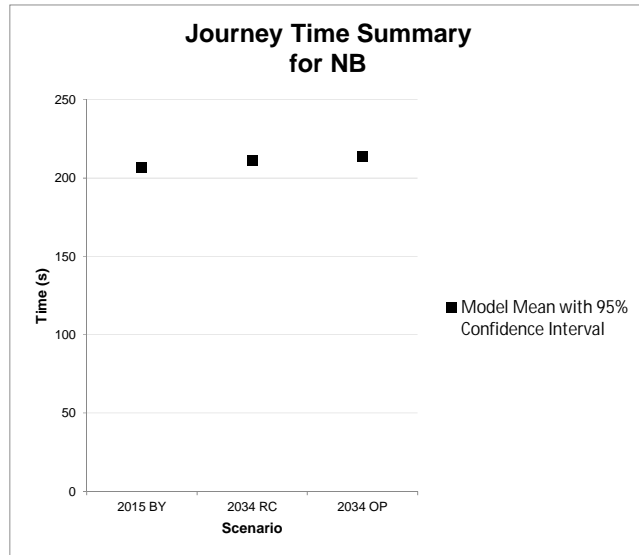
	2015 BY (AM)	2034 RC (AM)	2034 OP (AM)	2015 BY (PM)	2034 RC (PM)	2034 OP (PM)
Total Time Taken (s)	827774	1086481	1087456	1472571	1895276	1862503
Total Distance (m)	13622319	17579056	17500839	23940671	29992077	29603676
Total Vehicles	3118	3936	3862	5831	7207	7021
Total Delay (s)	82029	121481	125880	153475	237887	224780
Average Time (s) / Vehicle	266	276	282	253	263	265
Average Time (s) / Mile	98	99	100	99	102	101
Average Distance (m) / Vehicle	4370	4467	4532	4105	4162	4217
Average Speed (mph)	37	36	36	36	35	36
Average Speed (kph)	59	58	58	59	57	57
Average Delay / Vehicle	26	31	33	26	33	32

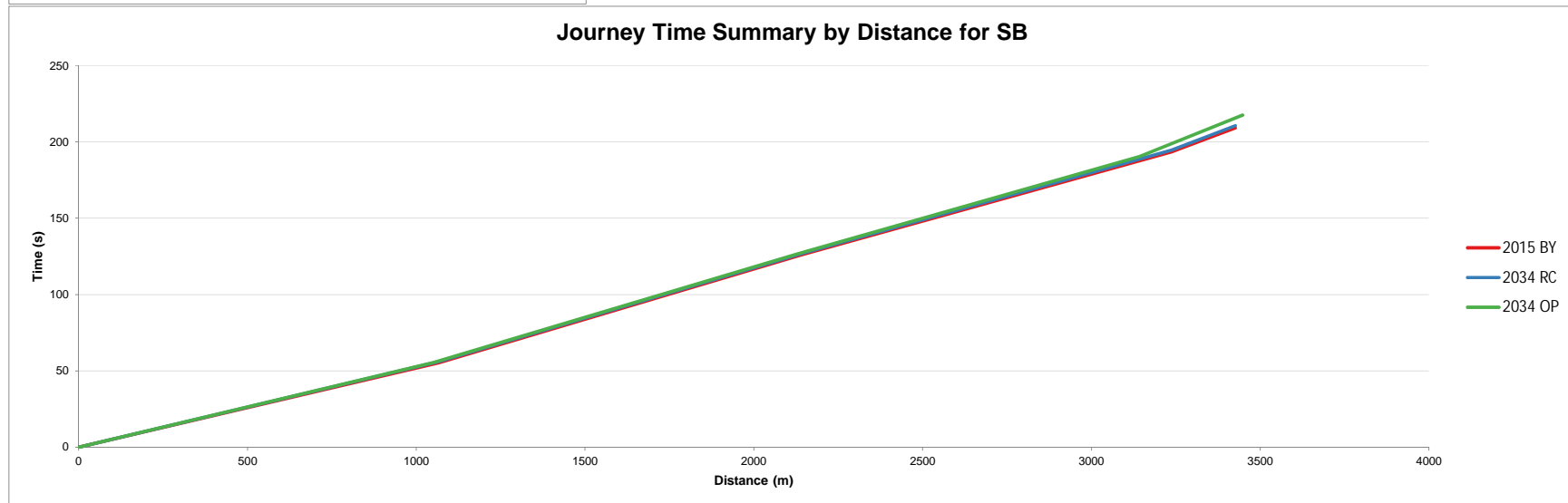
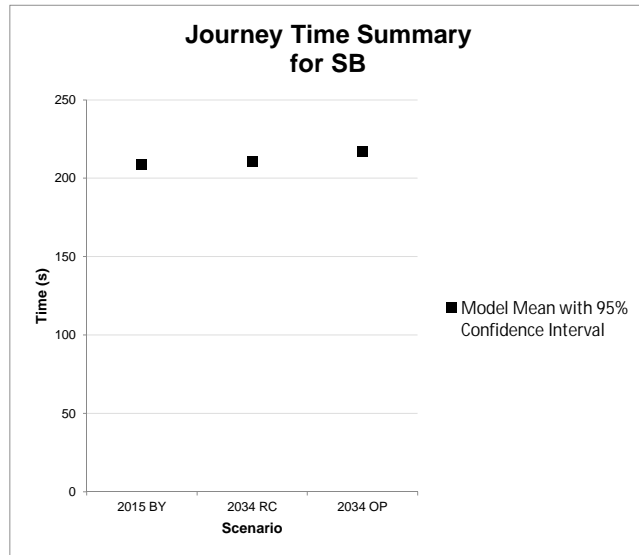




Full Routes Summary (AM)

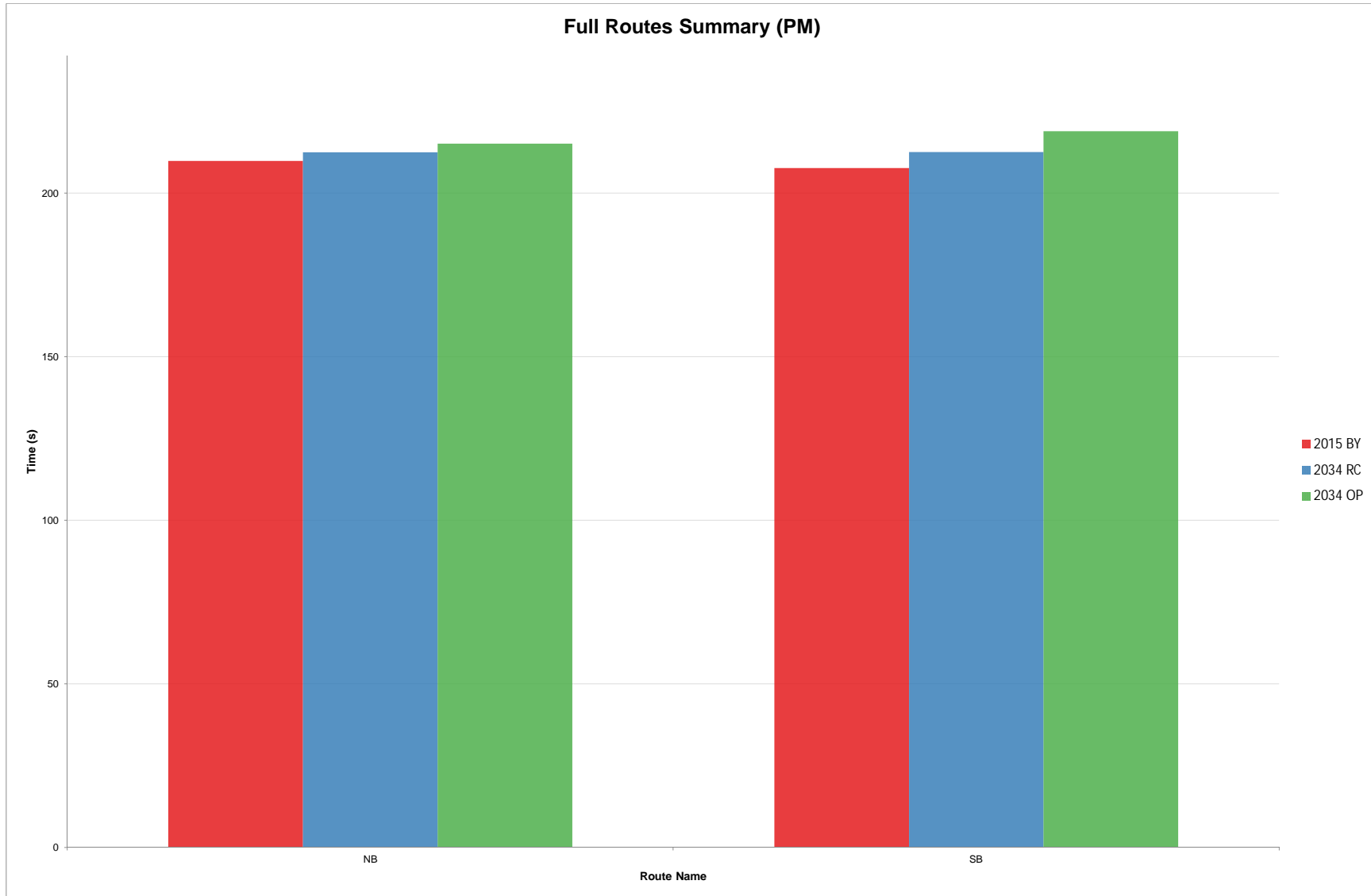






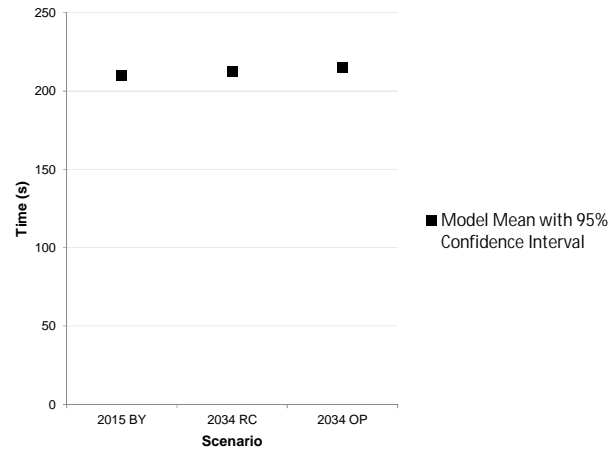


Full Routes Summary (PM)

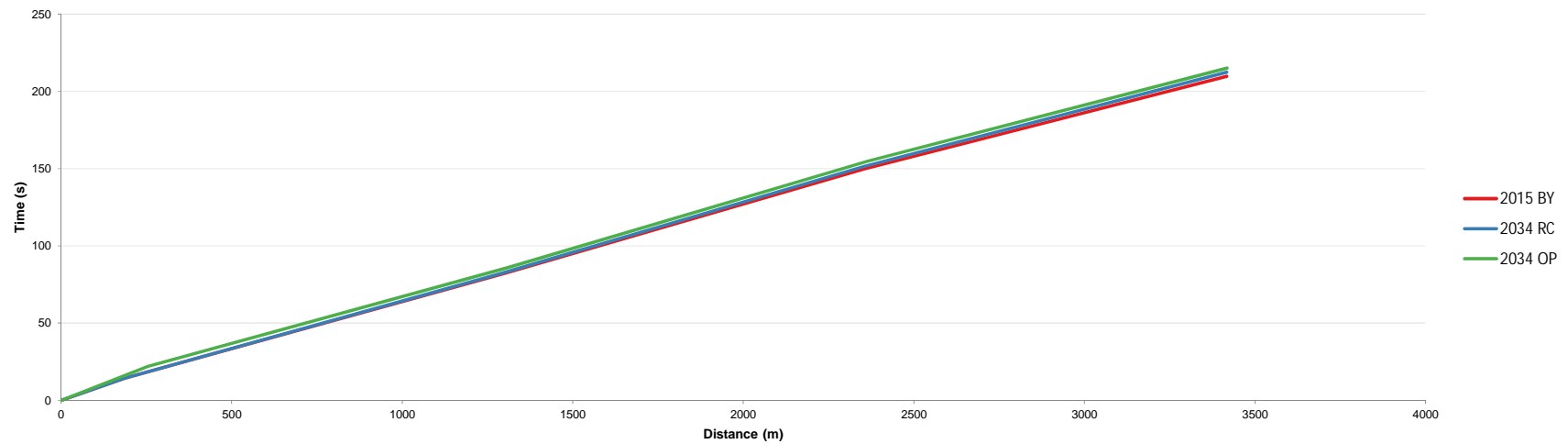


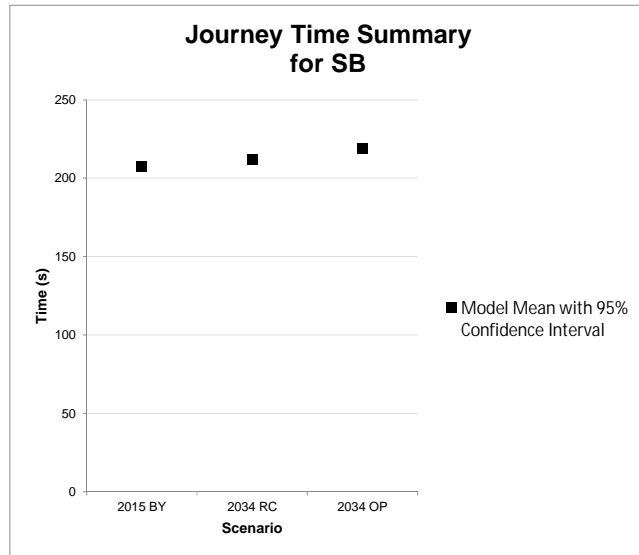


**Journey Time Summary
for NB**



Journey Time Summary by Distance for NB







Journey Time Table
AM
2034

Route Names	2015 BY	2034 RC	2034 OP
1 - Section 1 NB	14	14	21
2 - Section 2 NB	67	68	64
3 - Section 3 NB	67	69	69
4 - Section 4 NB	58	60	59
NB	207	211	214
5 - Section 1 SB	55	56	55
6 - Section 2 SB	71	71	71
7 - Section 3 SB	68	68	64
8 - Section 4 SB	16	16	27
SB	209	211	218



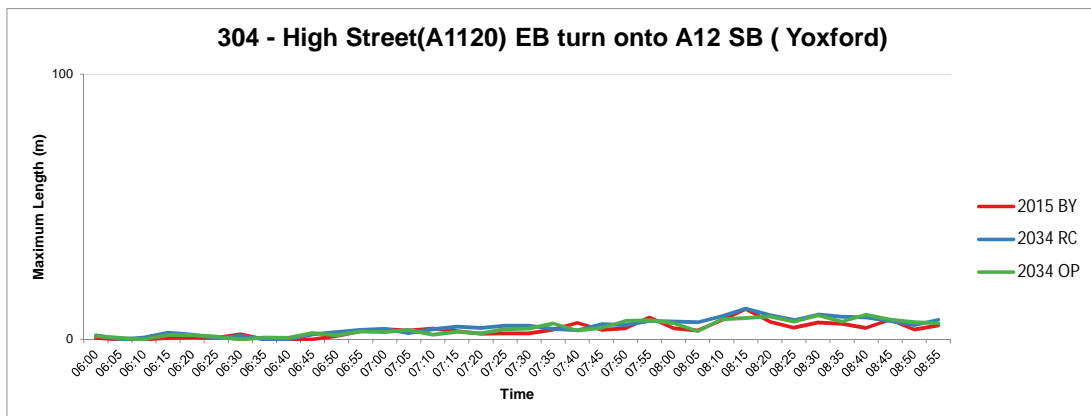
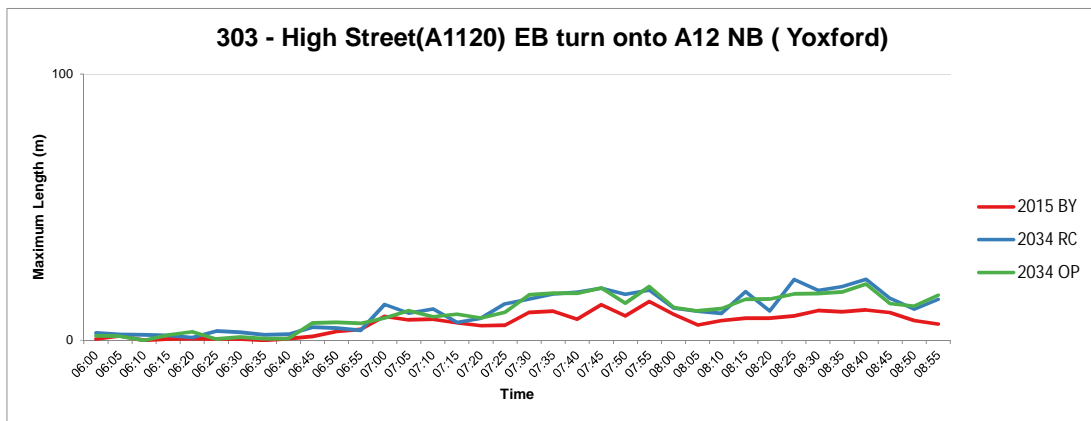
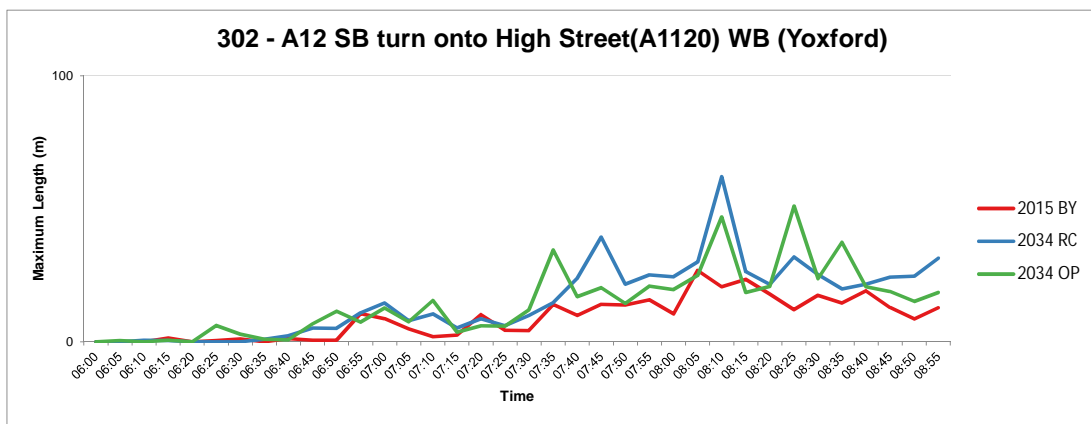
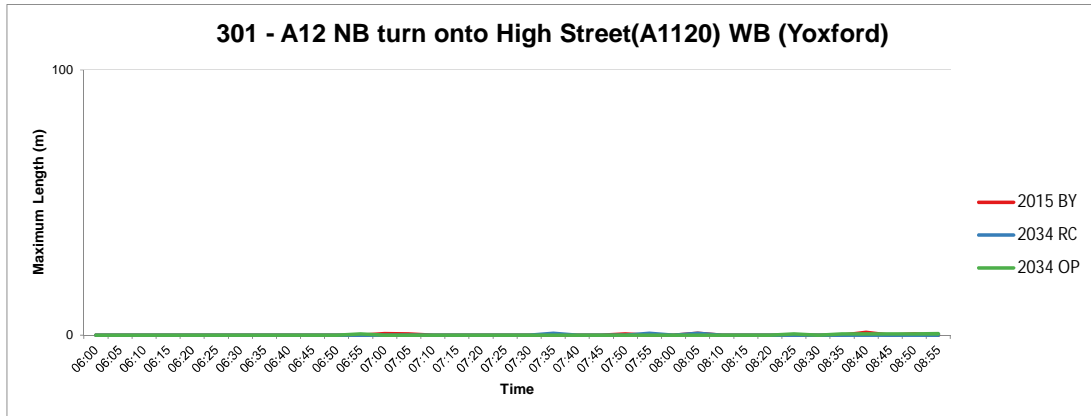
Journey Time Table
PM
2034

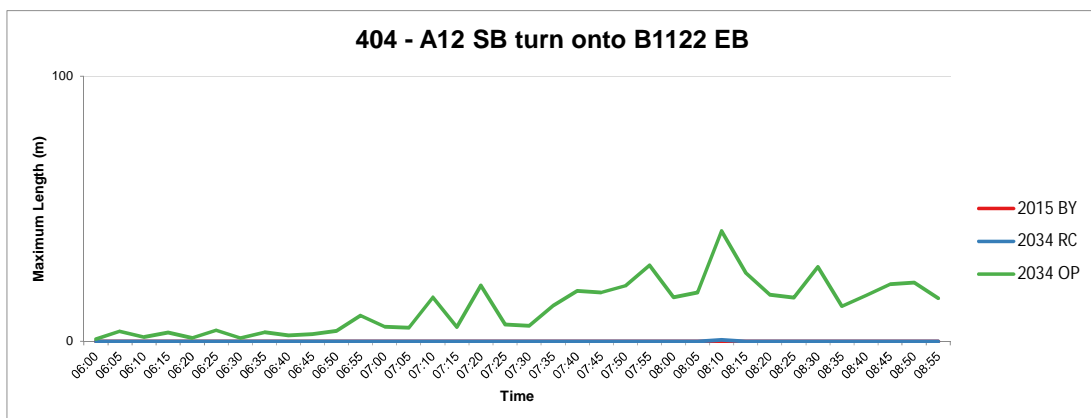
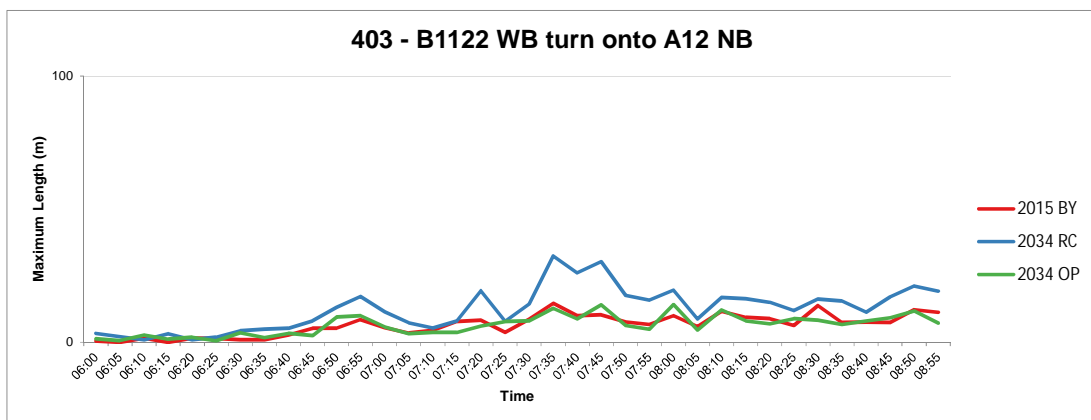
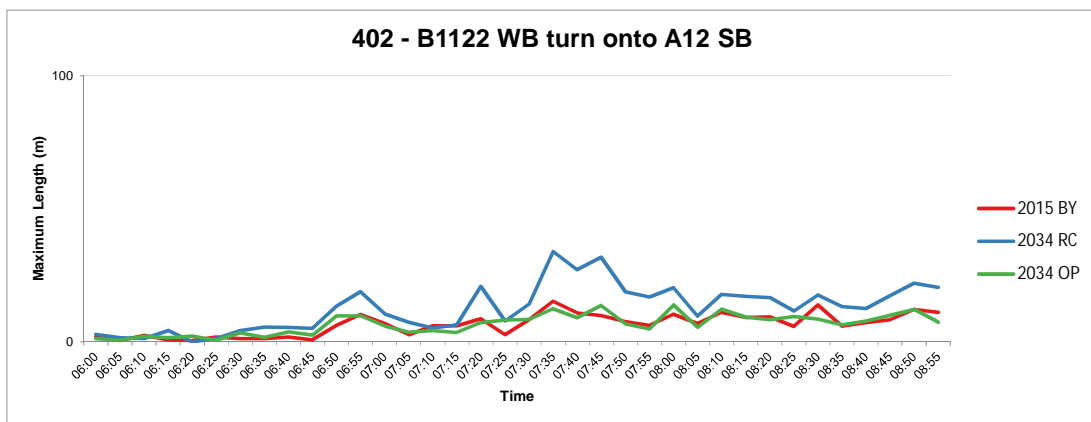
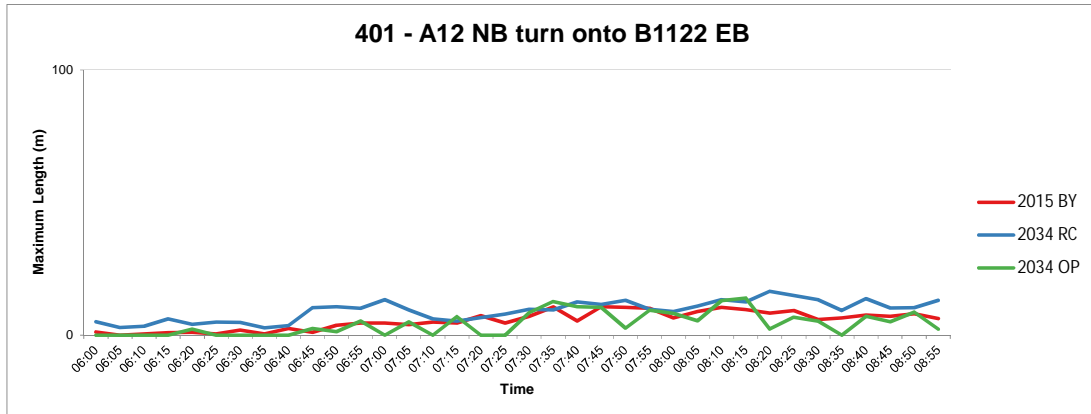
Route Names	2015 BY	2034 RC	2034 OP
1 - Section 1 NB	14	14	22
2 - Section 2 NB	68	68	64
3 - Section 3 NB	68	69	69
4 - Section 4 NB	60	61	60
NB	210	212	215
5 - Section 1 SB	55	56	55
6 - Section 2 SB	69	70	70
7 - Section 3 SB	67	68	64
8 - Section 4 SB	17	19	30
SB	208	213	219

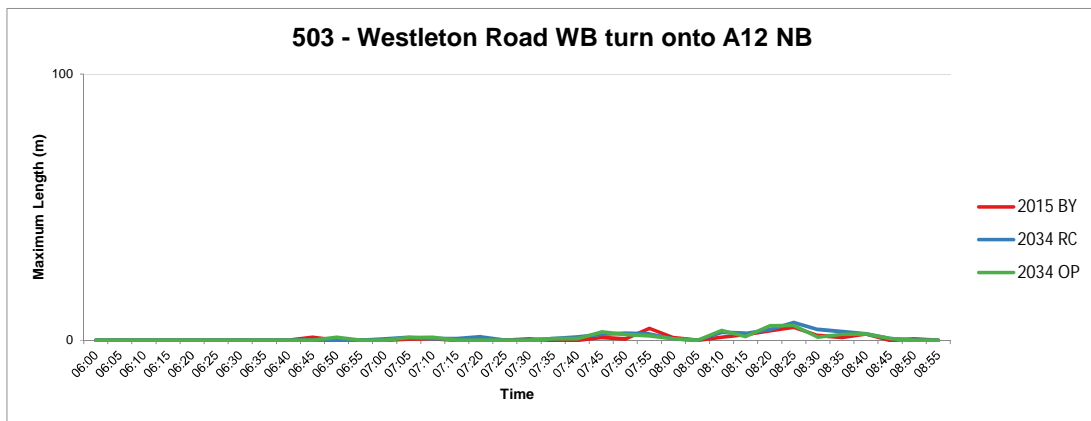
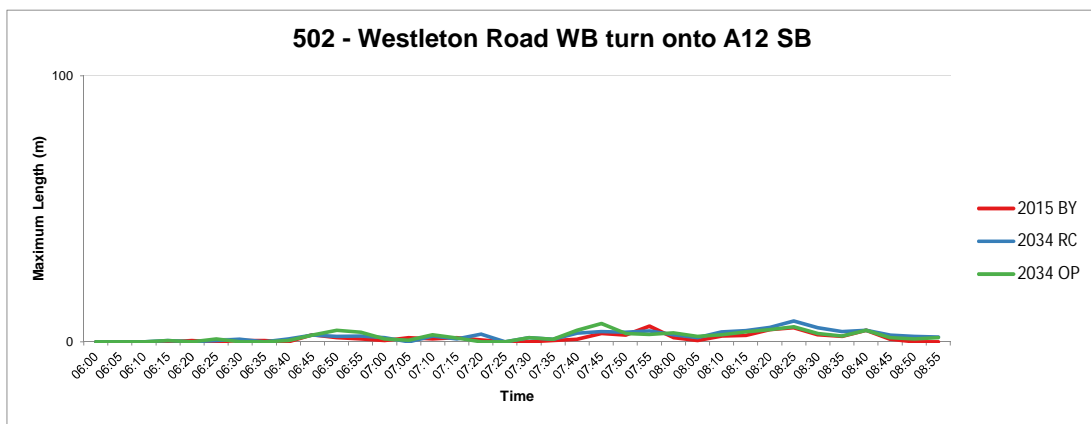
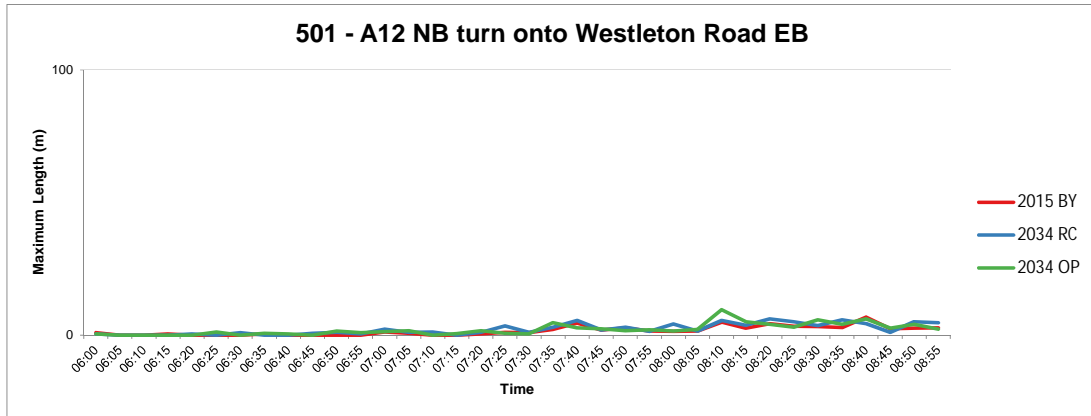


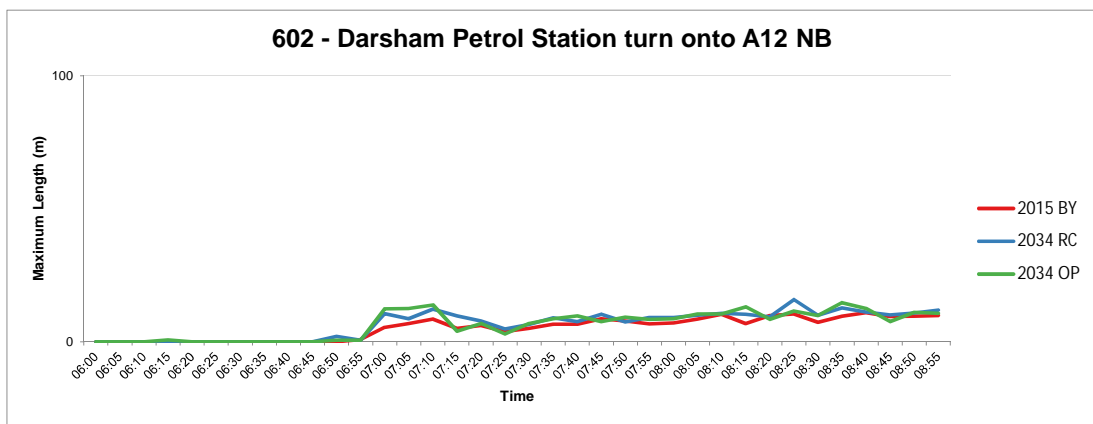
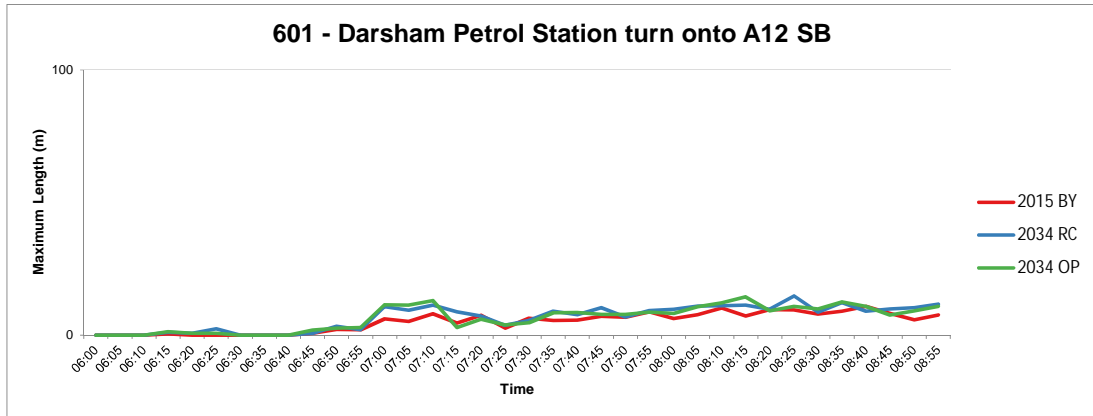
**Queue Comparison
AM
Maximum Length Summary
Maximum Length (m)**

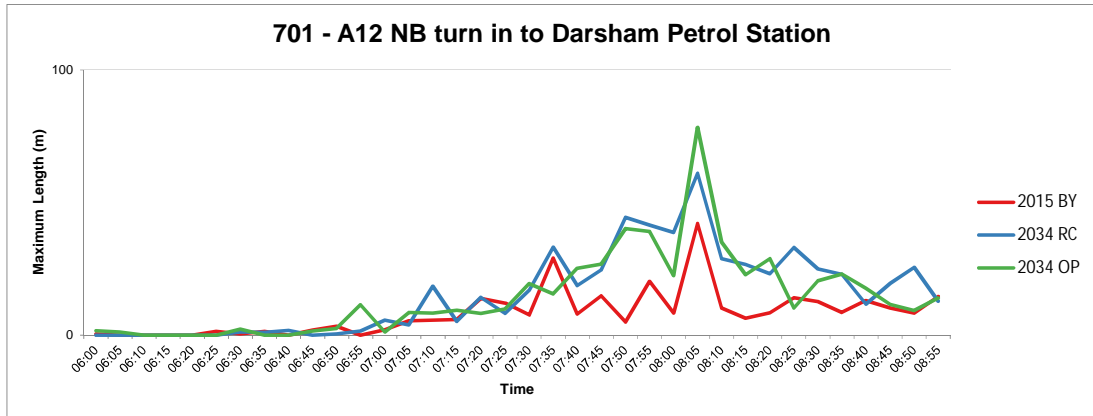
	2015 BY	2034 RC	2034 OP
301 - A12 NB turn onto High Stre	1.0	0.7	0.5
302 - A12 SB turn onto High Stre	26.8	62.1	51.0
303 - High Street(A1120) EB turn	14.6	22.9	21.1
304 - High Street(A1120) EB turn	11.5	11.6	9.3
401 - A12 NB turn onto B1122 EB	10.7	16.6	14.0
402 - B1122 WB turn onto A12 S	15.2	33.9	13.8
403 - B1122 WB turn onto A12 N	14.6	32.4	14.2
404 - A12 SB turn onto B1122 EB	0.0	0.6	41.6
501 - A12 NB turn onto Westleto	6.9	6.2	9.6
502 - Westleton Road WB turn o	5.9	7.8	6.9
503 - Westleton Road WB turn o	4.9	6.7	5.6
601 - Darsham Petrol Station turr	10.9	14.8	14.4
602 - Darsham Petrol Station turr	10.9	15.9	14.7
701 - A12 NB turn in to Darsham	42.1	61.0	78.4
801 - A12 NB turn on to The St E	13.3	23.8	29.9
802 - The St WB turn onto A12 S	4.2	7.0	6.6
803 - The St WB turn onto A12 N	6.2	8.7	6.8
901 - A12 SB turn onto Willow Ma	4.8	11.9	9.3
902 - Willow Marsh Lane EB turn	3.3	3.4	2.6
903 - Willow Marsh Lane EB turn	6.5	7.9	6.5
1001 - A12 NB turn onto Lymball	1.1	1.0	1.1
1002 - Lymballs Lane WB turn or	3.4	3.4	2.9
1003 - Lymballs Lane WB turn or	3.0	4.3	3.7
1101 - A12 SB turn onto A144 W	6.6	5.3	3.4
1102 - A144 EB turn onto A12 NB	59.1	69.0	82.1
1103 - A144 EB turn onto A12 SB	62.6	69.5	80.0
1104 - A12 SB turn onto A144 WB first queue			11.5
1201 - Level Crossing A12 NB	101.8	141.3	153.9
1202 - Level Crossing A12 SB	161.6	196.4	211.3
1301 - Level Crossing B1122 EB	19.9	19.9	20.2
1302 - Level Crossing B1122 WB	5.6	14.4	12.6
1401 - PandR Roundabout A12 NB			
1402 - PandR Roundabout PandR Access			
1403 - PandR Roundabout A12 SB			
904 - PandR Access SB turn onto Willow Marsh Lane WB			
905 - Willow Marsh Lane EB turn onto PandR Access NB			
906 - Willow Marsh Lane EB turn onto PandR Access SB			

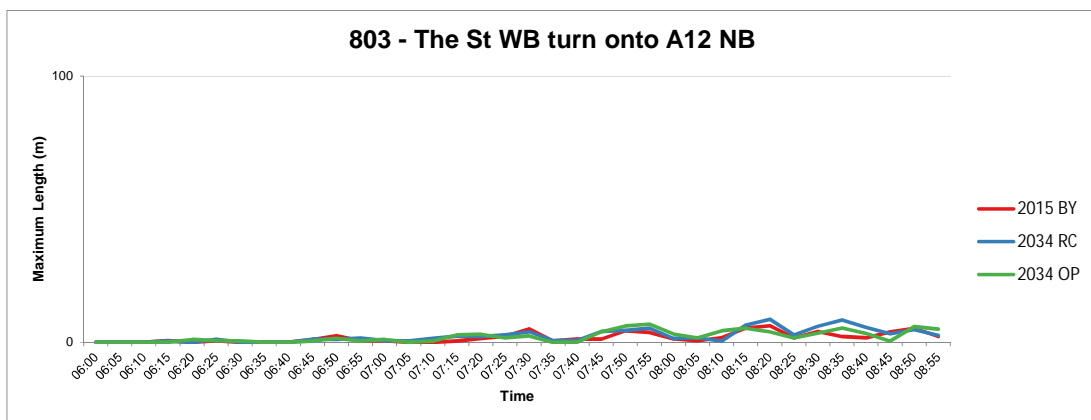
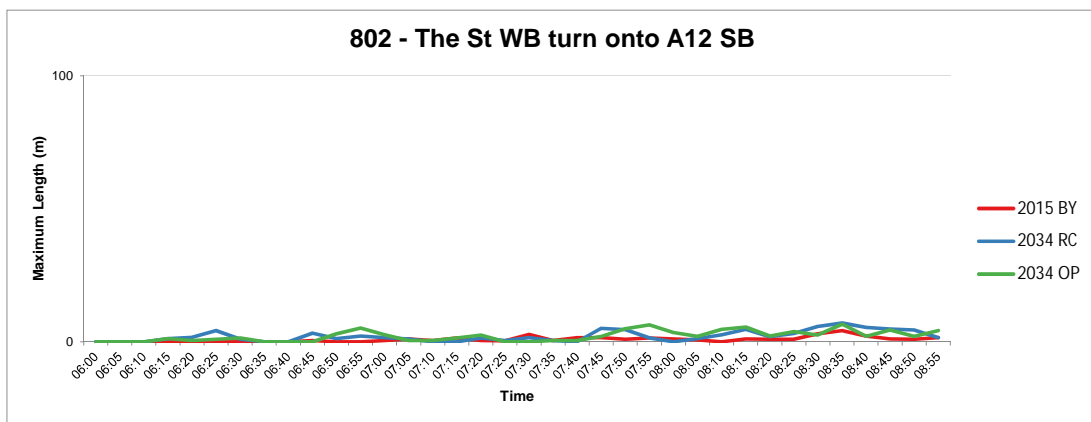
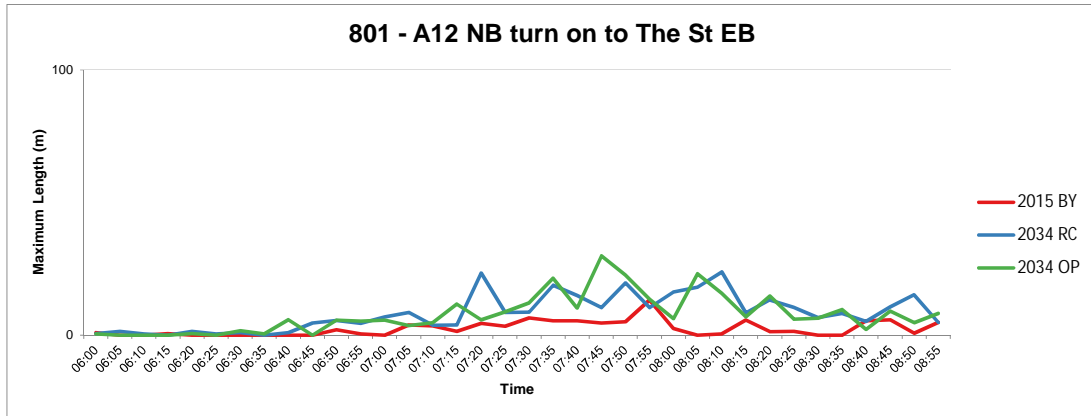


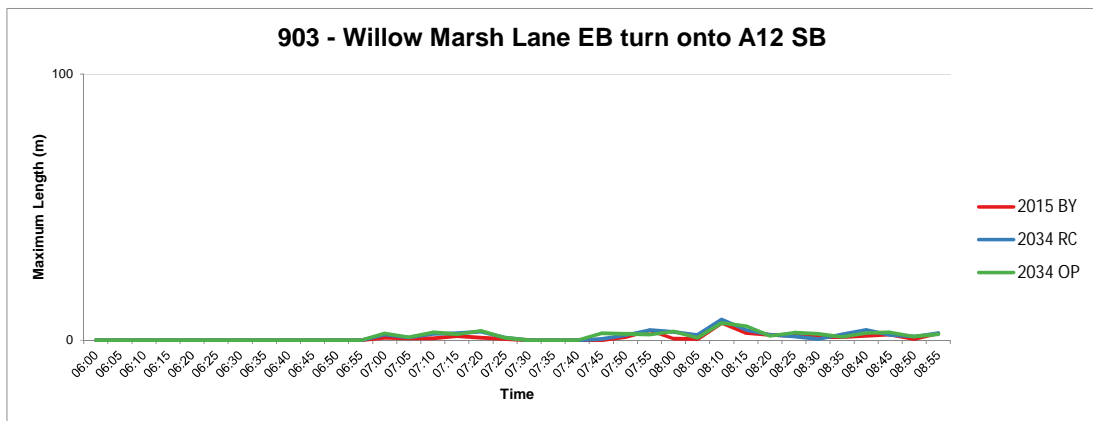
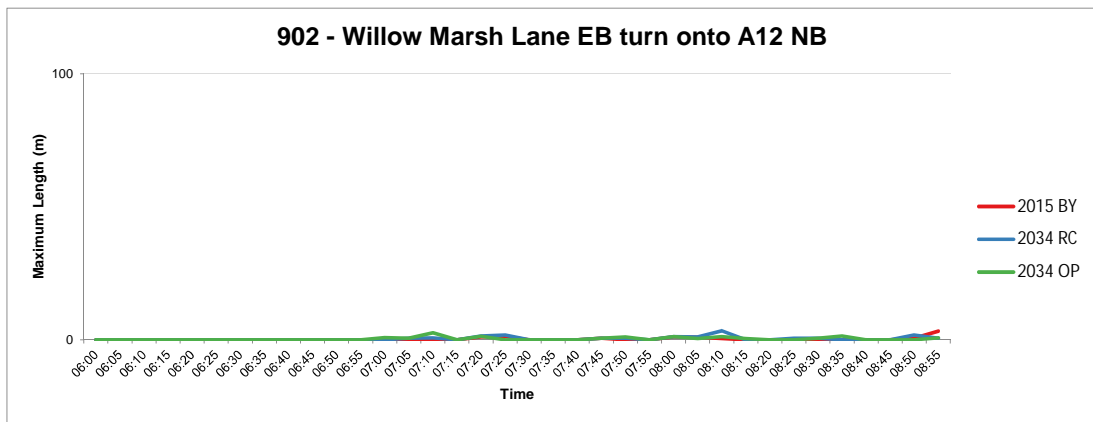
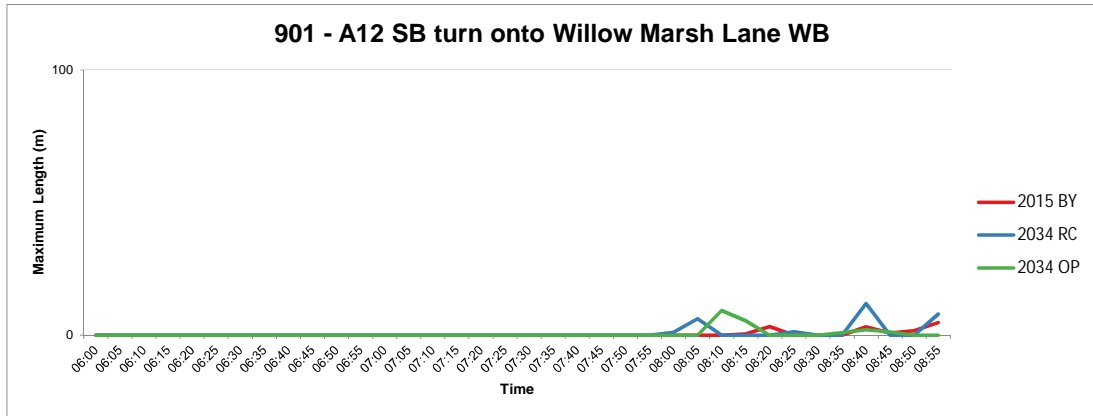


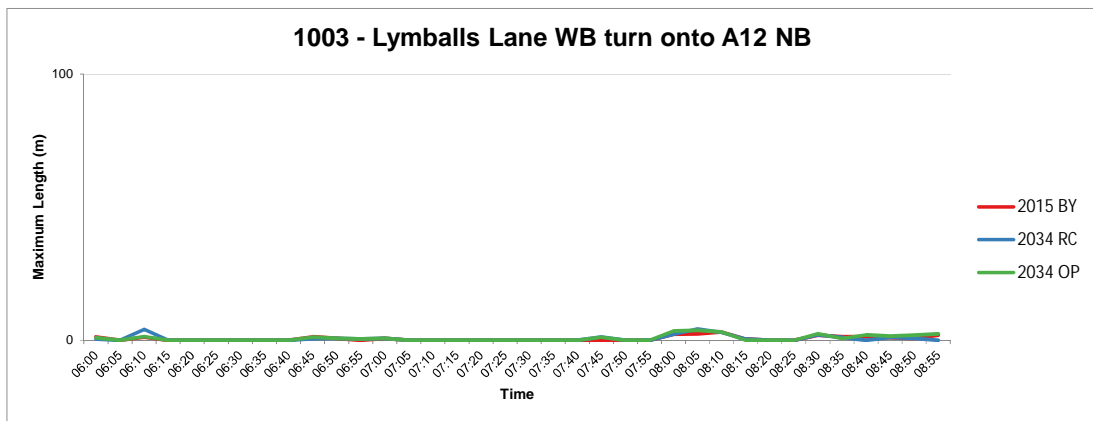
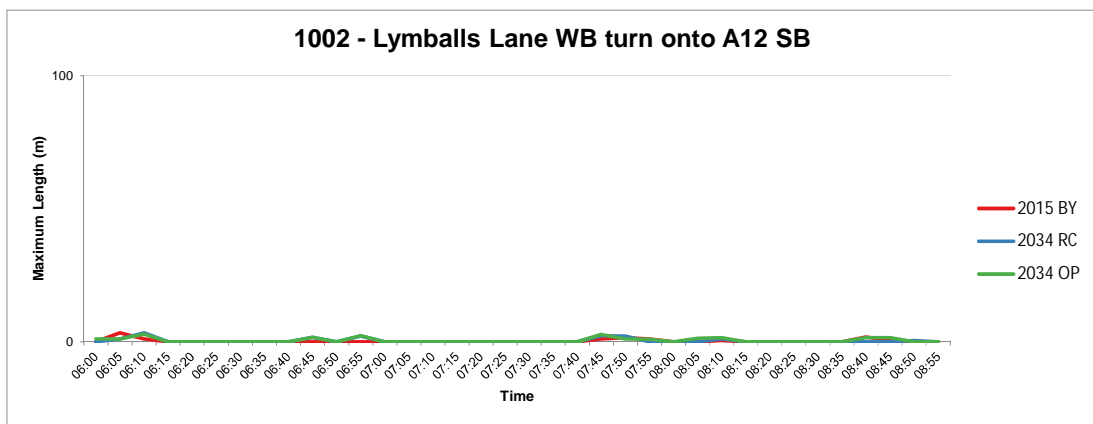
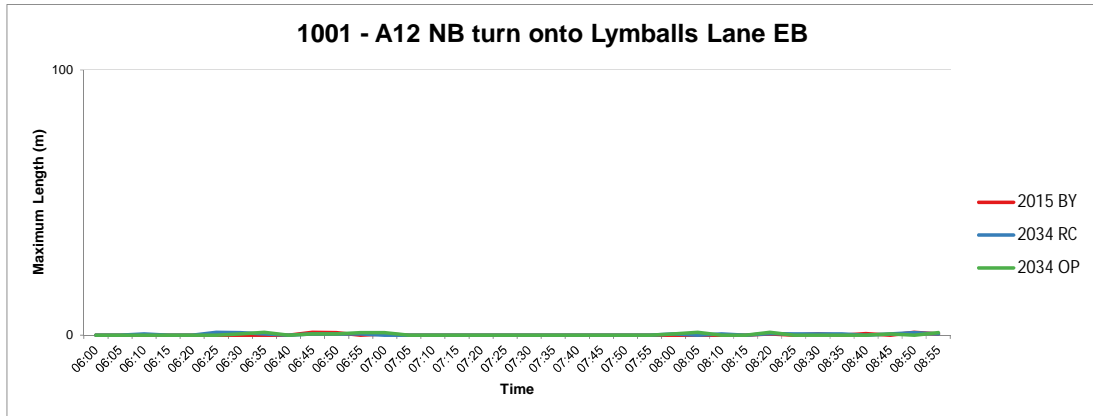


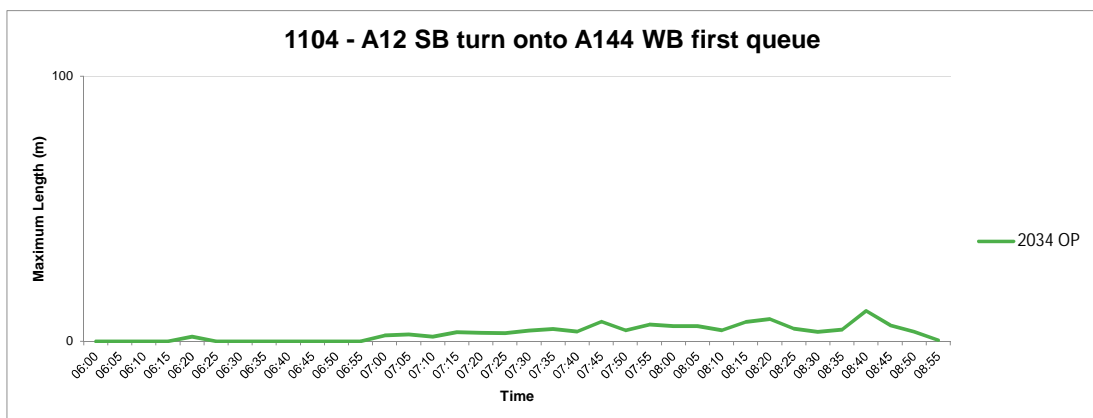
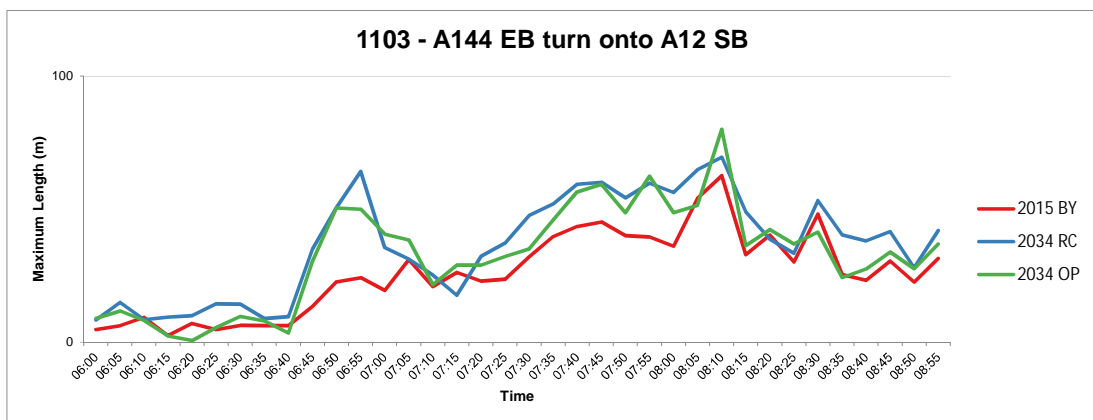
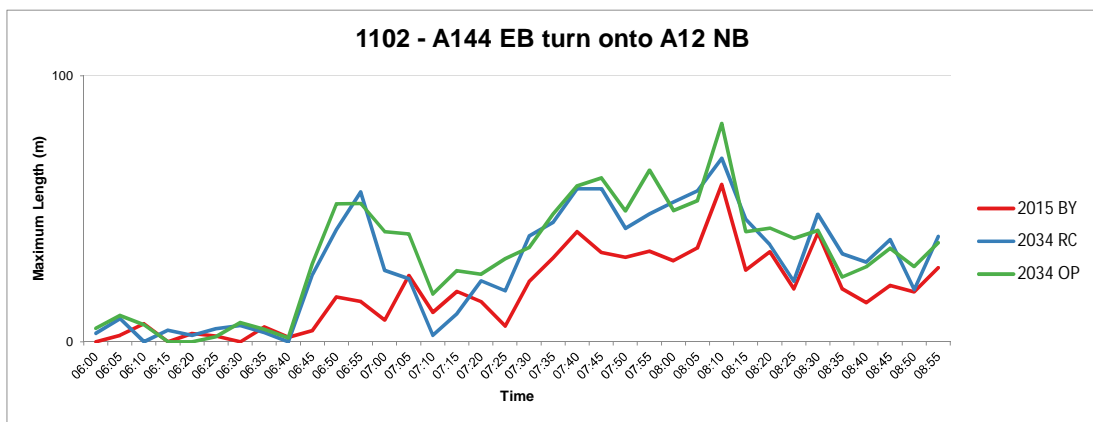
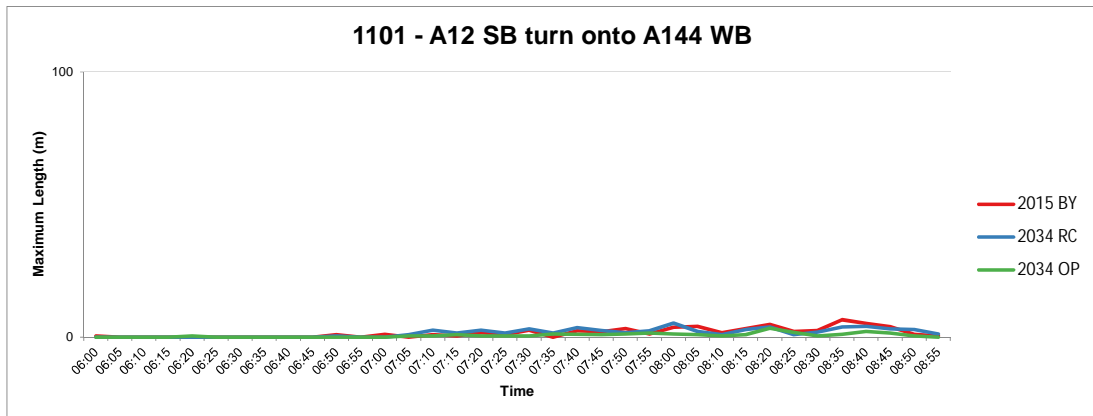


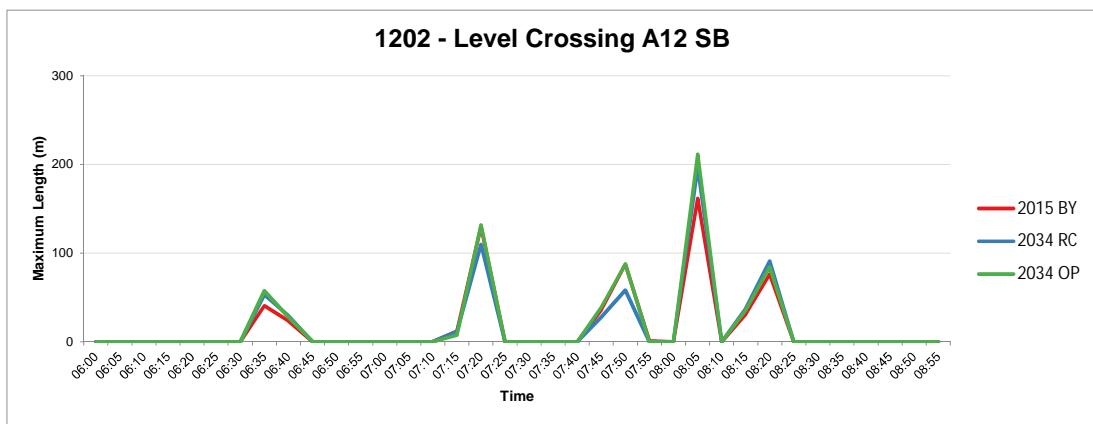
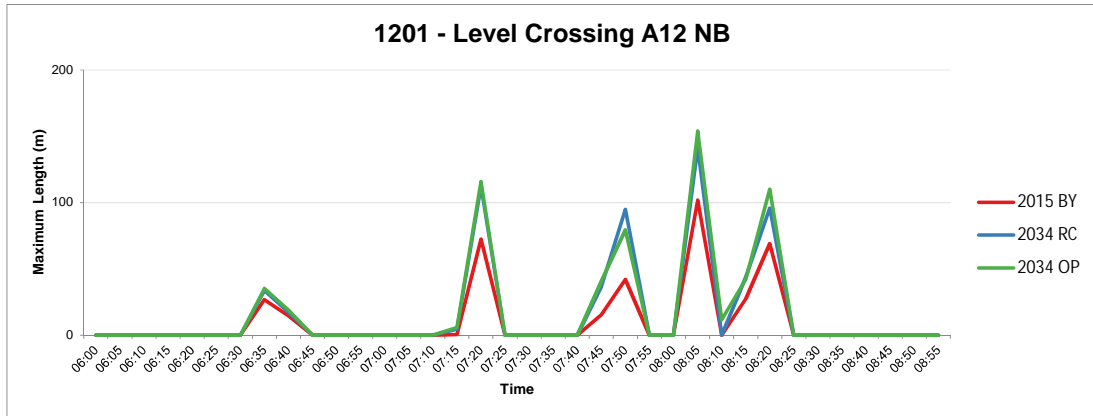


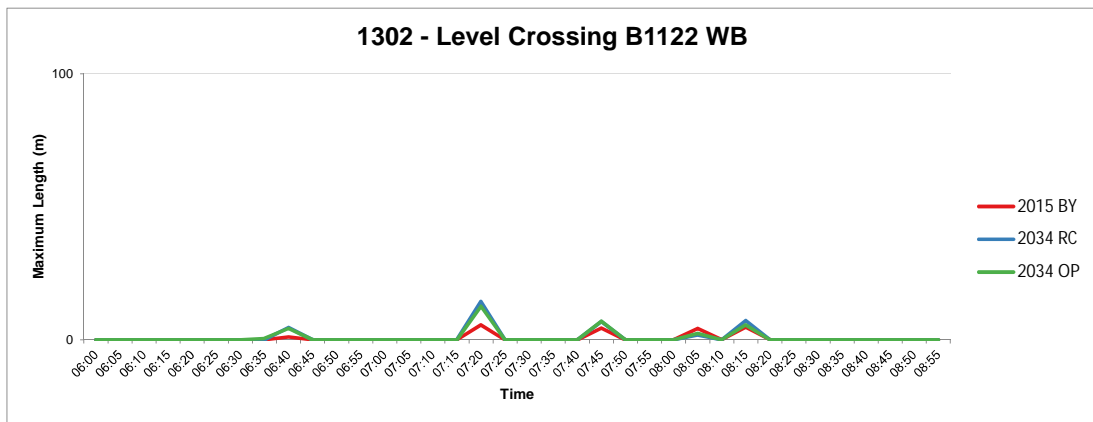
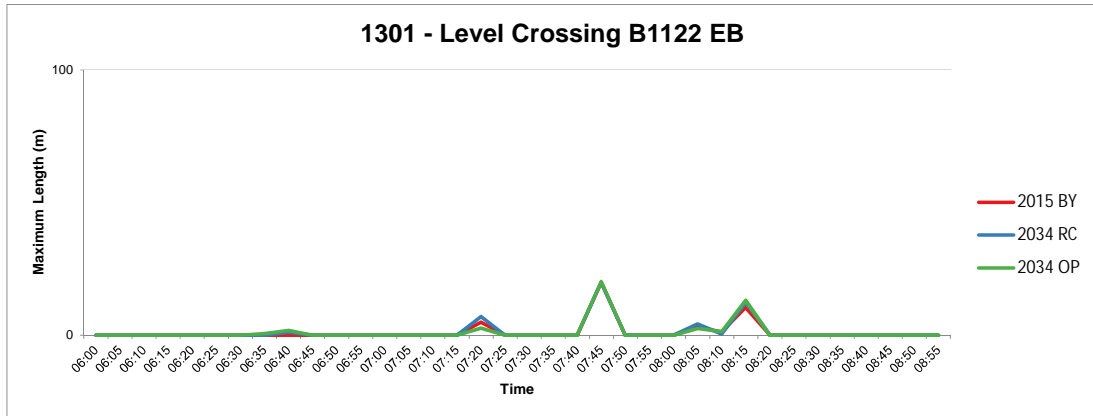








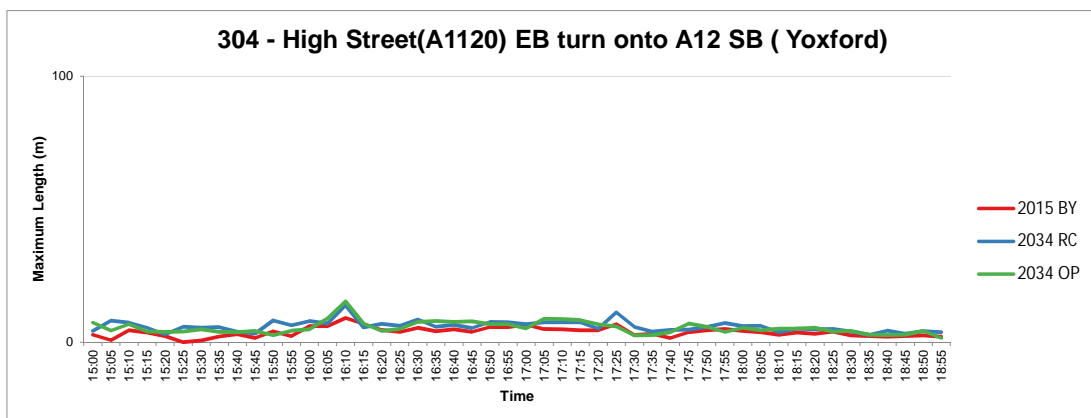
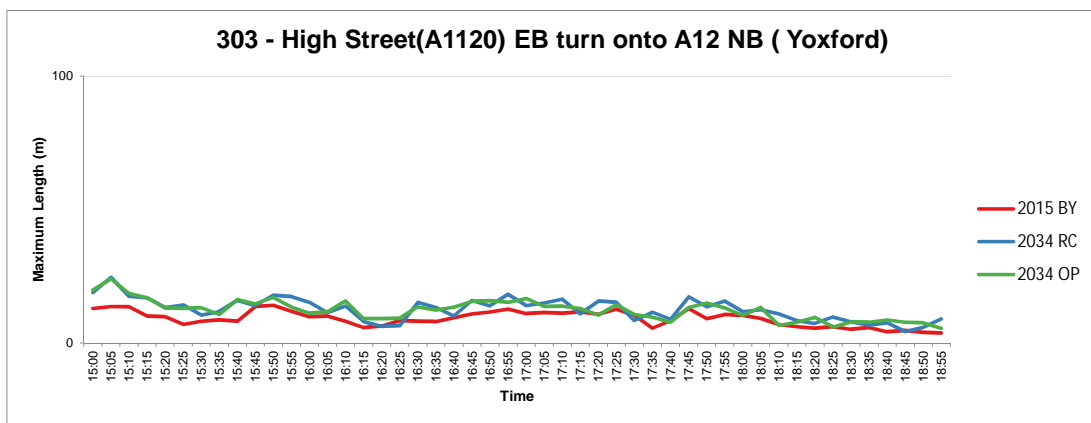
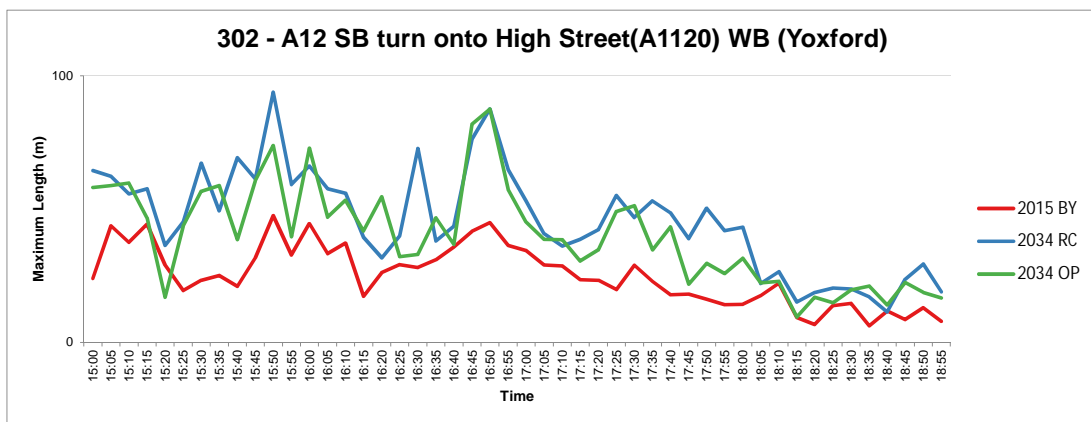
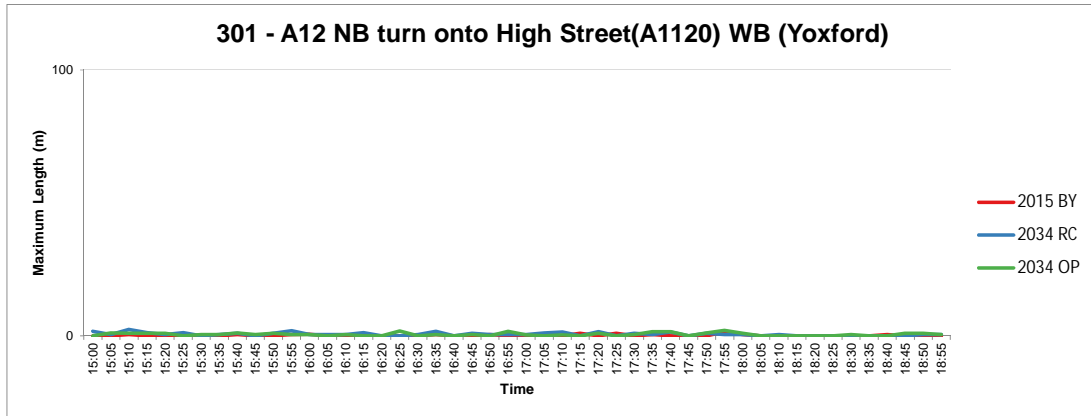


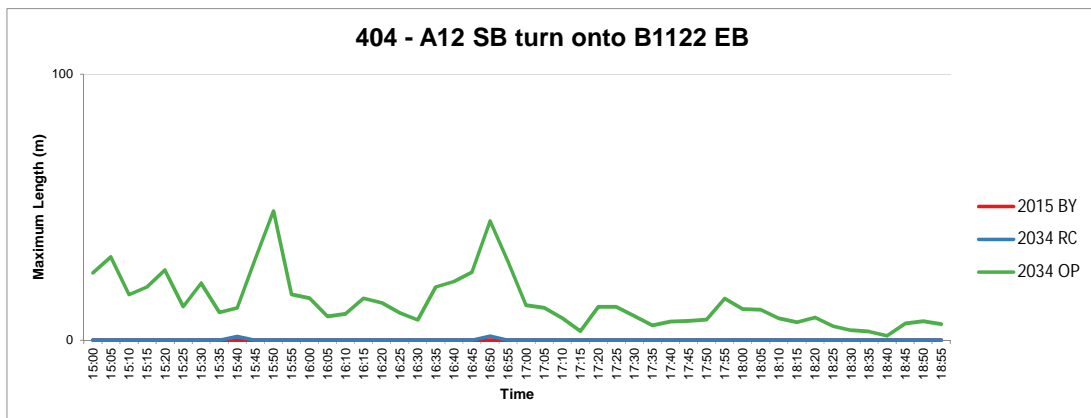
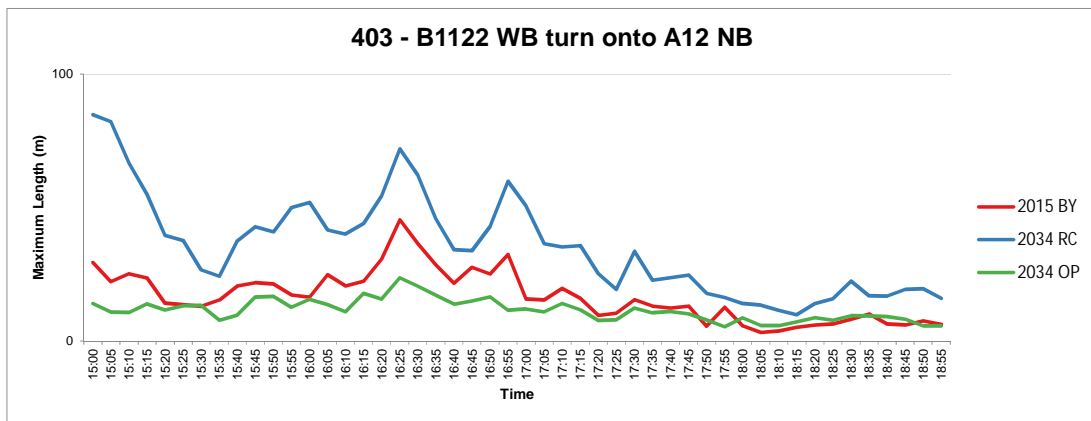
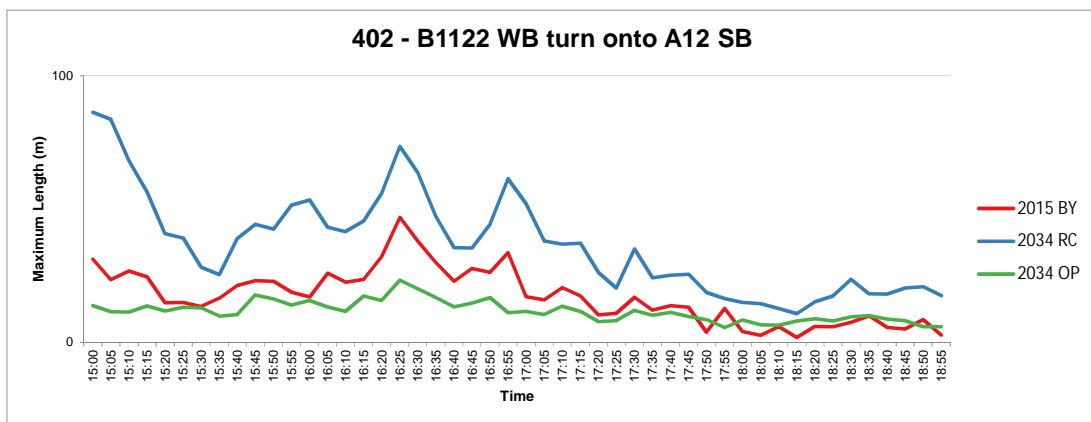
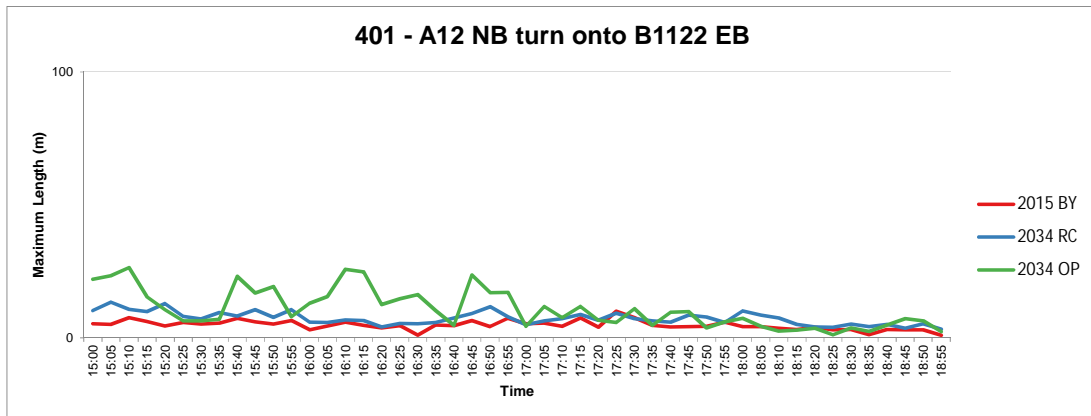


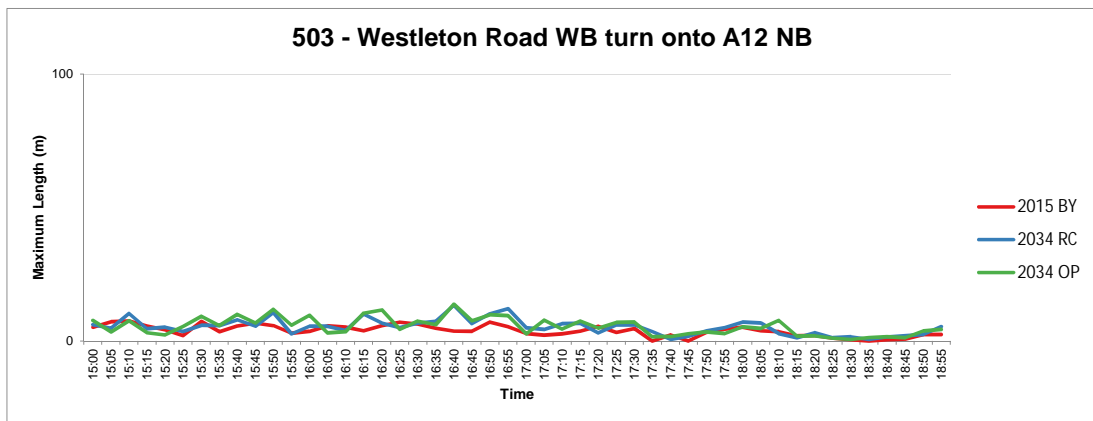
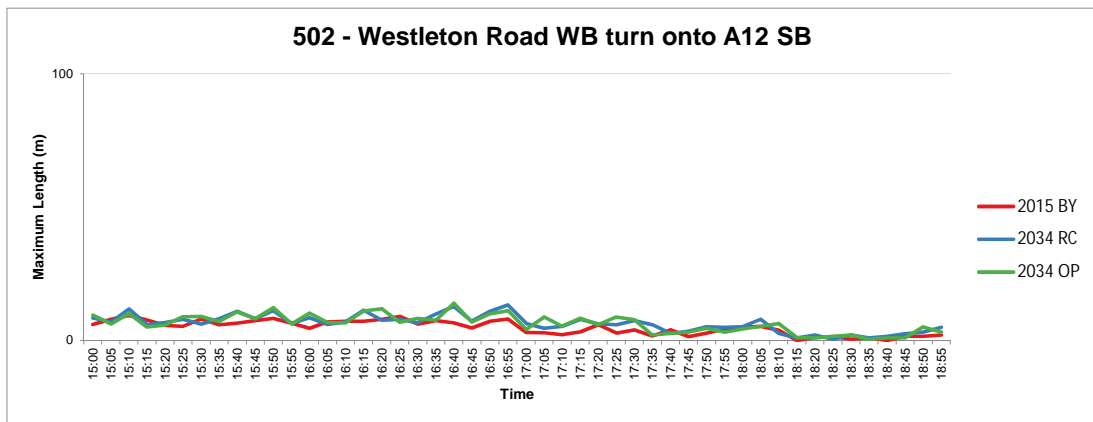
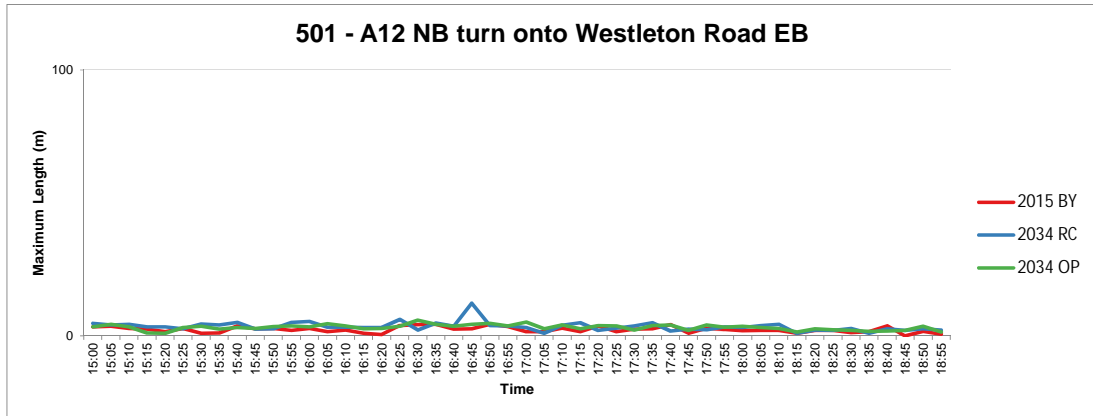


**Queue Comparison
PM
Maximum Length Summary
Maximum Length (m)**

	2015 BY	2034 RC	2034 OP
301 - A12 NB turn onto High Stre	1.6	2.4	2.1
302 - A12 SB turn onto High Stre	47.6	93.9	87.5
303 - High Street(A1120) EB turn	14.1	24.6	24.0
304 - High Street(A1120) EB turn	9.1	13.8	15.3
401 - A12 NB turn onto B1122 EB	10.0	13.4	26.5
402 - B1122 WB turn onto A12 S	46.9	86.3	23.3
403 - B1122 WB turn onto A12 N	45.4	84.8	23.7
404 - A12 SB turn onto B1122 EB	0.0	1.5	48.5
501 - A12 NB turn onto Westleto	4.4	12.3	5.9
502 - Westleton Road WB turn o	9.4	13.3	14.0
503 - Westleton Road WB turn o	7.5	13.3	13.8
601 - Darsham Petrol Station tur	11.5	19.2	19.7
602 - Darsham Petrol Station tur	10.7	19.1	20.3
701 - A12 NB turn in to Darsham	38.9	50.5	88.9
801 - A12 NB turn on to The St E	12.1	34.6	26.6
802 - The St WB turn onto A12 S	9.2	11.6	12.0
803 - The St WB turn onto A12 N	11.9	14.8	14.7
901 - A12 SB turn onto Willow M	6.4	26.4	14.2
902 - Willow Marsh Lane EB turn	2.6	2.9	4.6
903 - Willow Marsh Lane EB turn	3.8	3.3	3.1
1001 - A12 NB turn onto Lymball	12.6	10.8	20.1
1002 - Lymballs Lane WB turn o	5.6	3.9	3.5
1003 - Lymballs Lane WB turn o	4.3	4.3	4.8
1101 - A12 SB turn onto A144 W	8.4	4.0	1.7
1102 - A144 EB turn onto A12 NB	27.7	53.7	45.1
1103 - A144 EB turn onto A12 SB	30.7	55.2	43.0
1104 - A12 SB turn onto A144 WB first queue			5.7
1201 - Level Crossing A12 NB	155.0	177.3	183.3
1202 - Level Crossing A12 SB	109.1	139.7	128.7
1301 - Level Crossing B1122 EB	8.9	12.9	18.2
1302 - Level Crossing B1122 WB	15.6	17.2	18.0
1401 - PandR Roundabout A12 NB			
1402 - PandR Roundabout PandR Access			
1403 - PandR Roundabout A12 SB			
904 - PandR Access SB turn onto Willow Marsh Lane WB			
905 - Willow Marsh Lane EB turn onto PandR Access NB			
906 - Willow Marsh Lane EB turn onto PandR Access SB			

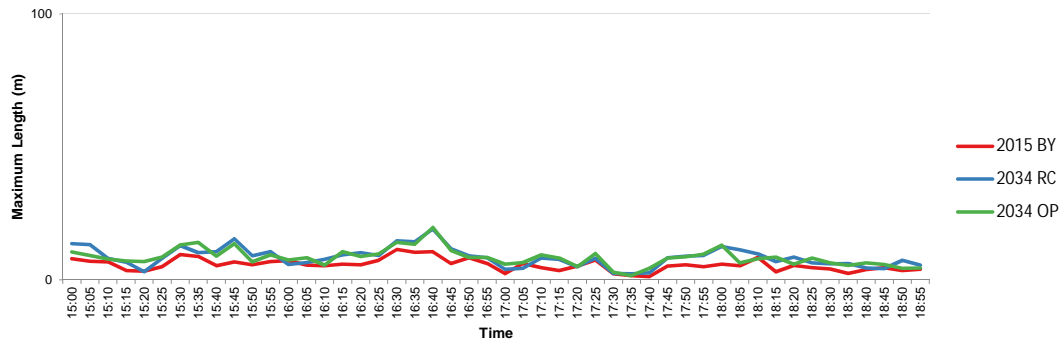




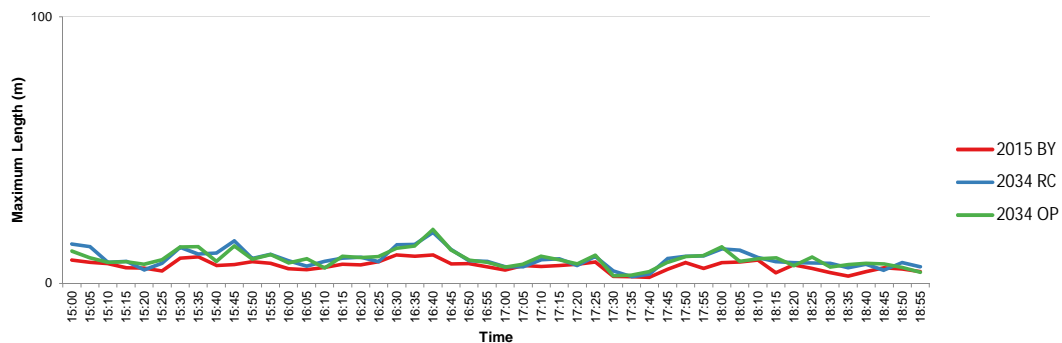


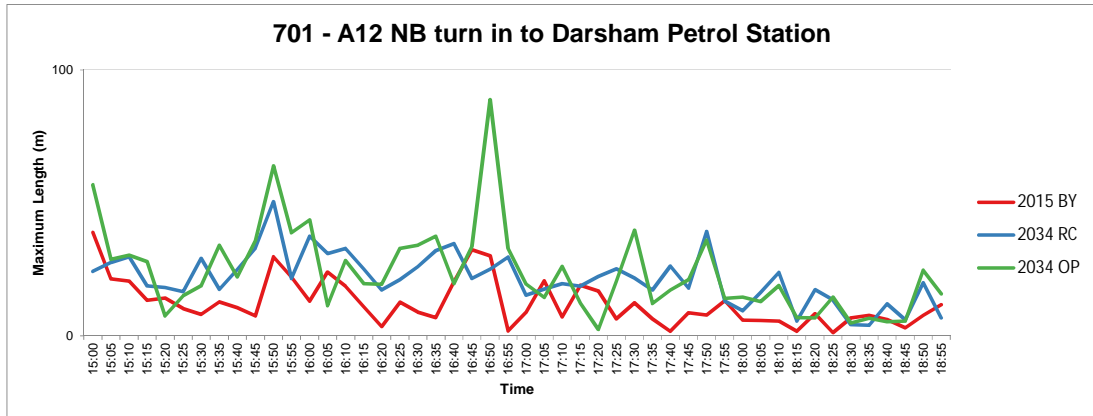


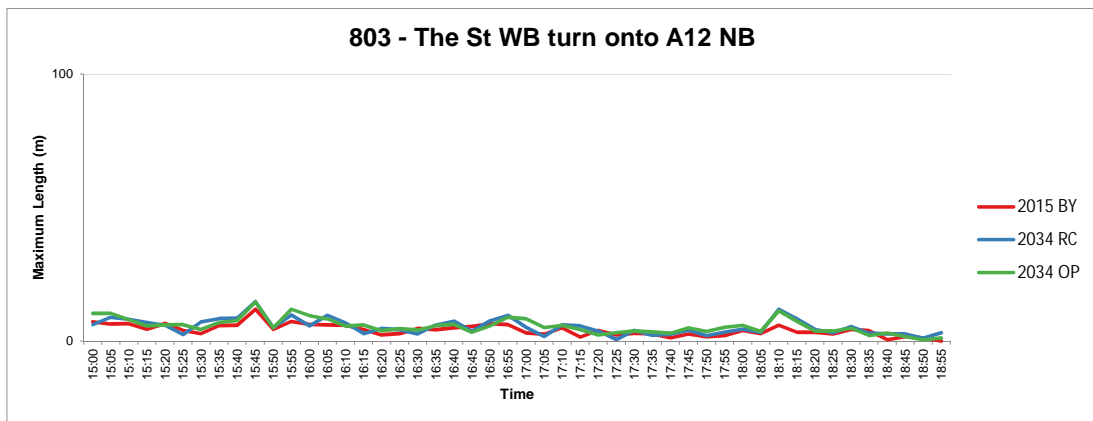
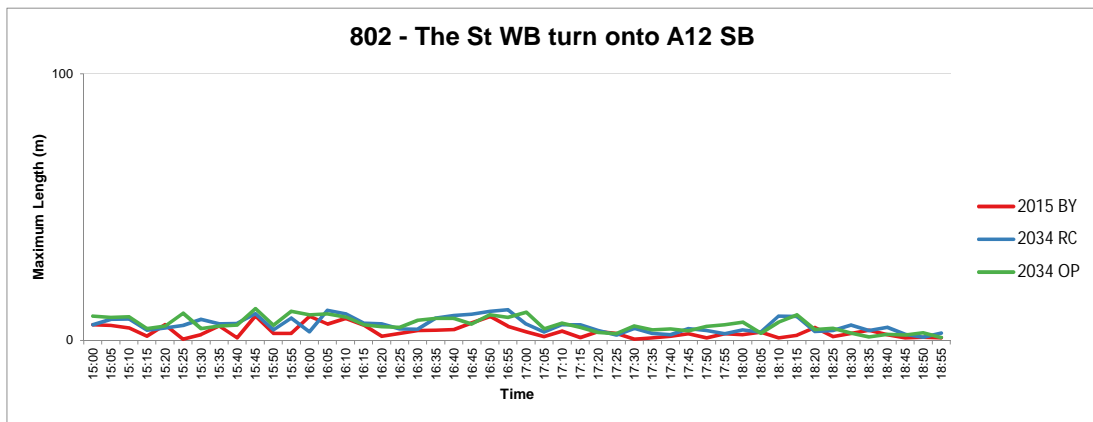
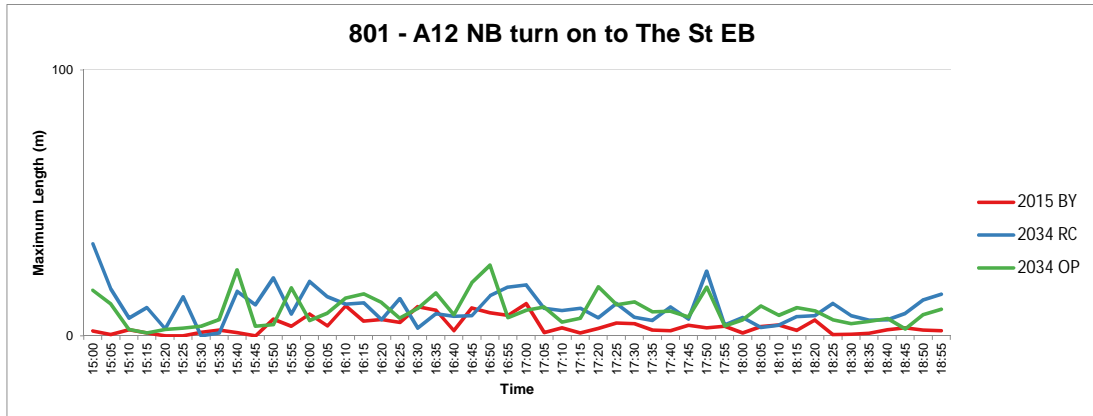
601 - Darsham Petrol Station turn onto A12 SB

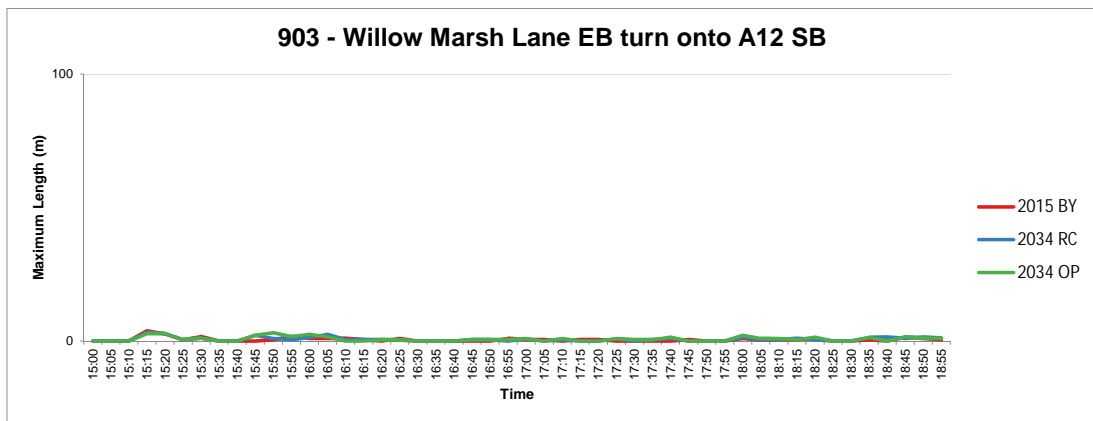
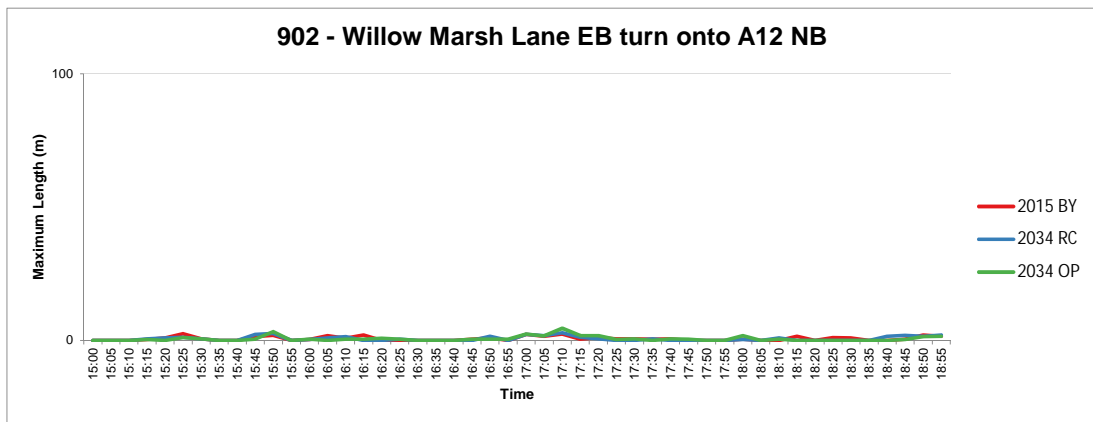
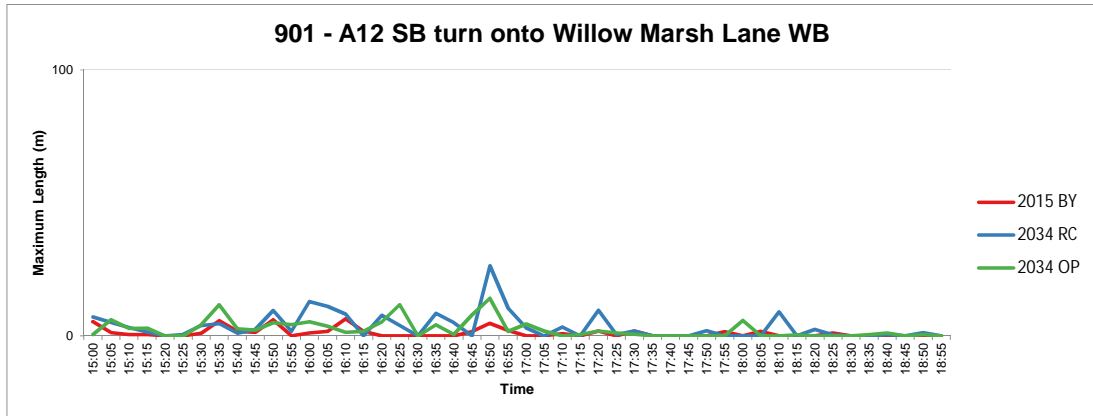


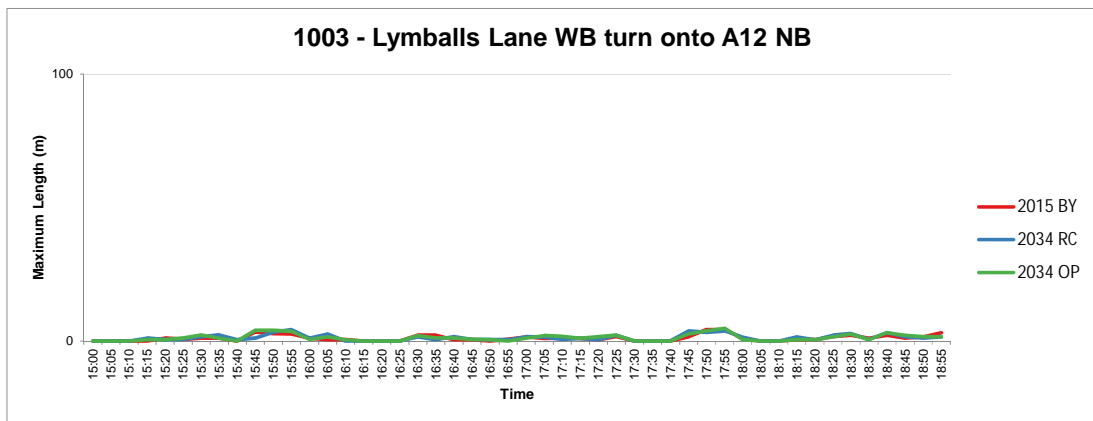
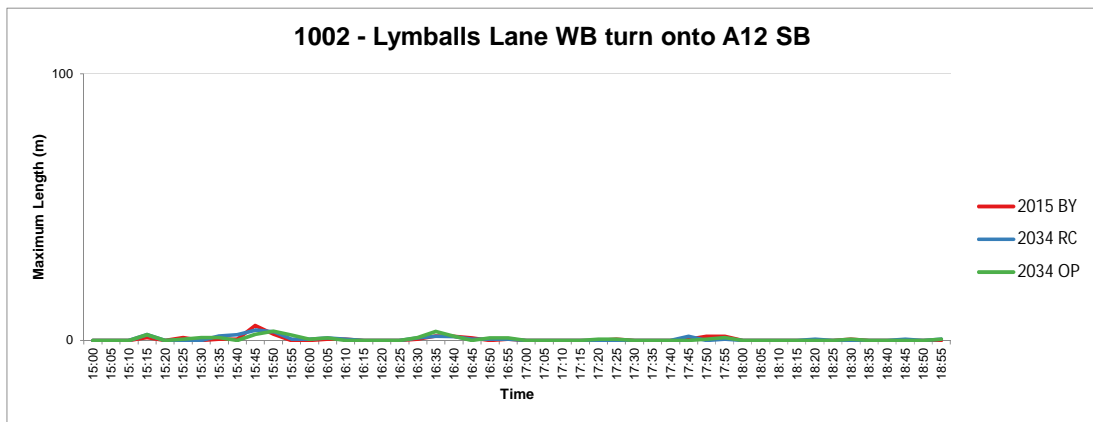
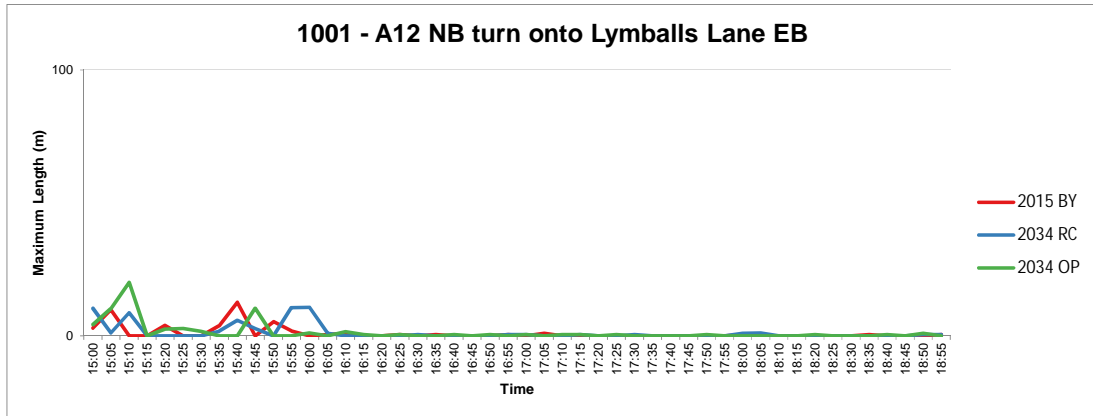
602 - Darsham Petrol Station turn onto A12 NB

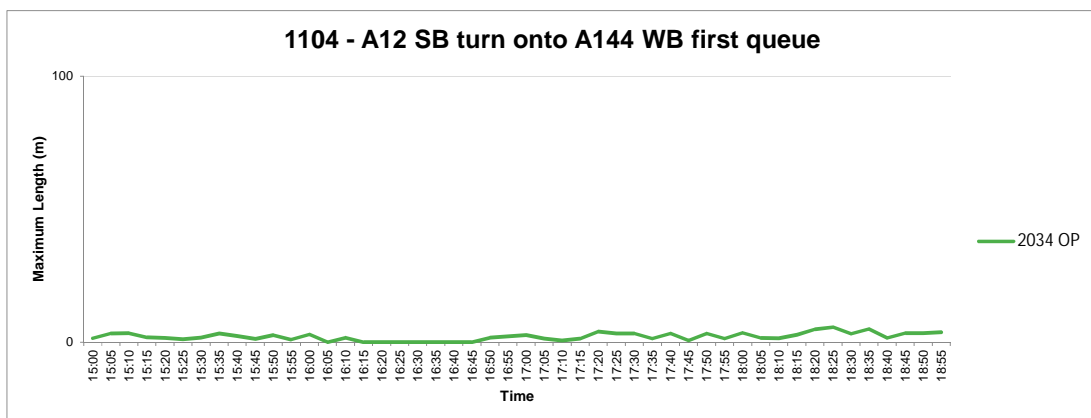
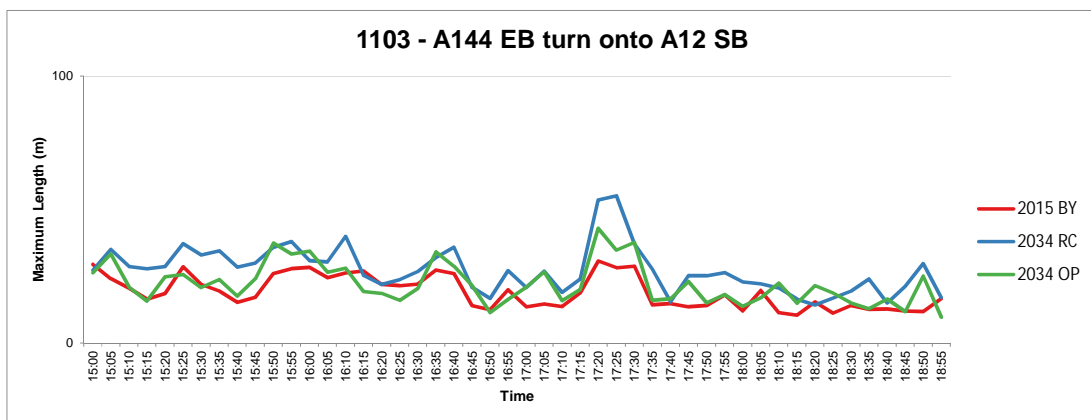
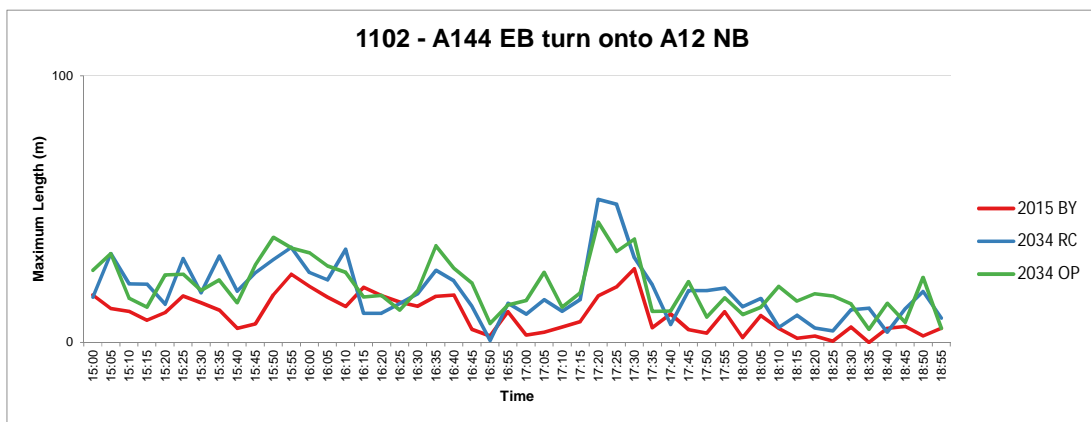
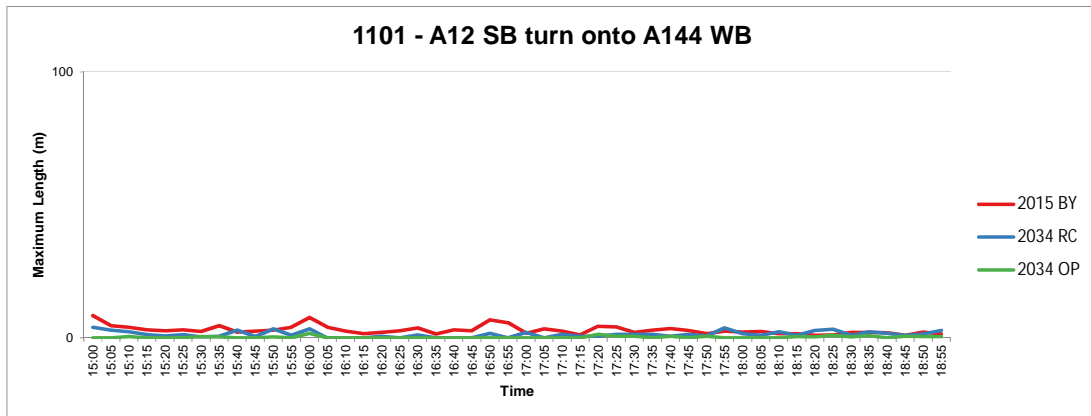


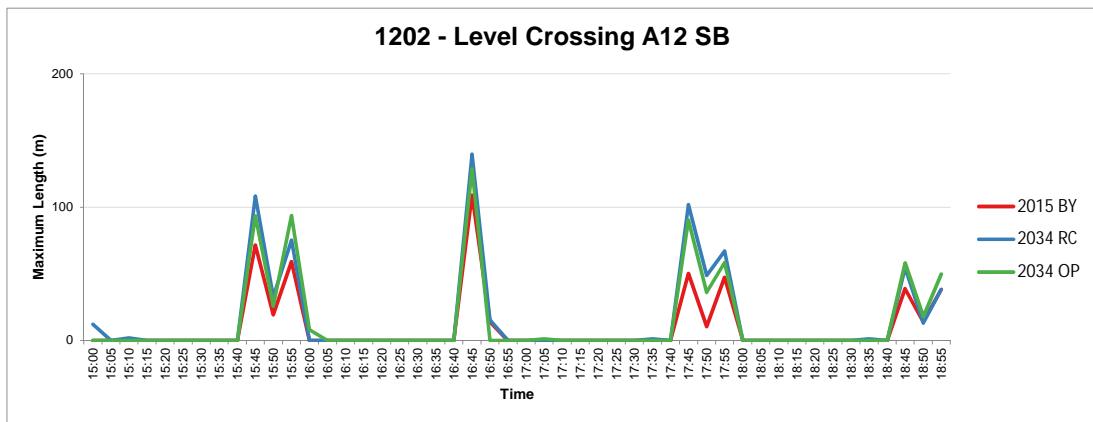
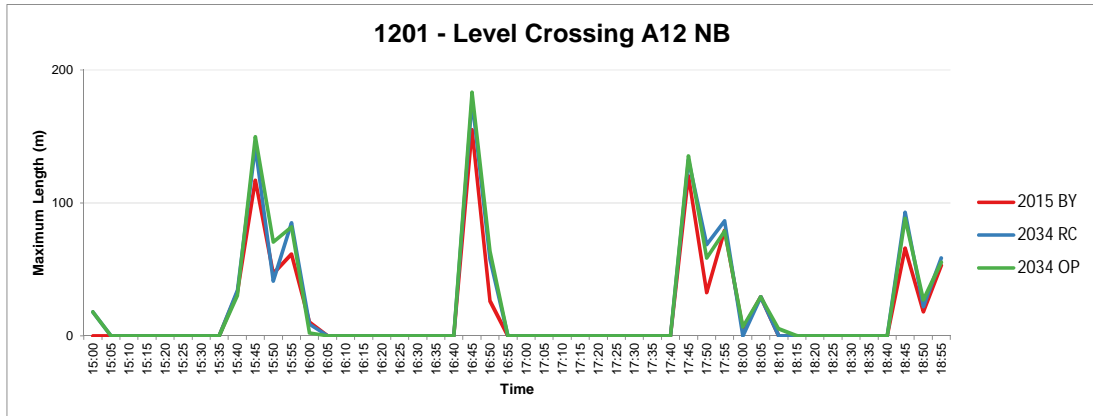


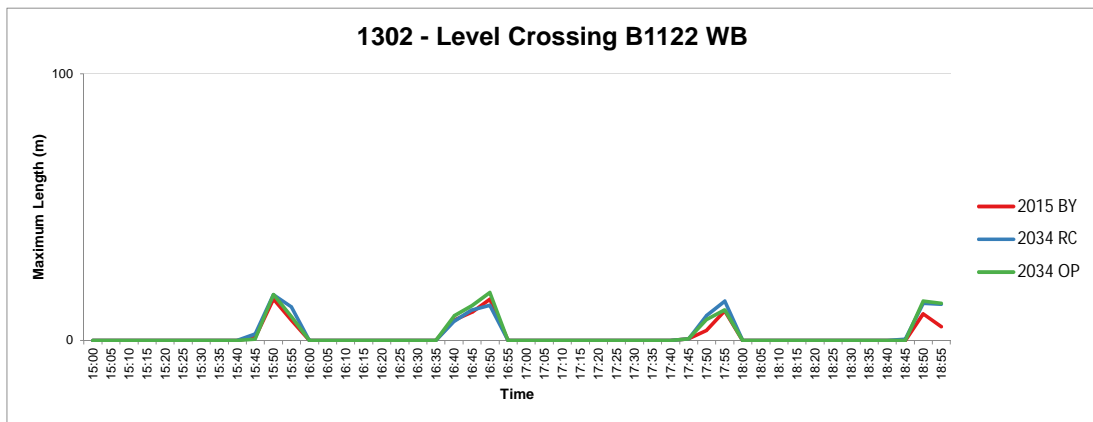
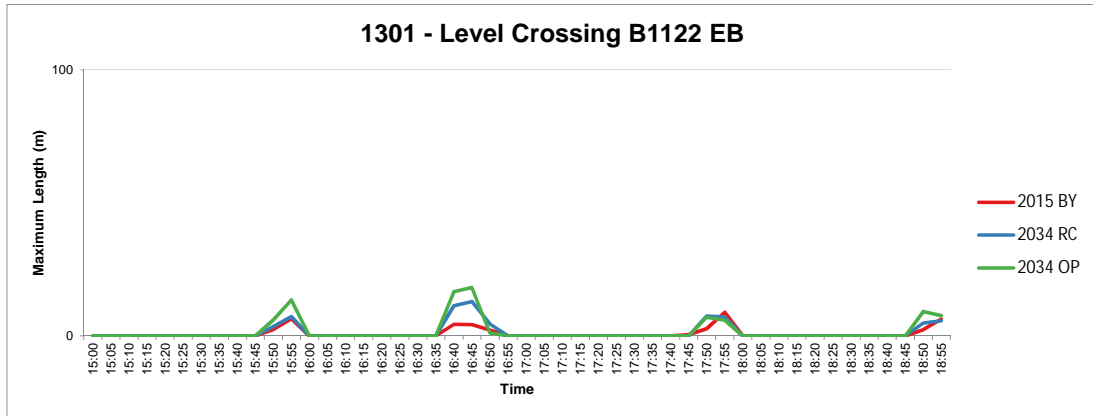










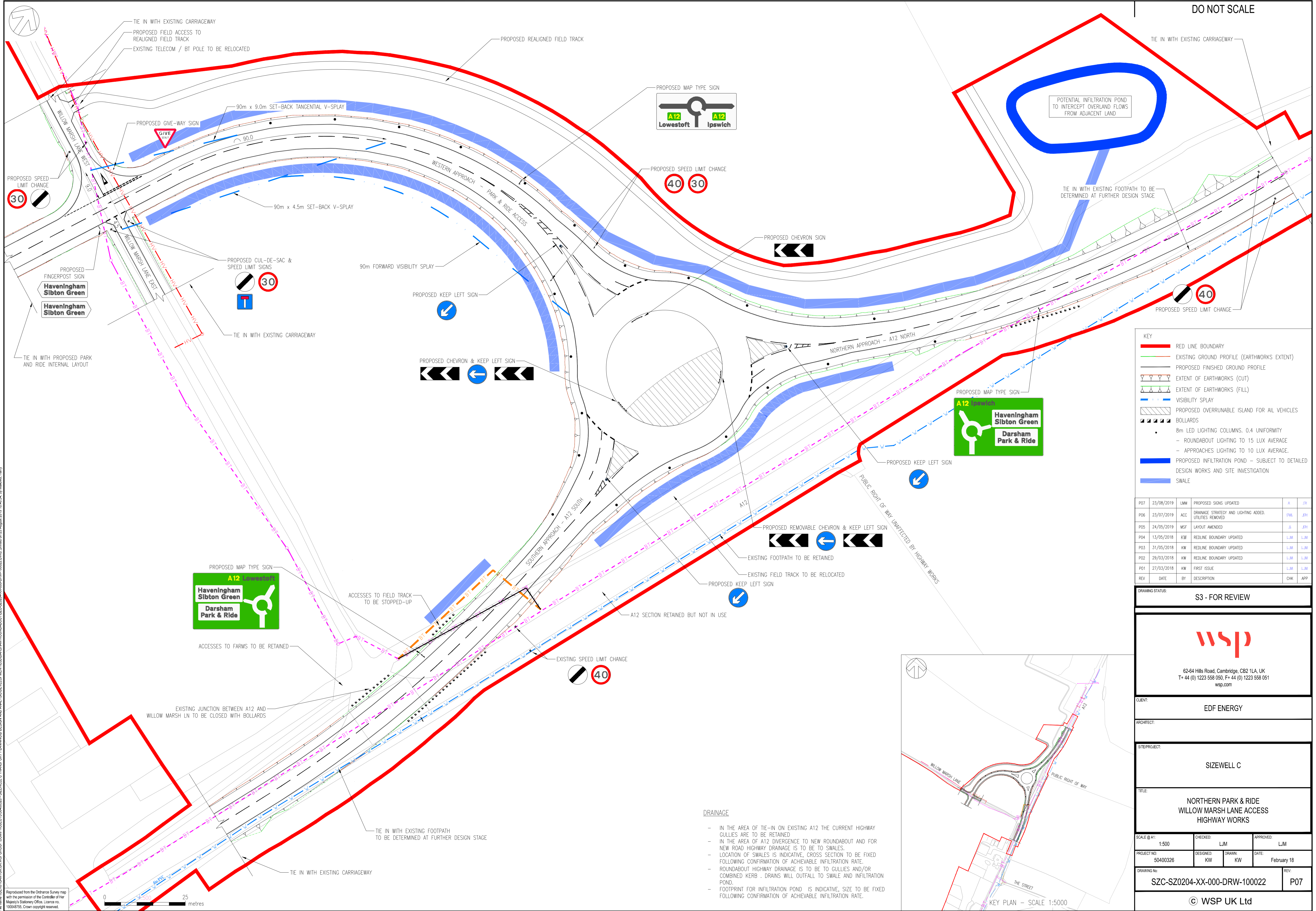


Appendix F



JUNCTION MITIGATION DESIGNS

DO NOT SCALE



KEY

- RED LINE BOUNDARY
- EXISTING GROUND PROFILE (EARTHWORKS EXTENT)
- PROPOSED FINISHED GROUND PROFILE
- EXTENT OF EARTHWORKS (CUT)
- EXTENT OF EARTHWORKS (FILL)
- VISIBILITY SPLAY
- PROPOSED OVERRUNNABLE ISLAND FOR AIL VEHICLES
- BOLLARDS
- 8m LED LIGHTING COLUMNS, 0.4 UNIFORMITY
 - ROUNDABOUT LIGHTING TO 15 LUX AVERAGE
 - APPROACHES LIGHTING TO 10 LUX AVERAGE.
- PROPOSED INFILTRATION POND - SUBJECT TO DETAILED DESIGN WORKS AND SITE INVESTIGATION
- SWALE

REV	DATE	BY	DESCRIPTION	CHK	APP
P07	23/08/2019	LJM	PROPOSED SIGNS UPDATED	A	JKH
P06	23/07/2019	ACC	DRAINAGE STRATEGY AND LIGHTING ADDED, UTILITIES REMOVED	DWL	JKH
P05	24/05/2019	MSF	LAYOUT AMENDED	J	JKH
P04	13/05/2018	KW	REDLINE BOUNDARY UPDATED	LJM	LJM
P03	31/05/2018	KW	REDLINE BOUNDARY UPDATED	LJM	LJM
P02	29/03/2018	KW	REDLINE BOUNDARY UPDATED	LJM	LJM
P01	27/03/2018	KW	FIRST ISSUE	LJM	LJM

DRAWING STATUS: **S3 - FOR REVIEW**

62-64 Hills Road, Cambridge, CB2 1LA, UK
T+ 44 (0) 1223 558 050, F+ 44 (0) 1223 558 051
wsp.com

CLIENT: **EDF ENERGY**

ARCHITECT:

SITE/PROJECT: **SIZEWELL C**

TITLE: **NORTHERN PARK & RIDE
WILLOW MARSH LANE ACCESS
HIGHWAY WORKS**

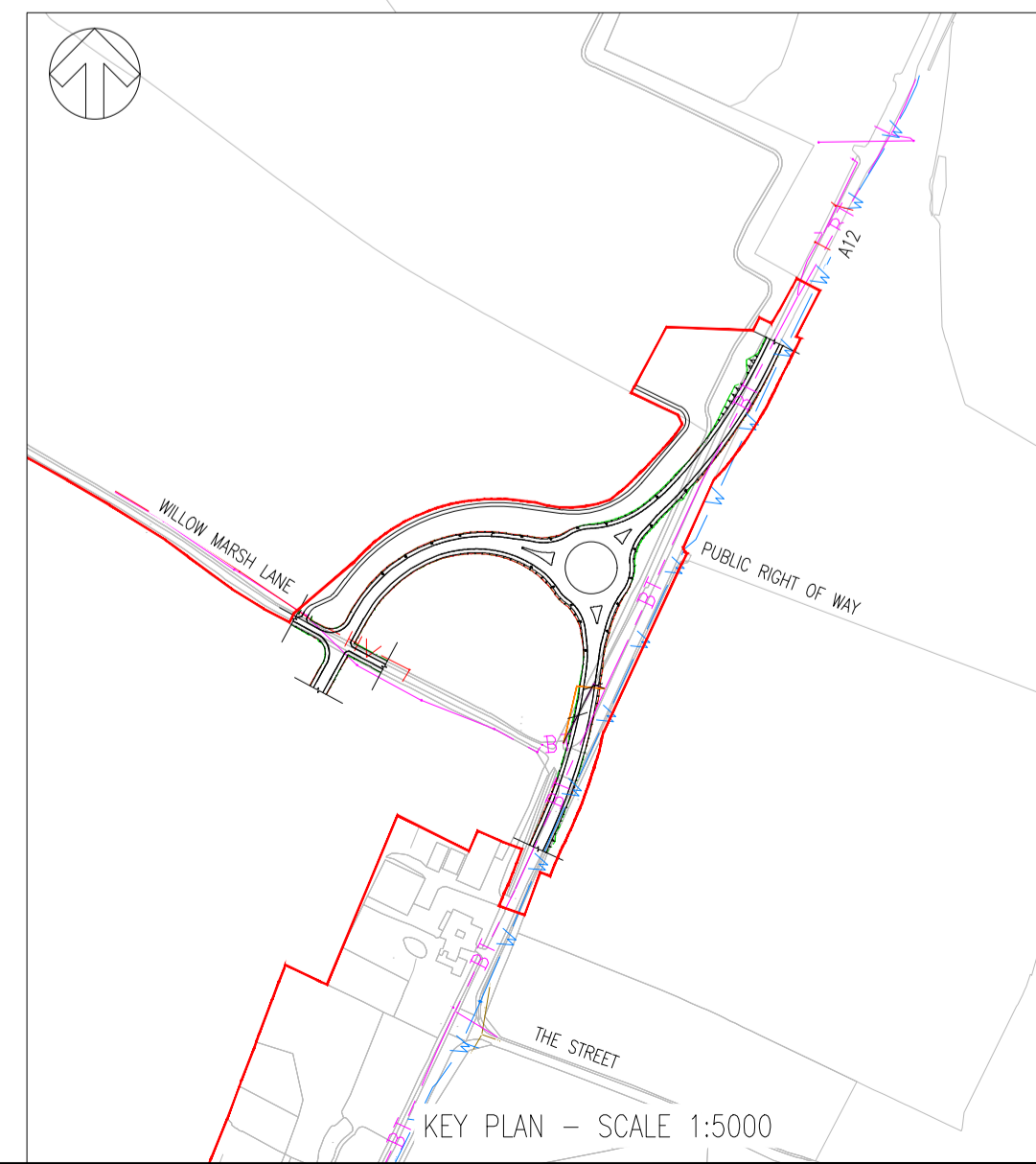
SCALE @ A1:	1:500	CHECKED:	LJM	APPROVED:	LJM
PROJECT NO:	50400326	DESIGNED:	KW	DATE:	February 18

DRAWING NO: **SZC-SZ0204-XX-000-DRW-100022** REV: **P07**

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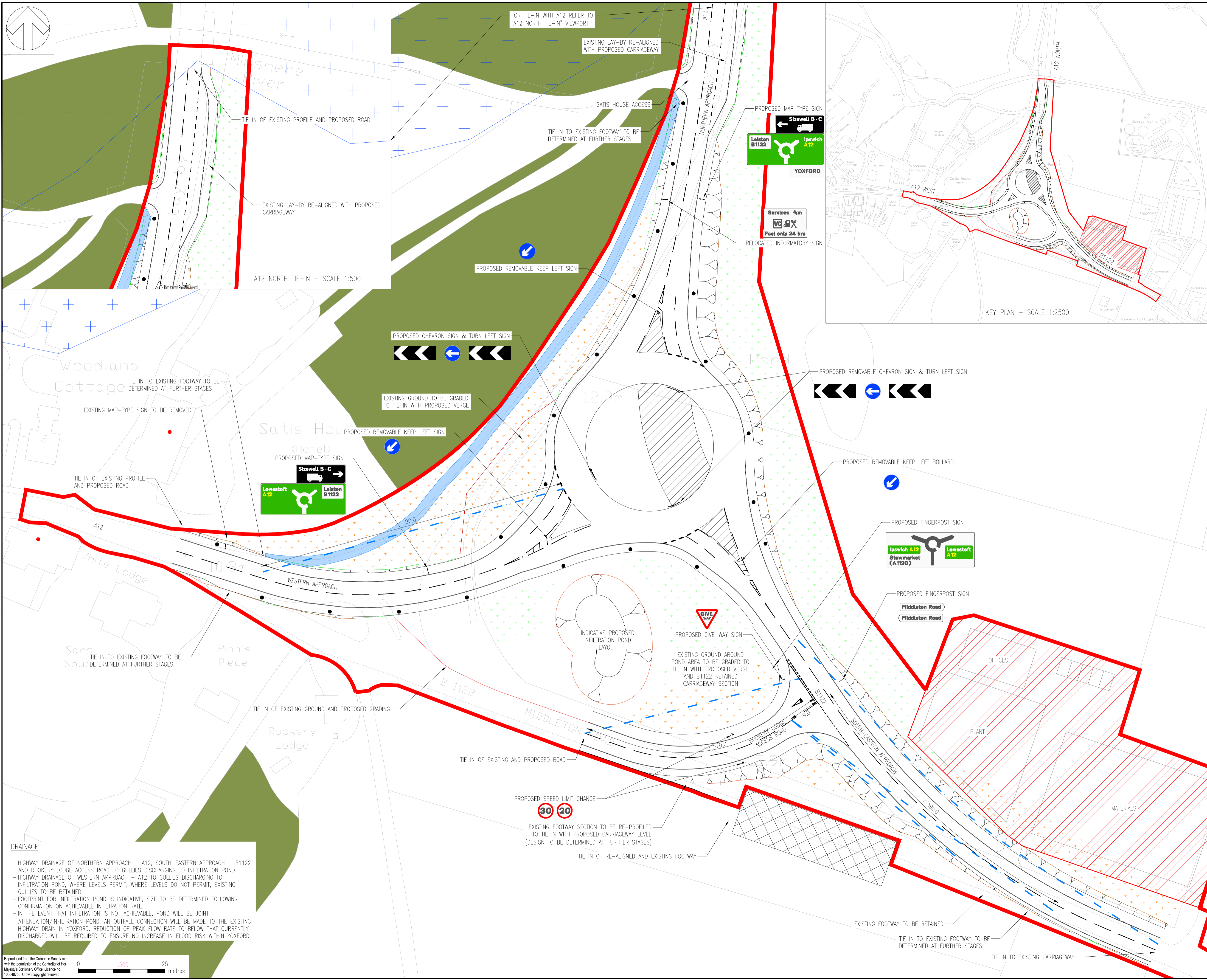
DRAINAGE

- IN THE AREA OF TIE-IN ON EXISTING A12 THE CURRENT HIGHWAY GULLIES ARE TO BE RETAINED
- IN THE AREA OF A12 DIVERGENCE TO NEW ROUNDABOUT AND FOR NEW ROAD HIGHWAY DRAINAGE IS TO BE TO SWALES.
- LOCATION OF SWALES IS INDICATIVE, CROSS SECTION TO BE FIXED FOLLOWING CONFIRMATION OF ACHIEVABLE INFILTRATION RATE.
- ROUNDABOUT HIGHWAY DRAINAGE IS TO BE TO GULLIES AND/OR COMBINED KERB, DRAINS WILL OUTFALL TO SWALE AND INFILTRATION POND.
- FOOTPRINT FOR INFILTRATION POND IS INDICATIVE, SIZE TO BE FIXED FOLLOWING CONFIRMATION OF ACHIEVABLE INFILTRATION RATE.



0 25 metres

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DO NOT SCALE

KEY

- RED LINE BOUNDARY
- EXISTING GROUND PROFILE (EARTHWORKS EXTENTS)
- PROPOSED FINISHED GROUND PROFILE
- Y Y Y Y EXTENT OF EARTHWORKS (CUT)
- △ △ △ △ EXTENT OF EARTHWORKS (FILL)
- - - VISIBILITY SPLAY
- DECIDUOUS WOODLAND
- ▨ PROTECTED FLORA (ASSUMED OUTLINE)
- +++ FLOOD RISK AREAS
- ▨ PROPOSED CONSTRUCTION COMPOUND
- ▨ PROPOSED LANDSCAPE EXTENT
- ▨ PROPOSED SOFT LANDSCAPE (BELOW 300mm)
- ▨ PROPOSED OVERRUNNABLE ISLAND FOR AIL VEHICLES
- EXISTING FOOTWAY UPGRADED TO 3m SHARED USE
- PROPOSED RETAINING WALL (HEIGHT <500mm)
- INDICATIVE TO 10m LIGHTING COLUMN. 0.4 UNIFORMITY
 - ROUNDABOUT LIGHTING TO 15 LUX AVERAGE
 - APPROACHES LIGHTING TO 10 LUX AVERAGE

KEY PLAN - SCALE 1:2500

A12 NORTH TIE-IN - SCALE 1:500

REV	DATE	BY	DESCRIPTION	CHK	APP
P08	23/08/2019	HM	PROPOSED SIGNS UPDATED	A	EH
P07	22/07/2019	ACC	DRAINAGE NOTE AND LIGHTING ADDED. UTILITIES REMOVED.	EW	EH
P06	30/05/2019	MSF	A12 LAY-BY ADDED	EH	EH
P05	24/05/2019	MSF	RED LINE BOUNDARY AMENDED	J	EH
P04	07/05/2019	MSF	ISSUED FOR COORDINATION FOLLOWING ROUNDABOUT AMENDMENTS	J	EH
P03	20/06/2018	HM	PROPOSED LANDSCAPE EXTENT ADDED	ACC	WF
P02	13/06/2018	LMM	CONSTRUCTION COMPOUND AREA ADDED	ACC	LMM
P01	31/05/2018	LMM	STAGE 3 PUBLIC CONSULTATION ISSUE	WF	LMM

DRAWING STATUS: **S3 - FOR REVIEW**

62-64 Hills Road, Cambridge, CB2 1LA, UK
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CLIENT: **EDF ENERGY**

ARCHITECT:

SITE PROJECT: **SIZEWELL C TRANSPORT PLANNING**

TITLE: **A12/B1122 ROUNDABOUT PROPOSED LAYOUT**

SCALE @ A1:	1:500	CHECKED:	MF	APPROVED:	LM
PROJECT NO:	50400326	DESIGNED:	ACC	DATE:	May 2018

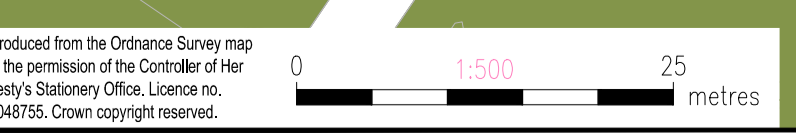
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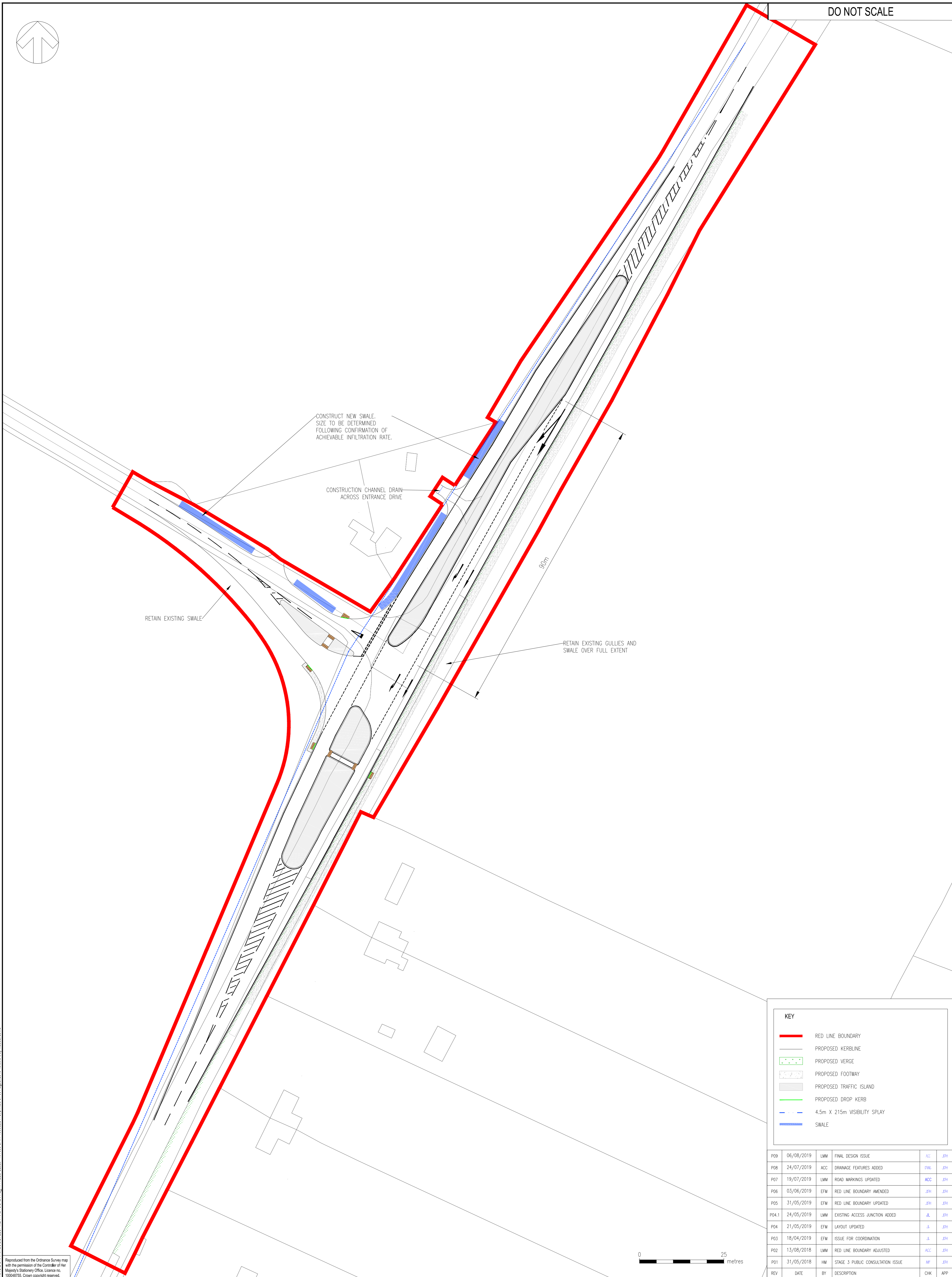
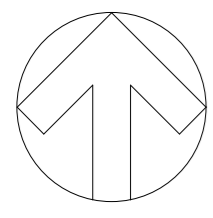
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File: szc_s3_15000235_SIZEWELL_C_TRANSPORT_PLANNING_DESIGN_AND_ANALYSIS/DEVELOPMENT/CD/02/ROUNDABOUTS/ROUNDABOUTS/0204-XX-000-DRW-100019.dwg, printed on 27 August 2019 17:51:16, by Colin Cousins, M366

DRAINAGE

- HIGHWAY DRAINAGE OF NORTHERN APPROACH - A12, SOUTH-EASTERN APPROACH - B1122 AND ROOKERY LODGE ACCESS ROAD TO GULLIES DISCHARGING TO INFILTRATION POND.
- HIGHWAY DRAINAGE OF WESTERN APPROACH - A12 TO GULLIES DISCHARGING TO INFILTRATION POND, WHERE LEVELS PERMIT, WHERE LEVELS DO NOT PERMIT, EXISTING GULLIES TO BE RETAINED.
- FOOTPRINT FOR INFILTRATION POND IS INDICATIVE, SIZE TO BE DETERMINED FOLLOWING CONFIRMATION ON ACHIEVABLE INFILTRATION RATE.
- IN THE EVENT THAT INFILTRATION IS NOT ACHIEVABLE, POND WILL BE JOINT ATTENUATION/INFILTRATION POND. AN OUTFALL CONNECTION WILL BE MADE TO THE EXISTING HIGHWAY DRAIN IN YOXFORD. REDUCTION OF PEAK FLOW RATE TO BELOW THAT CURRENTLY DISCHARGED WILL BE REQUIRED TO ENSURE NO INCREASE IN FLOOD RISK WITHIN YOXFORD.





KEY

- RED LINE BOUNDARY
- PROPOSED KERBLINE
- PROPOSED VERGE
- PROPOSED FOOTWAY
- PROPOSED TRAFFIC ISLAND
- PROPOSED DROP KERB
- 4.5m X 215m VISIBILITY SPLAY
- SWALE

REV	DATE	BY	DESCRIPTION	CHK	APP
P09	06/08/2019	LMM	FINAL DESIGN ISSUE	ACC	JDH
P08	24/07/2019	ACC	DRAINAGE FEATURES ADDED	JDH	JDH
P07	19/07/2019	LMM	ROAD MARKINGS UPDATED	ACC	JDH
P06	03/06/2019	EFM	RED LINE BOUNDARY AMENDED	JDH	JDH
P05	31/05/2019	EFM	RED LINE BOUNDARY UPDATED	JDH	JDH
P04.1	24/05/2019	LMM	EXISTING ACCESS JUNCTION ADDED	JL	JDH
P04	21/05/2019	EFM	LAYOUT UPDATED	JL	JDH
P03	18/04/2019	EFM	ISSUE FOR COORDINATION	JL	JDH
P02	13/08/2018	LMM	RED LINE BOUNDARY ADJUSTED	ACC	JDH
P01	31/05/2018	HW	STAGE 3 PUBLIC CONSULTATION ISSUE	WF	JDH



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<p>DRAWING STATUS:</p> <p style="text-align: center; font-weight: bold;">S3 - FOR REVIEW</p>	<p>62-64 Hills Road Cambridge CB2 1LA, UK</p> <p>T+ 44 (0) 1223 558 050 F+ 44 (0) 1223 558 051 wsp.com</p>	<p>CLIENT:</p> <p style="text-align: center; font-weight: bold;">EDF ENERGY</p> <p>ARCHITECT:</p>	<p>PROJECT:</p> <p style="text-align: center; font-weight: bold;">SIZEWELL C TRANSPORT PLANNING</p> <p>TITLE:</p> <p style="text-align: center; font-weight: bold;">A12 / A144 PROPOSED HIGHWAY LAYOUT</p>	<p>SCALE @ A1:</p> <p style="text-align: center; font-weight: bold;">1:500</p> <p>PROJECT No:</p> <p style="text-align: center; font-weight: bold;">50400326</p> <p>DRAWING No:</p> <p style="text-align: center; font-weight: bold;">SZC-SZ0204-XX-000-DRW-100052</p>	<p>CHECKED:</p> <p style="text-align: center; font-weight: bold;">JDH</p> <p>DESIGNED:</p> <p style="text-align: center; font-weight: bold;">ACC</p> <p>DRAWN:</p> <p style="text-align: center; font-weight: bold;">EFM</p> <p>DATE:</p> <p style="text-align: center; font-weight: bold;">MAY 19</p> <p>APPROVED:</p> <p style="text-align: center; font-weight: bold;">JDH</p> <p>REV:</p> <p style="text-align: center; font-weight: bold;">P09</p>
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File name: P:\6200326\SIZEWELL_C_TRANSPORT_PLANNING\DRAWING\OUTPUT\DATA\A12_A144_SZC-SZ0204-XX-000-DRW-100052.DWG, printed on 02 August 2019 15:02:31, by Nicola Lewis



62-64 Hills Road
Cambridge
CB2 1LA

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APPENDIX 9C: DETAILED RESULTS FROM SCOPED-IN JUNCTION MODELS

Contents

- Detailed Model Outputs for the Scoped-In Junctions

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk
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Filename: 2019.09.23_J1_Model_SCC_v11_B1078widthfixed.j9

Path: \\ser01cam1uk.uk.wspgroup.com\projects\50400326 - Sizewell C transport planning\D Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\v11\J1\Model

Report generation date: 13/03/2020 11:11:19

- »Base Year, 6-7 AM
- »Base Year, 7-8 AM
- »Base Year, 8-9 AM
- »Base Year, 3-4 PM
- »Base Year, 5-6 PM
- »2023 Reference Case , 6-7 AM
- »2023 Reference Case , 7-8 AM
- »2023 Reference Case , 8-9 AM
- »2023 Reference Case , 3-4 PM
- »2023 Reference Case , 5-6 PM
- »2023 Early Years , 6-7 AM
- »2023 Early Years , 7-8 AM
- »2023 Early Years , 8-9 AM
- »2023 Early Years , 3-4 PM
- »2023 Early Years , 5-6 PM
- »2028 Reference Case , 6-7 AM
- »2028 Reference Case , 7-8 AM
- »2028 Reference Case , 8-9 AM
- »2028 Reference Case , 3-4 PM
- »2028 Reference Case , 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case , 6-7 AM
- »2034 Reference Case , 7-8 AM
- »2034 Reference Case , 8-9 AM
- »2034 Reference Case , 3-4 PM
- »2034 Reference Case , 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM				7-8 AM				8-9 AM				3-4 PM				5-6 PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
Base Year																				
Stream B-ACD	0.2	7.64	0.16	A	0.5	10.92	0.35	B	1.7	20.51	0.63	C	0.5	10.74	0.35	B	0.5	10.08	0.33	B
Stream A-D	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream D-ABC	0.1	7.83	0.12	A	0.5	11.38	0.34	B	0.9	14.89	0.47	B	0.7	12.38	0.43	B	0.9	13.02	0.47	B
Stream C-ABD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
2023 Reference Case																				
Stream B-ACD	0.3	8.10	0.21	A	1.3	16.88	0.57	C	8.3	75.48	0.93	F	2.4	24.30	0.71	C	1.2	15.27	0.55	C
Stream A-D	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream D-ABC	0.2	7.96	0.14	A	0.6	12.54	0.39	B	1.2	18.21	0.56	C	1.5	18.07	0.60	C	1.5	17.53	0.60	C
Stream C-ABD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
2023 Early Years																				
Stream B-ACD	0.3	8.11	0.21	A	1.4	17.40	0.58	C	8.5	77.45	0.93	F	2.9	28.16	0.75	D	1.3	15.98	0.57	C
Stream A-D	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream D-ABC	0.2	8.16	0.17	A	0.7	13.14	0.42	B	1.3	18.57	0.57	C	1.5	18.74	0.61	C	1.6	18.26	0.61	C

Stream C-ABD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
2028 Reference Case																				
Stream B-ACD	0.3	8.01	0.20	A	0.6	11.84	0.39	B	5.0	48.80	0.86	E	0.8	12.61	0.44	B	1.0	13.76	0.49	B
Stream A-D	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream D-ABC	0.2	8.19	0.16	A	0.7	12.90	0.41	B	1.6	21.07	0.63	C	1.5	18.16	0.60	C	2.0	21.46	0.67	C
Stream C-ABD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
2028 Peak Construction																				
Stream B-ACD	0.3	8.03	0.20	A	0.7	12.31	0.41	B	4.8	47.05	0.85	E	1.1	15.17	0.53	C	1.1	14.96	0.53	B
Stream A-D	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream D-ABC	0.4	9.36	0.28	A	1.1	15.56	0.52	C	2.2	25.82	0.70	D	1.7	19.99	0.63	C	2.5	25.53	0.72	D
Stream C-ABD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
2034 Reference Case																				
Stream B-ACD	0.3	8.40	0.23	A	0.8	13.24	0.45	B	8.3	76.10	0.93	F	2.3	24.83	0.70	C	1.3	17.26	0.58	C
Stream A-D	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream D-ABC	0.2	8.30	0.16	A	1.0	14.95	0.49	B	3.6	38.06	0.80	E	2.6	27.91	0.73	D	5.7	51.46	0.87	F
Stream C-ABD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
2034 Operational Led																				
Stream B-ACD	0.3	8.39	0.23	A	0.8	13.25	0.45	B	8.9	80.80	0.94	F	1.9	21.82	0.66	C	1.4	17.57	0.58	C
Stream A-D	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
Stream D-ABC	0.2	8.30	0.16	A	1.0	14.96	0.49	B	3.7	38.95	0.80	E	2.7	28.43	0.74	D	5.7	51.11	0.87	F
Stream C-ABD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

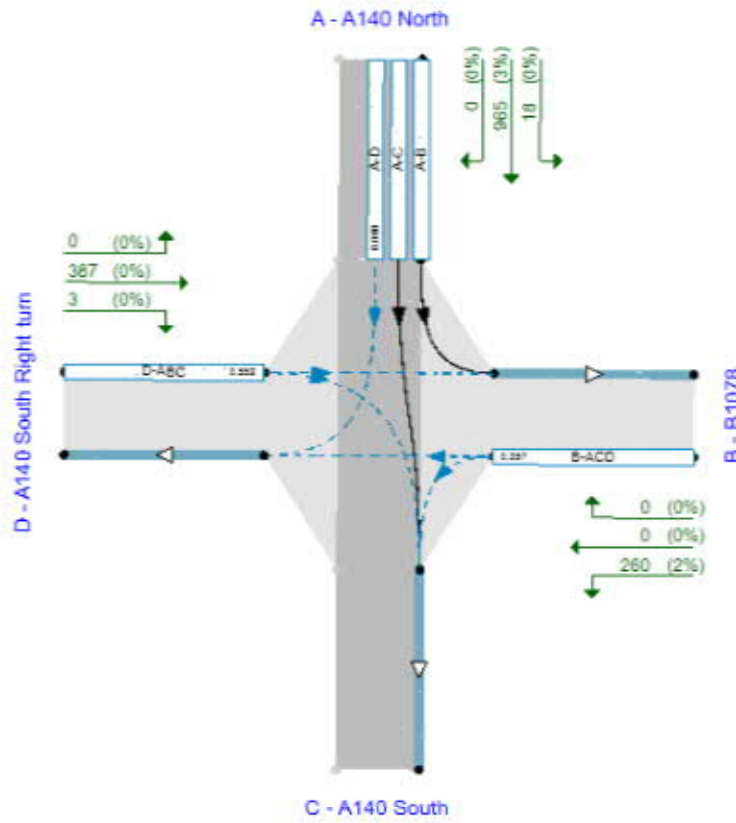
File summary

File Description

Title	A140 / B1078
Location	52.150570°, 1.085415°
Site number	1
Date	11/10/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKWSPGROUP\ukjgm001
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (left)
Streams (downstream) show RFC (%)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		1.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A140 North		Major
B	B1078		Minor
C	A140 South		Major
D	A140 South Right turn		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - A140 North	7.30			250.0		-
C - A140 South	7.30				✓	

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - B1078	One lane	3.40	53	52
D - A140 South Right turn	One lane	3.00	52	250

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	719	-	-	-	-	-	-	0.174	0.249	0.174	-	-	-
B-A	541	0.062	0.156	0.156	-	-	-	0.098	0.223	-	0.156	0.156	0.078
B-C	683	0.066	0.166	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	541	0.062	0.156	0.156	-	-	-	0.098	0.223	0.098	-	-	-
B-D, offside lane	541	0.062	0.156	0.156	-	-	-	0.098	0.223	0.098	-	-	-
C-B	574	0.139	0.139	0.199	-	-	-	-	-	-	-	-	-
D-A	781	-	-	-	-	-	-	0.189	-	0.075	-	-	-
D-B, nearside lane	619	0.112	0.112	0.255	-	-	-	0.178	0.178	0.071	-	-	-
D-B, offside lane	619	0.112	0.112	0.255	-	-	-	0.178	0.178	0.071	-	-	-
D-C	619	-	0.112	0.255	0.089	0.178	0.178	0.178	0.178	0.071	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	405	100.000
B - B1078		ONE HOUR	✓	83	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	59	100.000

Origin-Destination Data

Demand (Veh/hr)

From		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
	A - A140 North	0	2	403	0
	B - B1078	0	0	83	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	58	1	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
	A - A140 North	0	0	17	0
	B - B1078	0	0	6	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.16	7.64	0.2	A	76	114
A-B					2	3
A-C					370	555
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.12	7.83	0.1	A	54	81
C-ABD	0.00	0.00	0.0	A	0	0
C-D					0	0
C-A					0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	62	16	588	0.106	62	0.0	0.1	6.835	A
A-B	2	0.38			2				
A-C	303	76			303				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	44	11	542	0.082	44	0.0	0.1	7.227	A
C-ABD	0	0	524	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	75	19	577	0.129	74	0.1	0.1	7.155	A
A-B	2	0.45			2				
A-C	362	91			362				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	53	13	535	0.099	53	0.1	0.1	7.475	A
C-ABD	0	0	515	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	91	23	563	0.162	91	0.1	0.2	7.638	A
A-B	2	0.55			2				
A-C	444	111			444				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	65	16	524	0.124	65	0.1	0.1	7.832	A
C-ABD	0	0	501	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	91	23	563	0.162	91	0.2	0.2	7.640	A
A-B	2	0.55			2				
A-C	444	111			444				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	65	16	524	0.124	65	0.1	0.1	7.835	A
C-ABD	0	0	501	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	75	19	577	0.129	75	0.2	0.1	7.163	A
A-B	2	0.45			2				
A-C	362	91			362				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	53	13	535	0.099	53	0.1	0.1	7.482	A
C-ABD	0	0	515	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	62	16	588	0.106	63	0.1	0.1	6.851	A
A-B	2	0.38			2				
A-C	303	76			303				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	44	11	542	0.082	45	0.1	0.1	7.238	A
C-ABD	0	0	524	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		2.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	870	100.000
B - B1078		ONE HOUR	✓	160	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	150	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	23	847	0
	B - B1078	0	0	160	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	146	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	10	0
	B - B1078	0	0	1	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.35	10.92	0.5	B	147	220
A-B					21	32
A-C					777	1166
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.34	11.38	0.5	B	138	206
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	120	30	559	0.215	119	0.0	0.3	8.170	A
A-B	17	4			17				
A-C	638	159			638				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	113	28	517	0.218	112	0.0	0.3	8.854	A
C-ABD	0	0	474	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	144	36	537	0.268	143	0.3	0.4	9.149	A
A-B	21	5			21				
A-C	761	190			761				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	135	34	502	0.268	135	0.3	0.4	9.780	A
C-ABD	0	0	455	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	176	44	506	0.348	176	0.4	0.5	10.883	B
A-B	25	6			25				
A-C	933	233			933				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	165	41	481	0.343	165	0.4	0.5	11.344	B
C-ABD	0	0	428	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	176	44	506	0.348	176	0.5	0.5	10.924	B
A-B	25	6			25				
A-C	933	233			933				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	165	41	481	0.343	165	0.5	0.5	11.381	B
C-ABD	0	0	428	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	144	36	537	0.268	144	0.5	0.4	9.195	A
A-B	21	5			21				
A-C	761	190			761				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	135	34	502	0.268	135	0.5	0.4	9.829	A
C-ABD	0	0	455	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	120	30	559	0.215	121	0.4	0.3	8.223	A
A-B	17	4			17				
A-C	638	159			638				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	113	28	517	0.218	113	0.4	0.3	8.917	A
C-ABD	0	0	474	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		5.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	922	100.000
B - B1078		ONE HOUR	✓	271	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	196	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	27	895	0
	B - B1078	0	0	271	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	191	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	4	10	0
	B - B1078	0	0	6	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.63	20.51	1.7	C	249	373
A-B					25	37
A-C					821	1232
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.47	14.89	0.9	B	180	270
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	204	51	527	0.387	202	0.0	0.6	10.966	B
A-B	20	5			20				
A-C	674	168			674				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	148	37	495	0.298	146	0.0	0.4	10.276	B
C-ABD	0	0	468	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	244	61	505	0.483	242	0.6	0.9	13.663	B
A-B	24	6			24				
A-C	805	201			805				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	176	44	479	0.368	176	0.4	0.6	11.841	B
C-ABD	0	0	447	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	298	75	473	0.630	296	0.9	1.6	19.935	C
A-B	30	7			30				
A-C	985	246			985				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	216	54	457	0.472	215	0.6	0.9	14.753	B
C-ABD	0	0	419	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	298	75	473	0.630	298	1.6	1.7	20.508	C
A-B	30	7			30				
A-C	985	246			985				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	216	54	457	0.472	216	0.9	0.9	14.891	B
C-ABD	0	0	419	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	244	61	505	0.483	246	1.7	1.0	14.084	B
A-B	24	6			24				
A-C	805	201			805				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	176	44	479	0.368	177	0.9	0.6	11.983	B
C-ABD	0	0	447	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	204	51	527	0.387	205	1.0	0.6	11.219	B
A-B	20	5			20				
A-C	674	168			674				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	148	37	495	0.298	148	0.6	0.4	10.413	B
C-ABD	0	0	468	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		3.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	701	100.000
B - B1078		ONE HOUR	✓	163	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	196	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	17	684	0
	B - B1078	0	0	163	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	191	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	6	11	0
	B - B1078	0	0	6	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.35	10.74	0.5	B	150	224
A-B					16	23
A-C					628	941
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.43	12.38	0.7	B	180	270
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	123	31	556	0.221	122	0.0	0.3	8.260	A
A-B	13	3			13				
A-C	515	129			515				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	148	37	536	0.275	146	0.0	0.4	9.193	A
C-ABD	0	0	492	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	147	37	539	0.272	146	0.3	0.4	9.159	A
A-B	15	4			15				
A-C	615	154			615				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	176	44	524	0.336	176	0.4	0.5	10.327	B
C-ABD	0	0	477	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	179	45	515	0.349	179	0.4	0.5	10.703	B
A-B	19	5			19				
A-C	753	188			753				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	216	54	506	0.426	215	0.5	0.7	12.307	B
C-ABD	0	0	455	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	179	45	515	0.349	179	0.5	0.5	10.741	B
A-B	19	5			19				
A-C	753	188			753				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	216	54	506	0.426	216	0.7	0.7	12.380	B
C-ABD	0	0	455	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	147	37	539	0.272	147	0.5	0.4	9.204	A
A-B	15	4			15				
A-C	615	154			615				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	176	44	524	0.336	177	0.7	0.5	10.410	B
C-ABD	0	0	477	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	123	31	556	0.221	123	0.4	0.3	8.314	A
A-B	13	3			13				
A-C	515	129			515				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	148	37	536	0.275	148	0.5	0.4	9.289	A
C-ABD	0	0	492	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		4.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	717	100.000
B - B1078		ONE HOUR	✓	159	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	225	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	19	698	0
	B - B1078	0	0	159	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	222	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	4	0
	B - B1078	0	0	3	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.33	10.08	0.5	B	146	219
A-B					17	26
A-C					640	961
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.47	13.02	0.9	B	206	310
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	120	30	573	0.209	119	0.0	0.3	7.902	A
A-B	14	4			14				
A-C	525	131			525				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	169	42	553	0.306	168	0.0	0.4	9.297	A
C-ABD	0	0	496	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	143	36	556	0.257	143	0.3	0.3	8.702	A
A-B	17	4			17				
A-C	627	157			627				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	202	51	541	0.374	202	0.4	0.6	10.592	B
C-ABD	0	0	481	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	175	44	532	0.329	174	0.3	0.5	10.049	B
A-B	21	5			21				
A-C	769	192			769				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	248	62	524	0.473	247	0.6	0.9	12.920	B
C-ABD	0	0	460	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	175	44	532	0.329	175	0.5	0.5	10.081	B
A-B	21	5			21				
A-C	769	192			769				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	248	62	524	0.473	248	0.9	0.9	13.022	B
C-ABD	0	0	460	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	143	36	556	0.257	143	0.5	0.4	8.740	A
A-B	17	4			17				
A-C	627	157			627				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	202	51	541	0.374	203	0.9	0.6	10.702	B
C-ABD	0	0	481	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	120	30	573	0.209	120	0.4	0.3	7.951	A
A-B	14	4			14				
A-C	525	131			525				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	169	42	553	0.306	170	0.6	0.4	9.414	A
C-ABD	0	0	496	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2023 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		2.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	447	100.000
B - B1078		ONE HOUR	✓	105	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	3	444	0
	B - B1078	0	0	105	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	67	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	16	0
	B - B1078	0	0	5	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.21	8.10	0.3	A	96	145
A-B					3	4
A-C					407	611
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.14	7.96	0.2	A	63	94
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	79	20	589	0.134	78	0.0	0.2	7.048	A
A-B	2	0.52			2				
A-C	334	84			334				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	51	13	547	0.094	51	0.0	0.1	7.255	A
C-ABD	0	0	520	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	94	24	577	0.164	94	0.2	0.2	7.460	A
A-B	2	0.62			2				
A-C	399	100			399				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	61	15	539	0.114	61	0.1	0.1	7.538	A
C-ABD	0	0	509	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	116	29	560	0.206	115	0.2	0.3	8.088	A
A-B	3	0.76			3				
A-C	489	122			489				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	75	19	527	0.142	75	0.1	0.2	7.953	A
C-ABD	0	0	495	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	116	29	560	0.206	116	0.3	0.3	8.095	A
A-B	3	0.76			3				
A-C	489	122			489				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	75	19	527	0.142	75	0.2	0.2	7.958	A
C-ABD	0	0	495	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	94	24	577	0.164	95	0.3	0.2	7.471	A
A-B	2	0.62			2				
A-C	399	100			399				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	61	15	539	0.114	61	0.2	0.1	7.549	A
C-ABD	0	0	509	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	79	20	589	0.134	79	0.2	0.2	7.072	A
A-B	2	0.52			2				
A-C	334	84			334				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	51	13	547	0.094	51	0.1	0.1	7.272	A
C-ABD	0	0	520	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2023 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		4.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	953	100.000
B - B1078		ONE HOUR	✓	256	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	168	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	25	928	0
	B - B1078	0	0	256	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	164	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	9	0
	B - B1078	0	0	1	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.57	16.88	1.3	C	235	352
A-B					22	34
A-C					852	1278
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.39	12.54	0.6	B	154	232
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	193	48	553	0.348	190	0.0	0.5	9.876	A
A-B	18	5			18				
A-C	699	175			699				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	127	32	512	0.248	125	0.0	0.3	9.289	A
C-ABD	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	230	57	528	0.435	229	0.5	0.8	11.987	B
A-B	22	6			22				
A-C	835	209			835				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	151	38	495	0.305	151	0.3	0.4	10.440	B
C-ABD	0	0	445	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	282	70	494	0.569	279	0.8	1.3	16.583	C
A-B	27	7			27				
A-C	1022	256			1022				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	185	46	472	0.392	184	0.4	0.6	12.469	B
C-ABD	0	0	416	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	282	70	494	0.569	281	1.3	1.3	16.879	C
A-B	27	7			27				
A-C	1022	256			1022				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	185	46	472	0.392	185	0.6	0.6	12.536	B
C-ABD	0	0	416	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	230	57	528	0.435	232	1.3	0.8	12.225	B
A-B	22	6			22				
A-C	835	209			835				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	151	38	495	0.305	152	0.6	0.4	10.516	B
C-ABD	0	0	445	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	193	48	553	0.348	193	0.8	0.5	10.044	B
A-B	18	5			18				
A-C	699	175			699				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	127	32	512	0.248	127	0.4	0.3	9.372	A
C-ABD	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2023 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		19.43	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	1056	100.000
B - B1078		ONE HOUR	✓	386	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	226	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	28	1028	0
	B - B1078	0	0	386	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	221	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	3	9	0
	B - B1078	0	0	4	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.93	75.48	8.3	F	355	532
A-B					25	38
A-C					943	1415
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.56	18.21	1.2	C	208	312
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	291	73	521	0.558	286	0.0	1.2	15.017	C
A-B	21	5			21				
A-C	774	193			774				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	170	43	489	0.348	168	0.0	0.5	11.143	B
C-ABD	0	0	454	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	347	87	495	0.702	344	1.2	2.2	23.165	C
A-B	25	6			25				
A-C	924	231			924				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	204	51	471	0.432	203	0.5	0.7	13.347	B
C-ABD	0	0	431	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	426	106	459	0.927	407	2.2	6.8	55.667	F
A-B	31	8			31				
A-C	1132	283			1132				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	249	62	447	0.558	247	0.7	1.2	17.885	C
C-ABD	0	0	399	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	426	106	459	0.927	420	6.8	8.3	75.479	F
A-B	31	8			31				
A-C	1132	283			1132				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	249	62	447	0.558	249	1.2	1.2	18.205	C
C-ABD	0	0	399	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	347	87	495	0.702	370	8.3	2.6	32.904	D
A-B	25	6			25				
A-C	924	231			924				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	204	51	471	0.432	205	1.2	0.8	13.624	B
C-ABD	0	0	431	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	291	73	521	0.558	296	2.6	1.3	16.314	C
A-B	21	5			21				
A-C	774	193			774				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	170	43	489	0.348	171	0.8	0.5	11.355	B
C-ABD	0	0	454	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2023 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		8.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	845	100.000
B - B1078		ONE HOUR	✓	329	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	268	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	20	825	0
	B - B1078	0	0	329	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	263	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	5	9	0
	B - B1078	0	0	2	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.71	24.30	2.4	C	302	452
A-B					18	28
A-C					757	1135
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.60	18.07	1.5	C	246	369
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	247	62	560	0.442	244	0.0	0.8	11.301	B
A-B	15	4			15				
A-C	621	155			621				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	202	50	530	0.381	199	0.0	0.6	10.828	B
C-ABD	0	0	478	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	295	74	538	0.549	294	0.8	1.2	14.619	B
A-B	18	5			18				
A-C	741	185			741				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	241	60	515	0.468	240	0.6	0.9	13.057	B
C-ABD	0	0	459	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	362	90	509	0.711	357	1.2	2.3	23.135	C
A-B	22	6			22				
A-C	908	227			908				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	295	74	494	0.598	293	0.9	1.4	17.707	C
C-ABD	0	0	433	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	362	90	509	0.711	361	2.3	2.4	24.299	C
A-B	22	6			22				
A-C	908	227			908				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	295	74	494	0.598	295	1.4	1.5	18.070	C
C-ABD	0	0	433	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	295	74	538	0.549	300	2.4	1.3	15.352	C
A-B	18	5			18				
A-C	741	185			741				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	241	60	515	0.468	243	1.5	0.9	13.372	B
C-ABD	0	0	459	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	247	62	560	0.442	249	1.3	0.8	11.655	B
A-B	15	4			15				
A-C	621	155			621				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	202	50	530	0.381	203	0.9	0.6	11.063	B
C-ABD	0	0	478	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2023 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		6.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	820	100.000
B - B1078		ONE HOUR	✓	261	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	279	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	20	800	0
	B - B1078	0	0	261	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	276	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	4	0
	B - B1078	0	0	1	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.55	15.27	1.2	C	239	359
A-B					18	27
A-C					734	1101
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.60	17.53	1.5	C	256	384
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	196	49	570	0.344	194	0.0	0.5	9.528	A
A-B	15	4			15				
A-C	602	151			602				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	210	52	545	0.385	208	0.0	0.6	10.588	B
C-ABD	0	0	485	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	234	59	550	0.426	234	0.5	0.7	11.342	B
A-B	18	4			18				
A-C	719	180			719				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	251	63	531	0.472	250	0.6	0.9	12.738	B
C-ABD	0	0	468	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	287	72	523	0.549	285	0.7	1.2	15.054	C
A-B	22	5			22				
A-C	881	220			881				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	307	77	512	0.600	305	0.9	1.4	17.215	C
C-ABD	0	0	444	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	287	72	523	0.549	287	1.2	1.2	15.269	C
A-B	22	5			22				
A-C	881	220			881				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	307	77	512	0.600	307	1.4	1.5	17.532	C
C-ABD	0	0	444	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	234	59	550	0.426	236	1.2	0.8	11.529	B
A-B	18	4			18				
A-C	719	180			719				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	251	63	531	0.472	253	1.5	0.9	13.034	B
C-ABD	0	0	468	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	196	49	570	0.344	197	0.8	0.5	9.678	A
A-B	15	4			15				
A-C	602	151			602				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	210	52	545	0.385	211	0.9	0.6	10.813	B
C-ABD	0	0	485	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2023 Early Years , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		2.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	448	100.000
B - B1078		ONE HOUR	✓	106	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	82	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	3	445	0
	B - B1078	0	0	106	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	81	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	16	0
	B - B1078	0	0	5	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.21	8.11	0.3	A	97	146
A-B					3	4
A-C					408	613
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.17	8.16	0.2	A	75	113
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	80	20	589	0.136	79	0.0	0.2	7.056	A
A-B	2	0.52			2				
A-C	335	84			335				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	62	15	551	0.112	61	0.0	0.1	7.340	A
C-ABD	0	0	520	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	95	24	577	0.165	95	0.2	0.2	7.472	A
A-B	2	0.62							
A-C	400	100			400				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	74	18	543	0.136	74	0.1	0.2	7.668	A
C-ABD	0	0	509	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	117	29	560	0.208	116	0.2	0.3	8.104	A
A-B	3	0.76			3				
A-C	490	122			490				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	90	23	532	0.170	90	0.2	0.2	8.150	A
C-ABD	0	0	495	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	117	29	560	0.208	117	0.3	0.3	8.114	A
A-B	3	0.76			3				
A-C	490	122			490				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	90	23	532	0.170	90	0.2	0.2	8.156	A
C-ABD	0	0	495	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	95	24	577	0.165	96	0.3	0.2	7.483	A
A-B	2	0.62			2				
A-C	400	100			400				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	74	18	543	0.136	74	0.2	0.2	7.677	A
C-ABD	0	0	509	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	80	20	589	0.136	80	0.2	0.2	7.078	A
A-B	2	0.52			2				
A-C	335	84			335				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	62	15	551	0.112	62	0.2	0.1	7.361	A
C-ABD	0	0	520	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2023 Early Years , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		4.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	964	100.000
B - B1078		ONE HOUR	✓	260	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	180	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	25	939	0
	B - B1078	0	0	260	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	176	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	9	0
	B - B1078	0	0	1	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.58	17.40	1.4	C	238	357
A-B					22	34
A-C					862	1293
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.42	13.14	0.7	B	165	248
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	196	49	552	0.355	193	0.0	0.5	9.992	A
A-B	18	5			18				
A-C	707	177			707				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	136	34	512	0.265	134	0.0	0.4	9.496	A
C-ABD	0	0	464	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	233	58	527	0.443	233	0.5	0.8	12.194	B
A-B	22	6			22				
A-C	844	211			844				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	162	41	495	0.327	162	0.4	0.5	10.768	B
C-ABD	0	0	443	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	286	71	492	0.581	284	0.8	1.3	17.069	C
A-B	27	7			27				
A-C	1034	259			1034				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	198	50	472	0.420	198	0.5	0.7	13.061	B
C-ABD	0	0	414	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	286	71	492	0.581	286	1.3	1.4	17.395	C
A-B	27	7			27				
A-C	1034	259			1034				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	198	50	472	0.420	198	0.7	0.7	13.144	B
C-ABD	0	0	414	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	233	58	527	0.443	236	1.4	0.8	12.457	B
A-B	22	6			22				
A-C	844	211			844				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	162	41	495	0.327	163	0.7	0.5	10.860	B
C-ABD	0	0	443	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	196	49	552	0.355	197	0.8	0.6	10.171	B
A-B	18	5			18				
A-C	707	177			707				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	136	34	512	0.265	136	0.5	0.4	9.593	A
C-ABD	0	0	464	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2023 Early Years , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		19.70	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	1073	100.000
B - B1078		ONE HOUR	✓	385	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	228	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	28	1045	0
	B - B1078	0	0	385	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	223	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	3	8	0
	B - B1078	0	0	4	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.93	77.45	8.5	F	354	531
A-B					25	38
A-C					959	1438
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.57	18.57	1.3	C	210	314
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	290	73	519	0.559	285	0.0	1.2	15.100	C
A-B	21	5			21				
A-C	787	197			787				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	172	43	488	0.352	170	0.0	0.5	11.232	B
C-ABD	0	0	452	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	347	87	493	0.703	343	1.2	2.2	23.393	C
A-B	25	6			25				
A-C	939	235			939				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	205	51	470	0.437	204	0.5	0.8	13.500	B
C-ABD	0	0	429	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	424	106	456	0.931	405	2.2	7.0	56.790	F
A-B	31	8			31				
A-C	1150	288			1150				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	251	63	445	0.565	250	0.8	1.2	18.224	C
C-ABD	0	0	396	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	424	106	456	0.931	418	7.0	8.5	77.448	F
A-B	31	8			31				
A-C	1150	288			1150				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	251	63	445	0.565	251	1.2	1.3	18.571	C
C-ABD	0	0	396	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	347	87	493	0.703	370	8.5	2.6	33.730	D
A-B	25	6			25				
A-C	939	235			939				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	205	51	470	0.437	207	1.3	0.8	13.799	B
C-ABD	0	0	429	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	290	73	519	0.559	295	2.6	1.3	16.425	C
A-B	21	5			21				
A-C	787	197			787				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	172	43	488	0.352	173	0.8	0.6	11.453	B
C-ABD	0	0	452	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2023 Early Years , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		9.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	859	100.000
B - B1078		ONE HOUR	✓	346	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	273	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	20	839	0
	B - B1078	0	0	346	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	268	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	5	9	0
	B - B1078	0	0	2	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.75	28.16	2.9	D	317	476
A-B					18	28
A-C					769	1154
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.61	18.74	1.5	C	251	376
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	260	65	559	0.466	257	0.0	0.9	11.804	B
A-B	15	4			15				
A-C	631	158			631				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	206	51	529	0.389	203	0.0	0.6	10.984	B
C-ABD	0	0	476	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	311	78	537	0.579	309	0.9	1.3	15.663	C
A-B	18	5			18				
A-C	754	188			754				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	246	61	513	0.478	244	0.6	0.9	13.332	B
C-ABD	0	0	457	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	381	95	506	0.751	375	1.3	2.7	26.294	D
A-B	22	6			22				
A-C	923	231			923				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	301	75	492	0.611	298	0.9	1.5	18.323	C
C-ABD	0	0	431	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	381	95	506	0.751	380	2.7	2.9	28.159	D
A-B	22	6			22				
A-C	923	231			923				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	301	75	492	0.611	301	1.5	1.5	18.742	C
C-ABD	0	0	431	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	311	78	537	0.579	316	2.9	1.4	16.735	C
A-B	18	5			18				
A-C	754	188			754				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	246	61	513	0.478	248	1.5	0.9	13.685	B
C-ABD	0	0	457	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	260	65	559	0.466	262	1.4	0.9	12.242	B
A-B	15	4			15				
A-C	631	158			631				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	206	51	528	0.389	207	0.9	0.6	11.234	B
C-ABD	0	0	476	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2023 Early Years , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		6.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	843	100.000
B - B1078		ONE HOUR	✓	267	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	284	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	20	823	0
	B - B1078	0	0	267	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	281	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	3	0
	B - B1078	0	0	1	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.57	15.98	1.3	C	245	367
A-B					18	27
A-C					755	1133
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.61	18.26	1.6	C	261	391
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	201	50	567	0.354	199	0.0	0.5	9.708	A
A-B	15	4			15				
A-C	619	155			619				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	214	53	543	0.393	211	0.0	0.6	10.758	B
C-ABD	0	0	483	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	240	60	547	0.439	239	0.5	0.8	11.652	B
A-B	18	4			18				
A-C	740	185			740				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	255	64	529	0.482	254	0.6	0.9	13.040	B
C-ABD	0	0	465	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	294	73	519	0.566	292	0.8	1.3	15.726	C
A-B	22	5			22				
A-C	906	226			906				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	313	78	509	0.614	310	0.9	1.5	17.855	C
C-ABD	0	0	441	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	294	73	519	0.566	294	1.3	1.3	15.981	C
A-B	22	5			22				
A-C	906	226			906				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	313	78	509	0.614	312	1.5	1.6	18.256	C
C-ABD	0	0	441	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	240	60	547	0.439	242	1.3	0.8	11.871	B
A-B	18	4			18				
A-C	740	185			740				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	255	64	529	0.482	258	1.6	1.0	13.377	B
C-ABD	0	0	465	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	201	50	567	0.354	202	0.8	0.6	9.872	A
A-B	15	4			15				
A-C	619	155			619				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	214	53	543	0.393	215	1.0	0.7	11.001	B
C-ABD	0	0	483	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2028 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		2.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	458	100.000
B - B1078		ONE HOUR	✓	103	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	74	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	3	455	0
	B - B1078	0	0	103	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	73	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	16	0
	B - B1078	0	0	4	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.20	8.01	0.3	A	95	142
A-B					3	4
A-C					418	626
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.16	8.19	0.2	A	68	102
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	78	19	592	0.131	77	0.0	0.1	6.984	A
A-B	2	0.52			2				
A-C	343	86			343				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	56	14	541	0.103	55	0.0	0.1	7.409	A
C-ABD	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	93	23	580	0.160	92	0.1	0.2	7.387	A
A-B	2	0.62			2				
A-C	409	102			409				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	67	17	533	0.125	67	0.1	0.1	7.722	A
C-ABD	0	0	508	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	113	28	563	0.202	113	0.2	0.2	8.004	A
A-B	3	0.76			3				
A-C	501	125			501				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	82	20	521	0.157	81	0.1	0.2	8.179	A
C-ABD	0	0	493	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	113	28	563	0.202	113	0.2	0.3	8.012	A
A-B	3	0.76			3				
A-C	501	125			501				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	82	20	521	0.157	82	0.2	0.2	8.188	A
C-ABD	0	0	493	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	93	23	580	0.160	93	0.3	0.2	7.400	A
A-B	2	0.62			2				
A-C	409	102			409				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	67	17	533	0.125	67	0.2	0.1	7.732	A
C-ABD	0	0	508	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	78	19	592	0.131	78	0.2	0.2	7.002	A
A-B	2	0.52			2				
A-C	343	86			343				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	56	14	541	0.103	56	0.1	0.1	7.424	A
C-ABD	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2028 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		3.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	930	100.000
B - B1078		ONE HOUR	✓	178	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	179	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	25	905	0
	B - B1078	0	0	178	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	175	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	9	0
	B - B1078	0	0	0	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.39	11.84	0.6	B	163	245
A-B					22	34
A-C					831	1246
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.41	12.90	0.7	B	164	247
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	134	33	557	0.240	133	0.0	0.3	8.454	A
A-B	18	5			18				
A-C	682	170			682				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	135	34	515	0.262	134	0.0	0.4	9.411	A
C-ABD	0	0	468	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	160	40	533	0.300	159	0.3	0.4	9.620	A
A-B	22	6			22				
A-C	814	203			814				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	161	40	499	0.323	161	0.4	0.5	10.638	B
C-ABD	0	0	447	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	196	49	500	0.392	195	0.4	0.6	11.774	B
A-B	27	7			27				
A-C	997	249			997				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	197	49	476	0.414	196	0.5	0.7	12.824	B
C-ABD	0	0	419	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	196	49	500	0.392	196	0.6	0.6	11.836	B
A-B	27	7			27				
A-C	997	249			997				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	197	49	476	0.414	197	0.7	0.7	12.902	B
C-ABD	0	0	419	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	160	40	533	0.300	161	0.6	0.4	9.686	A
A-B	22	6			22				
A-C	814	203			814				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	161	40	499	0.323	162	0.7	0.5	10.724	B
C-ABD	0	0	447	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	134	33	557	0.240	134	0.4	0.3	8.522	A
A-B	18	5			18				
A-C	682	170			682				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	135	34	515	0.262	135	0.5	0.4	9.504	A
C-ABD	0	0	468	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2028 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		13.72	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	1016	100.000
B - B1078		ONE HOUR	✓	361	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	258	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	29	987	0
	B - B1078	0	0	361	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	253	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	3	9	0
	B - B1078	0	0	4	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.86	48.80	5.0	E	332	498
A-B					26	40
A-C					906	1358
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.63	21.07	1.6	C	237	356
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	272	68	526	0.518	268	0.0	1.0	13.757	B
A-B	22	5			22				
A-C	743	186			743				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	195	49	496	0.392	192	0.0	0.6	11.739	B
C-ABD	0	0	458	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	325	81	500	0.649	322	1.0	1.7	19.860	C
A-B	26	6			26				
A-C	887	222			887				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	232	58	479	0.485	231	0.6	0.9	14.462	B
C-ABD	0	0	435	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	398	99	465	0.855	387	1.7	4.5	40.986	E
A-B	32	8			32				
A-C	1087	272			1087				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	284	71	455	0.626	282	0.9	1.6	20.491	C
C-ABD	0	0	404	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	398	99	465	0.855	396	4.5	5.0	48.803	E
A-B	32	8			32				
A-C	1087	272			1087				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	284	71	455	0.626	284	1.6	1.6	21.067	C
C-ABD	0	0	404	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	325	81	500	0.649	337	5.0	2.0	23.478	C
A-B	26	6			26				
A-C	887	222			887				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	232	58	479	0.485	235	1.6	1.0	14.912	B
C-ABD	0	0	435	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	272	68	526	0.518	276	2.0	1.1	14.577	B
A-B	22	5			22				
A-C	743	186			743				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	195	49	496	0.392	196	1.0	0.7	12.034	B
C-ABD	0	0	458	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2028 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		5.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	839	100.000
B - B1078		ONE HOUR	✓	201	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	270	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	21	818	0
	B - B1078	0	0	201	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	265	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	4	9	0
	B - B1078	0	0	2	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.44	12.61	0.8	B	184	276
A-B					19	29
A-C					750	1125
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.60	18.16	1.5	C	248	372
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	151	38	557	0.271	150	0.0	0.4	8.808	A
A-B	16	4			16				
A-C	615	154			615				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	203	51	530	0.384	201	0.0	0.6	10.853	B
C-ABD	0	0	478	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	180	45	536	0.337	180	0.4	0.5	10.103	B
A-B	19	5			19				
A-C	735	184			735				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	243	61	516	0.471	242	0.6	0.9	13.099	B
C-ABD	0	0	460	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	221	55	506	0.436	220	0.5	0.8	12.525	B
A-B	23	6			23				
A-C	900	225			900				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	297	74	495	0.601	295	0.9	1.4	17.793	C
C-ABD	0	0	434	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	221	55	506	0.436	221	0.8	0.8	12.611	B
A-B	23	6			23				
A-C	900	225			900				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	297	74	495	0.601	297	1.4	1.5	18.165	C
C-ABD	0	0	434	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	180	45	536	0.337	181	0.8	0.5	10.192	B
A-B	19	5			19				
A-C	735	184			735				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	243	61	516	0.471	245	1.5	0.9	13.415	B
C-ABD	0	0	460	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	151	38	557	0.271	152	0.5	0.4	8.895	A
A-B	16	4			16				
A-C	615	154			615				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	203	51	530	0.384	205	0.9	0.6	11.086	B
C-ABD	0	0	478	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2028 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		6.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	853	100.000
B - B1078		ONE HOUR	✓	231	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	310	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	21	832	0
	B - B1078	0	0	231	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	307	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	4	0
	B - B1078	0	0	2	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.49	13.76	1.0	B	212	318
A-B					19	29
A-C					763	1145
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.67	21.46	2.0	C	284	427
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	174	43	565	0.308	172	0.0	0.4	9.127	A
A-B	16	4			16				
A-C	626	157			626				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	233	58	543	0.430	230	0.0	0.7	11.427	B
C-ABD	0	0	481	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	207	52	544	0.381	207	0.4	0.6	10.653	B
A-B	19	5			19				
A-C	748	187			748				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	279	70	528	0.528	277	0.7	1.1	14.266	B
C-ABD	0	0	464	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	254	64	515	0.493	253	0.6	0.9	13.632	B
A-B	23	6			23				
A-C	916	229			916				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	341	85	508	0.672	338	1.1	1.9	20.738	C
C-ABD	0	0	439	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	254	64	515	0.493	254	0.9	1.0	13.759	B
A-B	23	6			23				
A-C	916	229			916				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	341	85	508	0.672	341	1.9	2.0	21.463	C
C-ABD	0	0	439	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	207	52	544	0.381	209	1.0	0.6	10.779	B
A-B	19	5			19				
A-C	748	187			748				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	279	70	528	0.528	282	2.0	1.2	14.812	B
C-ABD	0	0	464	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	174	43	565	0.308	174	0.6	0.5	9.241	A
A-B	16	4			16				
A-C	626	157			626				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	233	58	543	0.430	235	1.2	0.8	11.754	B
C-ABD	0	0	481	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		2.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	459	100.000
B - B1078		ONE HOUR	✓	104	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	5	454	0
	B - B1078	0	0	104	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	136	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	16	0
	B - B1078	0	0	4	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.20	8.03	0.3	A	95	143
A-B					4	7
A-C					417	625
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.28	9.36	0.4	A	126	189
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	78	20	592	0.132	78	0.0	0.2	6.992	A
A-B	4	0.90			4				
A-C	342	85			342				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	103	26	556	0.186	102	0.0	0.2	7.927	A
C-ABD	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	94	23	580	0.161	93	0.2	0.2	7.397	A
A-B	4	1			4				
A-C	408	102			408				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	123	31	547	0.225	123	0.2	0.3	8.483	A
C-ABD	0	0	508	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	115	29	563	0.203	114	0.2	0.3	8.019	A
A-B	5	1			5				
A-C	500	125			500				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	151	38	535	0.282	151	0.3	0.4	9.344	A
C-ABD	0	0	493	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	115	29	563	0.203	115	0.3	0.3	8.027	A
A-B	5	1			5				
A-C	500	125			500				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	151	38	535	0.282	151	0.4	0.4	9.362	A
C-ABD	0	0	493	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	94	23	580	0.161	94	0.3	0.2	7.410	A
A-B	4	1			4				
A-C	408	102			408				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	123	31	547	0.225	124	0.4	0.3	8.510	A
C-ABD	0	0	508	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	78	20	592	0.132	78	0.2	0.2	7.012	A
A-B	4	0.90			4				
A-C	342	85			342				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	103	26	556	0.186	103	0.3	0.2	7.969	A
C-ABD	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		4.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	935	100.000
B - B1078		ONE HOUR	✓	188	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	225	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	26	909	0
	B - B1078	0	0	188	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	221	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	9	0
	B - B1078	0	0	0	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.41	12.31	0.7	B	172	258
A-B					23	35
A-C					834	1252
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.52	15.56	1.1	C	207	310
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	141	35	557	0.254	140	0.0	0.3	8.612	A
A-B	19	5			19				
A-C	685	171			685				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	170	42	518	0.327	168	0.0	0.5	10.223	B
C-ABD	0	0	467	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	169	42	532	0.317	168	0.3	0.5	9.872	A
A-B	23	6			23				
A-C	817	204			817				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	202	51	502	0.404	202	0.5	0.7	11.974	B
C-ABD	0	0	447	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	207	52	499	0.414	206	0.5	0.7	12.236	B
A-B	28	7			28				
A-C	1001	250			1001				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	248	62	479	0.518	246	0.7	1.0	15.375	C
C-ABD	0	0	418	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	207	52	499	0.414	207	0.7	0.7	12.310	B
A-B	28	7			28				
A-C	1001	250			1001				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	248	62	479	0.518	248	1.0	1.1	15.562	C
C-ABD	0	0	418	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	169	42	532	0.317	170	0.7	0.5	9.946	A
A-B	23	6			23				
A-C	817	204			817				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	202	51	502	0.404	204	1.1	0.7	12.153	B
C-ABD	0	0	447	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	141	35	557	0.254	142	0.5	0.3	8.689	A
A-B	19	5			19				
A-C	685	171			685				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	170	42	518	0.327	170	0.7	0.5	10.379	B
C-ABD	0	0	467	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		14.17	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	1022	100.000
B - B1078		ONE HOUR	✓	357	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	289	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	30	992	0
	B - B1078	0	0	357	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	284	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	3	9	0
	B - B1078	0	0	4	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.85	47.05	4.8	E	328	492
A-B					27	41
A-C					910	1365
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.70	25.82	2.2	D	266	398
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	269	67	525	0.513	265	0.0	1.0	13.653	B
A-B	22	6			22				
A-C	747	187			747				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	218	54	499	0.437	215	0.0	0.8	12.553	B
C-ABD	0	0	457	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	321	80	499	0.643	319	1.0	1.7	19.599	C
A-B	27	7			27				
A-C	892	223			892				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	260	65	481	0.541	259	0.8	1.1	16.061	C
C-ABD	0	0	435	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	394	98	464	0.848	383	1.7	4.3	39.908	E
A-B	33	8			33				
A-C	1092	273			1092				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	319	80	457	0.697	315	1.1	2.1	24.629	C
C-ABD	0	0	403	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	394	98	464	0.848	392	4.3	4.8	47.050	E
A-B	33	8			33				
A-C	1092	273			1092				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	319	80	457	0.697	318	2.1	2.2	25.819	D
C-ABD	0	0	403	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	321	80	499	0.643	333	4.8	1.9	22.915	C
A-B	27	7			27				
A-C	892	223			892				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	260	65	481	0.541	264	2.2	1.2	16.872	C
C-ABD	0	0	435	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	269	67	525	0.513	272	1.9	1.1	14.438	B
A-B	22	6			22				
A-C	747	187			747				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	218	54	499	0.437	220	1.2	0.8	12.976	B
C-ABD	0	0	457	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		6.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	873	100.000
B - B1078		ONE HOUR	✓	241	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	283	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	21	852	0
	B - B1078	0	0	241	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	278	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	4	9	0
	B - B1078	0	0	2	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.53	15.17	1.1	C	221	331
A-B					19	29
A-C					781	1172
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.63	19.99	1.7	C	260	390
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	555	0.327	179	0.0	0.5	9.538	A
A-B	16	4			16				
A-C	641	160			641				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	213	53	528	0.404	211	0.0	0.7	11.254	B
C-ABD	0	0	475	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	216	54	533	0.406	216	0.5	0.7	11.324	B
A-B	19	5			19				
A-C	766	191			766				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	255	64	512	0.497	253	0.7	1.0	13.848	B
C-ABD	0	0	455	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	265	66	502	0.528	263	0.7	1.1	14.973	B
A-B	23	6			23				
A-C	938	234			938				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	312	78	491	0.635	309	1.0	1.6	19.459	C
C-ABD	0	0	429	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	265	66	502	0.528	265	1.1	1.1	15.168	C
A-B	23	6			23				
A-C	938	234			938				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	312	78	491	0.635	312	1.6	1.7	19.986	C
C-ABD	0	0	429	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	216	54	533	0.406	218	1.1	0.7	11.497	B
A-B	19	5			19				
A-C	766	191			766				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	255	64	512	0.497	257	1.7	1.0	14.250	B
C-ABD	0	0	455	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	555	0.327	182	0.7	0.5	9.678	A
A-B	16	4			16				
A-C	641	160			641				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	213	53	528	0.404	214	1.0	0.7	11.537	B
C-ABD	0	0	475	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		8.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	869	100.000
B - B1078		ONE HOUR	✓	248	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	333	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	21	848	0
	B - B1078	0	0	248	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	330	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	4	0
	B - B1078	0	0	2	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.53	14.96	1.1	B	227	341
A-B					19	29
A-C					778	1167
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.72	25.53	2.5	D	306	458
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	187	47	563	0.331	185	0.0	0.5	9.456	A
A-B	16	4			16				
A-C	638	160			638				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	251	63	541	0.463	247	0.0	0.8	12.112	B
C-ABD	0	0	480	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	223	56	542	0.411	222	0.5	0.7	11.209	B
A-B	19	5			19				
A-C	762	191			762				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	299	75	527	0.568	298	0.8	1.3	15.601	C
C-ABD	0	0	462	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	273	68	513	0.532	271	0.7	1.1	14.773	B
A-B	23	6			23				
A-C	933	233			933				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	367	92	506	0.724	362	1.3	2.4	24.222	C
C-ABD	0	0	436	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	273	68	513	0.532	273	1.1	1.1	14.963	B
A-B	23	6			23				
A-C	933	233			933				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	367	92	506	0.724	366	2.4	2.5	25.529	D
C-ABD	0	0	436	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	223	56	542	0.411	224	1.1	0.7	11.378	B
A-B	19	5			19				
A-C	762	191			762				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	299	75	527	0.568	304	2.5	1.4	16.479	C
C-ABD	0	0	462	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	187	47	563	0.331	187	0.7	0.5	9.595	A
A-B	16	4			16				
A-C	638	160			638				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	251	63	541	0.463	253	1.4	0.9	12.554	B
C-ABD	0	0	480	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2034 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		2.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	488	100.000
B - B1078		ONE HOUR	✓	114	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	3	485	0
	B - B1078	0	0	114	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	76	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	16	0
	B - B1078	0	0	5	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.23	8.40	0.3	A	105	157
A-B					3	4
A-C					445	668
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.16	8.30	0.2	A	71	106
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	86	21	585	0.147	85	0.0	0.2	7.191	A
A-B	2	0.52			2				
A-C	365	91			365				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	58	15	539	0.108	58	0.0	0.1	7.464	A
C-ABD	0	0	515	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	103	26	572	0.179	102	0.2	0.2	7.657	A
A-B	2	0.62							
A-C	436	109			436				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	69	17	531	0.131	69	0.1	0.1	7.802	A
C-ABD	0	0	503	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	126	31	554	0.227	125	0.2	0.3	8.385	A
A-B	3	0.76			3				
A-C	534	134			534				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	85	21	518	0.164	85	0.1	0.2	8.297	A
C-ABD	0	0	488	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	126	31	554	0.227	126	0.3	0.3	8.396	A
A-B	3	0.76			3				
A-C	534	134			534				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	85	21	518	0.164	85	0.2	0.2	8.303	A
C-ABD	0	0	488	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	103	26	572	0.179	103	0.3	0.2	7.675	A
A-B	2	0.62			2				
A-C	436	109			436				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	69	17	531	0.131	69	0.2	0.2	7.812	A
C-ABD	0	0	503	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	86	21	585	0.147	86	0.2	0.2	7.213	A
A-B	2	0.52			2				
A-C	365	91			365				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	58	15	539	0.108	58	0.2	0.1	7.486	A
C-ABD	0	0	515	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2034 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		4.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	946	100.000
B - B1078		ONE HOUR	✓	202	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	212	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	26	920	0
	B - B1078	0	0	202	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	208	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	10	0
	B - B1078	0	0	1	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.45	13.24	0.8	B	185	278
A-B					23	35
A-C					844	1267
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.49	14.95	1.0	B	195	292
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	152	38	552	0.275	150	0.0	0.4	8.927	A
A-B	19	5			19				
A-C	693	173			693				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	160	40	513	0.311	158	0.4	0.4	10.078	B
C-ABD	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	528	0.344	181	0.4	0.5	10.358	B
A-B	23	6			23				
A-C	827	207			827				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	191	48	497	0.384	190	0.4	0.6	11.706	B
C-ABD	0	0	445	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	222	56	494	0.450	221	0.5	0.8	13.136	B
A-B	28	7			28				
A-C	1013	253			1013				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	234	58	474	0.493	232	0.6	0.9	14.799	B
C-ABD	0	0	416	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	222	56	494	0.450	222	0.8	0.8	13.240	B
A-B	28	7			28				
A-C	1013	253			1013				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	234	58	474	0.493	234	0.9	1.0	14.954	B
C-ABD	0	0	416	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	528	0.344	182	0.8	0.5	10.459	B
A-B	23	6			23				
A-C	827	207			827				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	191	48	497	0.384	192	1.0	0.6	11.858	B
C-ABD	0	0	445	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	152	38	552	0.275	152	0.5	0.4	9.021	A
A-B	19	5			19				
A-C	693	173			693				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	160	40	513	0.311	160	0.6	0.5	10.221	B
C-ABD	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2034 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		22.57	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	1080	100.000
B - B1078		ONE HOUR	✓	381	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	326	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	28	1052	0
	B - B1078	0	0	381	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	321	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	3	9	0
	B - B1078	0	0	4	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.93	76.10	8.3	F	350	525
A-B					25	38
A-C					965	1448
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.80	38.06	3.6	E	299	449
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	287	72	517	0.555	282	0.0	1.2	15.045	C
A-B	21	5			21				
A-C	792	198			792				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	246	61	495	0.496	242	0.0	1.0	14.025	B
C-ABD	0	0	451	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	343	86	490	0.700	339	1.2	2.2	23.227	C
A-B	25	6			25				
A-C	946	236			946				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	293	73	476	0.616	291	1.0	1.5	19.187	C
C-ABD	0	0	427	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	420	105	453	0.927	401	2.2	6.8	56.070	F
A-B	31	8			31				
A-C	1158	290			1158				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	359	90	451	0.797	352	1.5	3.3	34.179	D
C-ABD	0	0	394	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	420	105	453	0.927	414	6.8	8.3	76.095	F
A-B	31	8			31				
A-C	1158	290			1158				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	359	90	451	0.798	358	3.3	3.6	38.056	E
C-ABD	0	0	394	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	343	86	490	0.700	366	8.3	2.5	32.986	D
A-B	25	6			25				
A-C	946	236			946				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	293	73	476	0.616	301	3.6	1.7	21.335	C
C-ABD	0	0	427	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	287	72	517	0.555	292	2.5	1.3	16.330	C
A-B	21	5			21				
A-C	792	198			792				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	246	61	495	0.496	248	1.7	1.0	14.760	B
C-ABD	0	0	451	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2034 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		10.01	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	972	100.000
B - B1078		ONE HOUR	✓	310	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	320	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	23	949	0
	B - B1078	0	0	310	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	315	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	4	8	0
	B - B1078	0	0	2	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.70	24.83	2.3	C	284	426
A-B					21	32
A-C					870	1306
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.73	27.91	2.6	D	294	441
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	233	58	543	0.429	230	0.0	0.7	11.396	B
A-B	17	4			17				
A-C	714	179			714				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	241	60	520	0.463	238	0.0	0.8	12.587	B
C-ABD	0	0	464	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	278	70	519	0.537	277	0.7	1.1	14.787	B
A-B	21	5			21				
A-C	853	213			853				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	288	72	503	0.572	286	0.8	1.3	16.421	C
C-ABD	0	0	443	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	341	85	485	0.703	337	1.1	2.2	23.644	C
A-B	25	6			25				
A-C	1044	261			1044				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	353	88	480	0.735	348	1.3	2.5	26.261	D
C-ABD	0	0	413	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	341	85	485	0.703	341	2.2	2.3	24.827	C
A-B	25	6			25				
A-C	1044	261			1044				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	353	88	480	0.735	352	2.5	2.6	27.914	D
C-ABD	0	0	413	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	278	70	519	0.537	283	2.3	1.2	15.517	C
A-B	21	5			21				
A-C	853	213			853				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	288	72	503	0.572	293	2.6	1.4	17.466	C
C-ABD	0	0	443	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	233	58	543	0.429	235	1.2	0.8	11.736	B
A-B	17	4			17				
A-C	714	179			714				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	241	60	520	0.463	243	1.4	0.9	13.072	B
C-ABD	0	0	464	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2034 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		14.83	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	979	100.000
B - B1078		ONE HOUR	✓	259	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	391	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	18	961	0
	B - B1078	0	0	259	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	388	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	3	0
	B - B1078	0	0	2	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.58	17.26	1.3	C	237	356
A-B					16	24
A-C					882	1322
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.87	51.46	5.7	F	359	538
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	195	49	550	0.354	193	0.0	0.5	10.021	B
A-B	13	3			13				
A-C	723	181			723				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	294	74	532	0.553	290	0.0	1.2	14.566	B
C-ABD	0	0	468	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	233	58	526	0.442	232	0.5	0.8	12.191	B
A-B	16	4			16				
A-C	864	216			864				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	351	88	516	0.682	348	1.2	2.0	21.078	C
C-ABD	0	0	448	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	285	71	493	0.578	283	0.8	1.3	16.942	C
A-B	20	5			20				
A-C	1058	264			1058				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	430	108	493	0.874	418	2.0	5.1	42.486	E
C-ABD	0	0	419	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	285	71	493	0.578	285	1.3	1.3	17.263	C
A-B	20	5			20				
A-C	1058	264			1058				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	430	108	493	0.874	428	5.1	5.7	51.463	F
C-ABD	0	0	419	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	233	58	526	0.442	235	1.3	0.8	12.450	B
A-B	16	4			16				
A-C	864	216			864				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	351	88	516	0.682	365	5.7	2.3	25.740	D
C-ABD	0	0	448	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	195	49	550	0.354	196	0.8	0.6	10.200	B
A-B	13	3			13				
A-C	723	181			723				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	294	74	532	0.553	298	2.3	1.3	15.650	C
C-ABD	0	0	468	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		2.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	487	100.000
B - B1078		ONE HOUR	✓	114	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	2	485	0
	B - B1078	0	0	114	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	76	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	16	0
	B - B1078	0	0	5	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.23	8.39	0.3	A	105	157
A-B					2	2
A-C					445	668
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.16	8.30	0.2	A	71	106
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	86	21	585	0.147	85	0.0	0.2	7.190	A
A-B	1	0.33			1				
A-C	365	91			365				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	58	15	539	0.108	58	0.0	0.1	7.463	A
C-ABD	0	0	515	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	103	26	572	0.179	102	0.2	0.2	7.656	A
A-B	2	0.40			2				
A-C	436	109			436				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	69	17	531	0.131	69	0.1	0.1	7.800	A
C-ABD	0	0	504	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	126	31	554	0.226	125	0.2	0.3	8.383	A
A-B	2	0.48			2				
A-C	534	134			534				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	85	21	519	0.164	85	0.1	0.2	8.295	A
C-ABD	0	0	488	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	126	31	554	0.226	126	0.3	0.3	8.395	A
A-B	2	0.48			2				
A-C	534	134			534				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	85	21	519	0.164	85	0.2	0.2	8.301	A
C-ABD	0	0	488	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	103	26	572	0.179	103	0.3	0.2	7.674	A
A-B	2	0.40			2				
A-C	436	109			436				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	69	17	531	0.131	69	0.2	0.2	7.810	A
C-ABD	0	0	504	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	86	21	585	0.147	86	0.2	0.2	7.212	A
A-B	1	0.33			1				
A-C	365	91			365				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	58	15	539	0.108	58	0.2	0.1	7.482	A
C-ABD	0	0	515	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		4.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	947	100.000
B - B1078		ONE HOUR	✓	202	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	212	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	26	921	0
	B - B1078	0	0	202	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	208	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	10	0
	B - B1078	0	0	1	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.45	13.25	0.8	B	185	278
A-B					23	35
A-C					845	1268
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.49	14.96	1.0	B	195	292
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	152	38	552	0.275	150	0.0	0.4	8.930	A
A-B	19	5			19				
A-C	694	173			694				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	160	40	513	0.311	158	0.4	0.4	10.080	B
C-ABD	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	528	0.344	181	0.4	0.5	10.363	B
A-B	23	6			23				
A-C	828	207			828				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	191	48	497	0.384	190	0.4	0.6	11.709	B
C-ABD	0	0	444	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	222	56	494	0.450	221	0.5	0.8	13.145	B
A-B	28	7			28				
A-C	1014	254			1014				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	234	58	474	0.493	232	0.6	0.9	14.807	B
C-ABD	0	0	415	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	222	56	494	0.450	222	0.8	0.8	13.249	B
A-B	28	7			28				
A-C	1014	254			1014				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	234	58	474	0.493	234	0.9	1.0	14.962	B
C-ABD	0	0	415	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	528	0.344	182	0.8	0.5	10.465	B
A-B	23	6			23				
A-C	828	207			828				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	191	48	497	0.384	192	1.0	0.6	11.861	B
C-ABD	0	0	444	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	152	38	552	0.275	152	0.5	0.4	9.023	A
A-B	19	5			19				
A-C	694	173			694				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	160	40	513	0.311	160	0.6	0.5	10.221	B
C-ABD	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		23.67	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	1091	100.000
B - B1078		ONE HOUR	✓	384	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	327	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	34	1057	0
	B - B1078	0	0	384	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	322	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	3	9	0
	B - B1078	0	0	4	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.94	80.80	8.9	F	353	529
A-B					31	46
A-C					970	1455
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.80	38.95	3.7	E	300	451
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	289	72	516	0.560	285	0.0	1.2	15.223	C
A-B	25	6			25				
A-C	796	199			796				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	246	62	494	0.499	243	0.0	1.0	14.108	B
C-ABD	0	0	450	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	346	86	489	0.706	342	1.2	2.2	23.730	C
A-B	30	8			30				
A-C	950	238			950				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	294	74	475	0.619	292	1.0	1.5	19.374	C
C-ABD	0	0	425	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	423	106	452	0.937	403	2.2	7.2	58.503	F
A-B	37	9			37				
A-C	1164	291			1164				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	360	90	449	0.802	353	1.5	3.4	34.819	D
C-ABD	0	0	392	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	423	106	452	0.937	416	7.2	8.9	80.801	F
A-B	37	9			37				
A-C	1164	291			1164				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	360	90	449	0.802	359	3.4	3.7	38.946	E
C-ABD	0	0	392	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	346	86	489	0.706	371	8.9	2.6	35.064	E
A-B	30	8			30				
A-C	950	238			950				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	294	74	475	0.619	302	3.7	1.7	21.636	C
C-ABD	0	0	425	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	289	72	516	0.560	295	2.6	1.3	16.594	C
A-B	25	6			25				
A-C	796	199			796				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	246	62	494	0.499	249	1.7	1.0	14.862	B
C-ABD	0	0	450	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		9.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	974	100.000
B - B1078		ONE HOUR	✓	292	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	322	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	23	951	0
	B - B1078	0	0	292	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	317	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	4	8	0
	B - B1078	0	0	2	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.66	21.82	1.9	C	268	401
A-B					21	32
A-C					872	1308
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.74	28.43	2.7	D	296	443
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	220	55	544	0.404	217	0.0	0.7	10.919	B
A-B	17	4			17				
A-C	716	179			716				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	243	61	520	0.466	239	0.0	0.9	12.657	B
C-ABD	0	0	464	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	262	66	519	0.505	261	0.7	1.0	13.854	B
A-B	21	5			21				
A-C	855	214			855				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	290	72	503	0.576	288	0.9	1.3	16.565	C
C-ABD	0	0	442	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	321	80	485	0.662	318	1.0	1.8	21.066	C
A-B	25	6			25				
A-C	1047	262			1047				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	355	89	480	0.740	350	1.3	2.6	26.693	D
C-ABD	0	0	413	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	321	80	485	0.662	321	1.8	1.9	21.824	C
A-B	25	6			25				
A-C	1047	262			1047				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	355	89	480	0.740	354	2.6	2.7	28.433	D
C-ABD	0	0	413	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	262	66	519	0.505	266	1.9	1.0	14.362	B
A-B	21	5			21				
A-C	855	214			855				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	290	72	503	0.576	295	2.7	1.4	17.662	C
C-ABD	0	0	442	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	220	55	544	0.404	221	1.0	0.7	11.192	B
A-B	17	4			17				
A-C	716	179			716				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	243	61	520	0.466	245	1.4	0.9	13.152	B
C-ABD	0	0	464	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J1	A140 / B1078	Crossroads	One-way from A to C		14.74	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A140 North		ONE HOUR	✓	983	100.000
B - B1078		ONE HOUR	✓	260	100.000
C - A140 South		ONE HOUR	✓	0	100.000
D - A140 South Right turn		ONE HOUR	✓	390	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	18	965	0
	B - B1078	0	0	260	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	387	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A140 North	B - B1078	C - A140 South	D - A140 South Right turn
From	A - A140 North	0	0	3	0
	B - B1078	0	0	2	0
	C - A140 South	0	0	0	0
	D - A140 South Right turn	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.58	17.57	1.4	C	238	358
A-B					16	24
A-C					885	1328
A-D	0.00	0.00	0.0	A	0	0
D-ABC	0.87	51.11	5.7	F	358	537
C-ABD	0.00	0.00	0.0	A	0	0

C-D					0	0
C-A					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	196	49	547	0.357	193	0.0	0.5	10.112	B
A-B	13	3			13				
A-C	726	182			726				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	294	73	532	0.552	289	0.0	1.2	14.544	B
C-ABD	0	0	468	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	234	58	523	0.446	233	0.5	0.8	12.334	B
A-B	16	4			16				
A-C	867	217			867				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	351	88	515	0.680	347	1.2	2.0	21.024	C
C-ABD	0	0	447	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	286	72	491	0.583	284	0.8	1.3	17.229	C
A-B	20	5			20				
A-C	1062	266			1062				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	429	107	492	0.872	417	2.0	5.0	42.282	E
C-ABD	0	0	418	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	286	72	491	0.583	286	1.3	1.4	17.570	C
A-B	20	5			20				
A-C	1062	266			1062				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	429	107	492	0.872	427	5.0	5.7	51.107	F
C-ABD	0	0	418	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	234	58	523	0.446	236	1.4	0.8	12.605	B
A-B	16	4			16				
A-C	867	217			867				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A
D-ABC	351	88	515	0.680	364	5.7	2.3	25.603	D
C-ABD	0	0	447	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	196	49	547	0.357	197	0.8	0.6	10.295	B
A-B	13	3			13				
A-C	726	182			726				
A-D	0	0	719	0.000	0	0.0	0.0	0.000	A

D-ABC	294	73	532	0.552	298	2.3	1.3	15.616	C
C-ABD	0	0	468	0.000	0	0.0	0.0	0.000	A
C-D	0	0			0				
C-A	0	0			0				

Junctions 9
PICADY 9 - Priority Intersection Module
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Report generation date: 13/03/2020 10:15:58

- »Base Year, 6-7 AM
- »Base Year, 7-8 AM
- »Base Year, 8-9 AM
- »Base Year, 3-4 PM
- »Base Year, 5-6 PM
- »2023 Reference Case , 6-7 AM
- »2023 Reference Case , 7-8 AM
- »2023 Reference Case , 8-9 AM
- »2023 Reference Case , 3-4 PM
- »2023 Reference Case , 5-6 PM
- »2023 Early Years , 6-7 AM
- »2023 Early Years , 7-8 AM
- »2023 Early Years , 8-9 AM
- »2023 Early Years , 3-4 PM
- »2023 Early Years , 5-6 PM
- »2028 Reference Case , 6-7 AM
- »2028 Reference Case , 7-8 AM
- »2028 Reference Case , 8-9 AM
- »2028 Reference Case , 3-4 PM
- »2028 Reference Case , 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case , 6-7 AM
- »2034 Reference Case , 7-8 AM
- »2034 Reference Case , 8-9 AM
- »2034 Reference Case , 3-4 PM
- »2034 Reference Case , 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM				7-8 AM				8-9 AM				3-4 PM				5-6 PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
Base Year																				
Stream B-AC	0.2	8.66	0.15	A	0.9	15.53	0.48	C	3.1	38.09	0.77	E	1.4	19.08	0.60	C	2.0	23.34	0.67	C
Stream C-AB	0.0	6.53	0.04	A	0.1	6.70	0.11	A	0.4	7.76	0.24	A	0.2	7.23	0.13	A	0.1	6.47	0.07	A
2023 Reference Case																				
Stream B-AC	0.2	8.87	0.17	A	1.6	21.14	0.62	C	50.1	408.57	1.20	F	26.5	193.61	1.07	F	6.8	64.53	0.90	F
Stream C-AB	0.0	6.52	0.04	A	0.1	6.69	0.11	A	0.4	7.79	0.23	A	0.2	7.25	0.14	A	0.1	6.50	0.07	A
2023 Early Years																				
Stream B-AC	0.3	9.24	0.20	A	1.8	23.38	0.66	C	50.0	407.02	1.20	F	31.0	221.31	1.10	F	7.7	71.83	0.92	F
Stream C-AB	0.0	6.51	0.04	A	0.1	6.67	0.11	A	0.4	7.76	0.23	A	0.2	7.31	0.14	A	0.1	6.52	0.07	A
2028 Reference Case																				
Stream B-AC	0.2	8.91	0.17	A	1.2	18.37	0.55	C	13.6	129.05	1.00	F	5.9	58.46	0.88	F	7.9	74.62	0.92	F
Stream C-AB	0.0	6.60	0.04	A	0.1	6.90	0.11	A	0.4	8.52	0.26	A	0.2	7.65	0.14	A	0.1	6.81	0.07	A
2028 Peak Construction																				
Stream B-AC	0.5	10.95	0.32	B	2.3	27.61	0.70	D	35.8	280.25	1.14	F	13.7	118.54	0.99	F	20.1	158.22	1.04	F

Stream C-AB	0.0	6.56	0.04	A	0.2	6.92	0.11	A	0.4	8.56	0.26	A	0.2	7.97	0.15	A	0.1	6.97	0.07	A
2034 Reference Case																				
Stream B-AC	0.2	9.22	0.19	A	2.3	28.11	0.71	D	90.6	785.14	1.37	F	36.8	269.81	1.14	F	62.4	502.10	1.24	F
Stream C-AB	0.0	6.63	0.04	A	0.2	6.97	0.11	A	0.5	8.92	0.27	A	0.2	8.17	0.16	A	0.1	6.87	0.07	A
2034 Operational Led																				
Stream B-AC	0.2	9.19	0.19	A	2.1	26.50	0.69	D	93.2	799.97	1.38	F	37.4	275.62	1.14	F	62.0	499.33	1.24	F
Stream C-AB	0.0	6.63	0.04	A	0.2	6.96	0.11	A	0.5	8.72	0.27	A	0.2	8.18	0.16	A	0.1	6.89	0.07	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

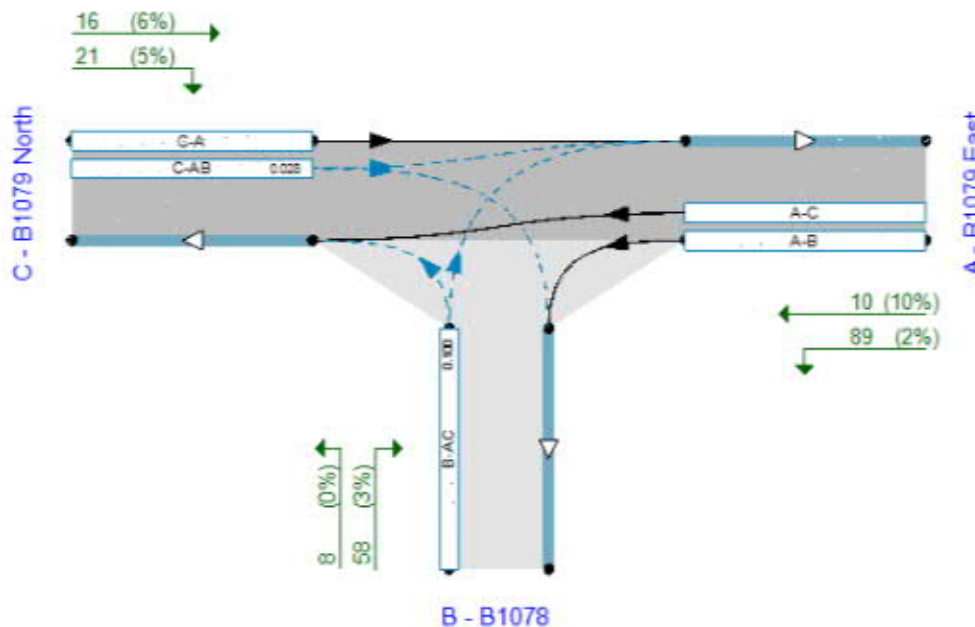
File summary

File Description

Title	B1078 / B1079
Location	52.142756°, 1.221817°
Site number	2
Date	11/10/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKWSPGROUP\ukjgm001
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Please refer original file demand table
 Streams (downward) with RFC

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)

5.75			0.85	36.00	20.00
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Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		3.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B1079 East		Major
B	B1078		Minor
C	B1079 North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - B1079 North	5.15			76.8	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - B1078	One lane	3.34	18	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	513	0.097	0.245	0.154	0.350
B-C	662	0.105	0.266	-	-
C-B	618	0.248	0.248	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	99	100.000
B - B1078		ONE HOUR	✓	66	100.000
C - B1079 North		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - B1079 East	B - B1078	C - B1079 North
From	A - B1079 East	0	89	10
	B - B1078	58	0	8
	C - B1079 North	16	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - B1079 East	B - B1078	C - B1079 North
From	A - B1079 East	0	2	10
	B - B1078	3	0	0
	C - B1079 North	6	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.15	8.66	0.2	A	61	91
C-AB	0.04	6.53	0.0	A	20	30
C-A					14	21
A-B					82	123
A-C					9	14

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	12	496	0.100	49	0.0	0.1	8.055	A
C-AB	16	4	580	0.028	16	0.0	0.0	6.380	A
C-A	12	3			12				
A-B	67	17			67				
A-C	8	2			8				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	493	0.120	59	0.1	0.1	8.304	A
C-AB	19	5	578	0.033	19	0.0	0.0	6.441	A
C-A	14	3			14				
A-B	80	20			80				
A-C	9	2			9				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	488	0.149	73	0.1	0.2	8.653	A
C-AB	24	6	575	0.041	24	0.0	0.0	6.525	A
C-A	17	4			17				
A-B	98	24			98				
A-C	11	3			11				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	488	0.149	73	0.2	0.2	8.658	A
C-AB	24	6	575	0.041	24	0.0	0.0	6.528	A
C-A	17	4			17				
A-B	98	24			98				
A-C	11	3			11				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	493	0.120	59	0.2	0.1	8.314	A
C-AB	19	5	578	0.033	19	0.0	0.0	6.445	A
C-A	14	3			14				
A-B	80	20			80				
A-C	9	2			9				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	12	496	0.100	50	0.1	0.1	8.077	A
C-AB	16	4	580	0.028	16	0.0	0.0	6.386	A
C-A	12	3			12				
A-B	67	17			67				
A-C	8	2			8				

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		6.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	206	100.000
B - B1078		ONE HOUR	✓	194	100.000
C - B1079 North		ONE HOUR	✓	130	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	153	53	
B - B1078	165	0	29	
C - B1079 North	81	49	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	1	0	
B - B1078	5	0	7	
C - B1079 North	5	4	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.48	15.53	0.9	C	178	267
C-AB	0.11	6.70	0.1	A	52	77
C-A					68	102
A-B					140	211
A-C					49	73

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	146	37	464	0.315	144	0.0	0.5	11.188	B
C-AB	41	10	598	0.069	41	0.0	0.1	6.458	A
C-A	57	14			57				
A-B	115	29			115				
A-C	40	10			40				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	174	44	456	0.382	174	0.5	0.6	12.714	B
C-AB	50	13	599	0.084	50	0.1	0.1	6.557	A
C-A	67	17			67				
A-B	138	34			138				
A-C	48	12			48				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	214	53	445	0.480	212	0.6	0.9	15.389	C
C-AB	63	16	601	0.106	63	0.1	0.1	6.699	A
C-A	80	20			80				
A-B	168	42			168				
A-C	58	15			58				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	214	53	445	0.480	214	0.9	0.9	15.529	C
C-AB	63	16	601	0.106	63	0.1	0.1	6.704	A
C-A	80	20			80				
A-B	168	42			168				
A-C	58	15			58				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	174	44	456	0.382	176	0.9	0.6	12.875	B
C-AB	50	13	599	0.084	50	0.1	0.1	6.566	A
C-A	67	17			67				
A-B	138	34			138				
A-C	48	12			48				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	146	37	464	0.315	147	0.6	0.5	11.364	B
C-AB	41	10	598	0.069	41	0.1	0.1	6.467	A
C-A	57	14			57				
A-B	115	29			115				
A-C	40	10			40				

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		13.98	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	341	100.000
B - B1078		ONE HOUR	✓	281	100.000
C - B1079 North		ONE HOUR	✓	234	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	286	55	
B - B1078	229	0	52	
C - B1079 North	135	99	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	3	0	
B - B1078	7	0	6	
C - B1079 North	1	4	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.77	38.09	3.1	E	258	387
C-AB	0.24	7.76	0.4	A	115	173
C-A					99	149
A-B					262	394
A-C					50	76

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	212	53	433	0.489	208	0.0	0.9	15.762	C
C-AB	90	22	603	0.149	89	0.0	0.2	7.002	A
C-A	87	22			87				
A-B	215	54			215				
A-C	41	10			41				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	420	0.602	251	0.9	1.4	21.037	C
C-AB	112	28	605	0.184	111	0.2	0.3	7.296	A
C-A	99	25			99				
A-B	257	64			257				
A-C	49	12			49				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	309	77	401	0.771	304	1.4	2.9	34.788	D
C-AB	145	36	609	0.237	144	0.3	0.4	7.752	A
C-A	113	28			113				
A-B	315	79			315				
A-C	61	15			61				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	309	77	401	0.771	309	2.9	3.1	38.086	E
C-AB	145	36	609	0.237	145	0.4	0.4	7.761	A
C-A	113	28			113				
A-B	315	79			315				
A-C	61	15			61				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	419	0.602	259	3.1	1.6	23.152	C
C-AB	112	28	605	0.184	112	0.4	0.3	7.306	A
C-A	99	25			99				
A-B	257	64			257				
A-C	49	12			49				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	212	53	432	0.489	214	1.6	1.0	16.656	C
C-AB	90	22	603	0.149	90	0.3	0.2	7.026	A
C-A	86	22			86				
A-B	215	54			215				
A-C	41	10			41				

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		8.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	262	100.000
B - B1078		ONE HOUR	✓	252	100.000
C - B1079 North		ONE HOUR	✓	134	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	177	85
B - B1078		178	0	74
C - B1079 North		74	60	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	6	0
B - B1078		2	0	0
C - B1079 North		4	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.60	19.08	1.4	C	231	347
C-AB	0.13	7.23	0.2	A	63	94
C-A					60	90
A-B					162	244
A-C					78	117

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	190	47	489	0.388	187	0.0	0.6	11.821	B
C-AB	50	12	579	0.086	50	0.0	0.1	6.798	A
C-A	51	13			51				
A-B	133	33			133				
A-C	64	16			64				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	57	479	0.473	226	0.6	0.9	14.122	B
C-AB	61	15	577	0.106	61	0.1	0.1	6.973	A
C-A	59	15			59				
A-B	159	40			159				
A-C	76	19			76				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	277	69	466	0.596	275	0.9	1.4	18.695	C
C-AB	77	19	575	0.134	77	0.1	0.2	7.226	A
C-A	70	18			70				
A-B	195	49			195				
A-C	94	23			94				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	277	69	466	0.596	277	1.4	1.4	19.085	C
C-AB	77	19	575	0.134	77	0.2	0.2	7.230	A
C-A	70	18			70				
A-B	195	49			195				
A-C	94	23			94				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	57	479	0.473	229	1.4	0.9	14.477	B
C-AB	61	15	577	0.106	61	0.2	0.1	6.977	A
C-A	59	15			59				
A-B	159	40			159				
A-C	76	19			76				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	190	47	489	0.388	191	0.9	0.6	12.109	B
C-AB	50	13	579	0.086	50	0.1	0.1	6.809	A
C-A	51	13			51				
A-B	133	33			133				
A-C	64	16			64				

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		10.53	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	262	100.000
B - B1078		ONE HOUR	✓	283	100.000
C - B1079 North		ONE HOUR	✓	97	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	163	99	
B - B1078	231	0	52	
C - B1079 North	66	31	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	4	1	
B - B1078	0	0	2	
C - B1079 North	2	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.67	23.34	2.0	C	260	390
C-AB	0.07	6.47	0.1	A	32	48
C-A					57	86
A-B					150	224
A-C					91	136

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	213	53	486	0.438	210	0.0	0.8	12.904	B
C-AB	25	6	602	0.042	25	0.0	0.1	6.243	A
C-A	48	12			48				
A-B	123	31			123				
A-C	75	19			75				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	254	64	477	0.533	253	0.8	1.1	15.957	C
C-AB	31	8	599	0.052	31	0.1	0.1	6.338	A
C-A	56	14			56				
A-B	147	37			147				
A-C	89	22			89				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	312	78	465	0.670	308	1.1	1.9	22.525	C
C-AB	39	10	595	0.065	39	0.1	0.1	6.472	A
C-A	68	17			68				
A-B	179	45			179				
A-C	109	27			109				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	312	78	465	0.670	311	1.9	2.0	23.335	C
C-AB	39	10	595	0.065	39	0.1	0.1	6.474	A
C-A	68	17			68				
A-B	179	45			179				
A-C	109	27			109				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	254	64	477	0.533	258	2.0	1.2	16.614	C
C-AB	31	8	599	0.052	31	0.1	0.1	6.342	A
C-A	56	14			56				
A-B	147	37			147				
A-C	89	22			89				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	213	53	486	0.438	215	1.2	0.8	13.338	B
C-AB	25	6	602	0.042	26	0.1	0.1	6.251	A
C-A	48	12			48				
A-B	123	31			123				
A-C	75	19			75				

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		3.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	107	100.000
B - B1078		ONE HOUR	✓	77	100.000
C - B1079 North		ONE HOUR	✓	41	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	97	11
B - B1078	69	0	8
C - B1079 North	20	21	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	2	9
B - B1078	2	0	0
C - B1079 North	5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	8.87	0.2	A	70	105
C-AB	0.04	6.52	0.0	A	20	30
C-A					18	26
A-B					89	133
A-C					10	15

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	14	498	0.116	57	0.0	0.1	8.159	A
C-AB	16	4	581	0.028	16	0.0	0.0	6.375	A
C-A	14	4			14				
A-B	73	18			73				
A-C	8	2			8				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	495	0.139	69	0.1	0.2	8.447	A
C-AB	19	5	579	0.034	19	0.0	0.0	6.436	A
C-A	17	4			17				
A-B	87	22			87				
A-C	10	2			10				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	490	0.172	84	0.2	0.2	8.862	A
C-AB	24	6	576	0.042	24	0.0	0.0	6.518	A
C-A	21	5			21				
A-B	106	27			106				
A-C	12	3			12				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	490	0.172	84	0.2	0.2	8.869	A
C-AB	24	6	576	0.042	24	0.0	0.0	6.521	A
C-A	21	5			21				
A-B	106	27			106				
A-C	12	3			12				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	495	0.139	69	0.2	0.2	8.461	A
C-AB	19	5	579	0.034	20	0.0	0.0	6.439	A
C-A	17	4			17				
A-B	87	22			87				
A-C	10	2			10				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	14	498	0.116	58	0.2	0.1	8.181	A
C-AB	16	4	581	0.028	16	0.0	0.0	6.381	A
C-A	14	4			14				
A-B	73	18			73				
A-C	8	2			8				

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		9.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	212	100.000
B - B1078		ONE HOUR	✓	251	100.000
C - B1079 North		ONE HOUR	✓	135	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	157	55	
B - B1078	222	0	29	
C - B1079 North	86	49	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	1	0	
B - B1078	3	0	7	
C - B1079 North	5	4	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.62	21.14	1.6	C	230	345
C-AB	0.11	6.69	0.1	A	52	78
C-A					71	107
A-B					144	216
A-C					51	76

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	189	47	466	0.405	186	0.0	0.7	12.752	B
C-AB	41	10	599	0.069	41	0.0	0.1	6.445	A
C-A	60	15			60				
A-B	118	30			118				
A-C	42	10			42				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	226	56	458	0.493	225	0.7	0.9	15.365	C
C-AB	51	13	601	0.084	50	0.1	0.1	6.542	A
C-A	70	18			70				
A-B	141	35			141				
A-C	50	12			50				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	69	446	0.620	274	0.9	1.5	20.616	C
C-AB	64	16	603	0.106	64	0.1	0.1	6.681	A
C-A	84	21			84				
A-B	173	43			173				
A-C	61	15			61				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	69	446	0.620	276	1.5	1.6	21.139	C
C-AB	64	16	603	0.106	64	0.1	0.1	6.686	A
C-A	84	21			84				
A-B	173	43			173				
A-C	61	15			61				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	226	56	458	0.493	228	1.6	1.0	15.832	C
C-AB	51	13	601	0.084	51	0.1	0.1	6.548	A
C-A	70	18			70				
A-B	141	35			141				
A-C	50	12			50				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	189	47	466	0.406	190	1.0	0.7	13.112	B
C-AB	41	10	599	0.069	41	0.1	0.1	6.454	A
C-A	60	15			60				
A-B	118	30			118				
A-C	42	10			42				

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		183.87	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	328	100.000
B - B1078		ONE HOUR	✓	447	100.000
C - B1079 North		ONE HOUR	✓	224	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	269	59	
B - B1078	395	0	52	
C - B1079 North	125	99	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	4	0	
B - B1078	3	0	6	
C - B1079 North	2	4	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.20	408.57	50.1	F	410	615
C-AB	0.23	7.79	0.4	A	113	170
C-A					92	139
A-B					247	371
A-C					54	81

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	336	84	442	0.761	325	0.0	2.8	28.637	D
C-AB	88	22	599	0.148	88	0.0	0.2	7.028	A
C-A	80	20			80				
A-B	203	51			203				
A-C	44	11			44				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	401	100	428	0.938	384	2.8	7.2	63.442	F
C-AB	110	27	601	0.182	109	0.2	0.3	7.325	A
C-A	92	23			92				
A-B	242	61			242				
A-C	53	13			53				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	492	123	409	1.201	404	7.2	29.2	184.082	F
C-AB	141	35	604	0.234	141	0.3	0.4	7.782	A
C-A	105	26			105				
A-B	296	74			296				
A-C	65	16			65				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	492	123	409	1.201	408	29.2	50.1	362.666	F
C-AB	142	35	604	0.234	142	0.4	0.4	7.792	A
C-A	105	26			105				
A-B	296	74			296				
A-C	65	16			65				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	401	100	428	0.938	420	50.1	45.6	408.568	F
C-AB	110	27	601	0.183	110	0.4	0.3	7.334	A
C-A	92	23			92				
A-B	242	61			242				
A-C	53	13			53				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	336	84	442	0.762	432	45.6	21.6	285.357	F
C-AB	89	22	600	0.148	89	0.3	0.2	7.054	A
C-A	80	20			80				
A-B	203	51			203				
A-C	44	11			44				

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		95.22	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	298	100.000
B - B1078		ONE HOUR	✓	436	100.000
C - B1079 North		ONE HOUR	✓	145	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	210	88
B - B1078		362	0	74
C - B1079 North		85	60	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	4	0
B - B1078		1	0	0
C - B1079 North		4	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.07	193.61	26.5	F	400	600
C-AB	0.14	7.25	0.2	A	64	96
C-A					69	104
A-B					193	290
A-C					81	121

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	328	82	474	0.693	320	0.0	2.1	22.366	C
C-AB	51	13	579	0.088	50	0.0	0.1	6.808	A
C-A	59	15			59				
A-B	158	40			158				
A-C	66	17			66				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	392	98	462	0.847	383	2.1	4.4	40.928	E
C-AB	62	16	577	0.108	62	0.1	0.1	6.988	A
C-A	68	17			68				
A-B	189	47			189				
A-C	79	20			79				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	480	120	447	1.074	430	4.4	16.7	109.411	F
C-AB	79	20	576	0.137	79	0.1	0.2	7.250	A
C-A	81	20			81				
A-B	232	58			232				
A-C	97	24			97				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	480	120	447	1.074	441	16.7	26.5	193.612	F
C-AB	79	20	576	0.137	79	0.2	0.2	7.252	A
C-A	81	20			81				
A-B	232	58			232				
A-C	97	24			97				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	392	98	462	0.848	445	26.5	13.1	166.120	F
C-AB	62	16	577	0.108	62	0.2	0.1	6.995	A
C-A	68	17			68				
A-B	189	47			189				
A-C	79	20			79				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	328	82	473	0.693	370	13.1	2.5	44.924	E
C-AB	51	13	579	0.088	51	0.1	0.1	6.822	A
C-A	59	15			59				
A-B	158	40			158				
A-C	66	17			66				

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		31.28	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	291	100.000
B - B1078		ONE HOUR	✓	373	100.000
C - B1079 North		ONE HOUR	✓	105	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	192	99	
B - B1078	321	0	52	
C - B1079 North	74	31	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	4	1	
B - B1078	0	0	2	
C - B1079 North	1	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.90	64.53	6.8	F	343	514
C-AB	0.07	6.50	0.1	A	32	48
C-A					64	97
A-B					176	264
A-C					91	136

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	281	70	479	0.587	276	0.0	1.4	17.277	C
C-AB	26	6	601	0.043	26	0.0	0.1	6.258	A
C-A	54	13			54				
A-B	144	36			144				
A-C	75	19			75				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	336	84	470	0.715	332	1.4	2.3	25.434	D
C-AB	31	8	598	0.053	31	0.1	0.1	6.355	A
C-A	63	16			63				
A-B	172	43			172				
A-C	89	22			89				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	411	103	456	0.901	397	2.3	5.9	51.013	F
C-AB	40	10	594	0.067	40	0.1	0.1	6.495	A
C-A	76	19			76				
A-B	211	53			211				
A-C	109	27			109				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	411	103	456	0.901	407	5.9	6.8	64.533	F
C-AB	40	10	594	0.067	40	0.1	0.1	6.500	A
C-A	76	19			76				
A-B	211	53			211				
A-C	109	27			109				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	336	84	469	0.715	352	6.8	2.8	33.829	D
C-AB	31	8	598	0.053	31	0.1	0.1	6.363	A
C-A	63	16			63				
A-B	172	43			172				
A-C	89	22			89				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	281	70	479	0.587	286	2.8	1.5	19.126	C
C-AB	26	6	601	0.043	26	0.1	0.1	6.265	A
C-A	54	13			54				
A-B	144	36			144				
A-C	75	19			75				

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		4.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	108	100.000
B - B1078		ONE HOUR	✓	91	100.000
C - B1079 North		ONE HOUR	✓	42	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	98	11
B - B1078		83	0	8
C - B1079 North		21	21	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	2	9
B - B1078		2	0	0
C - B1079 North		5	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	9.24	0.3	A	83	125
C-AB	0.04	6.51	0.0	A	20	30
C-A					18	28
A-B					90	134
A-C					10	15

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	68	17	497	0.137	68	0.0	0.2	8.363	A
C-AB	16	4	581	0.028	16	0.0	0.0	6.371	A
C-A	15	4			15				
A-B	73	18			73				
A-C	8	2			8				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	494	0.165	81	0.2	0.2	8.719	A
C-AB	20	5	579	0.034	19	0.0	0.0	6.431	A
C-A	18	5			18				
A-B	88	22			88				
A-C	10	2			10				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	100	25	489	0.204	100	0.2	0.3	9.226	A
C-AB	24	6	577	0.042	24	0.0	0.0	6.513	A
C-A	22	5			22				
A-B	107	27			107				
A-C	12	3			12				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	100	25	489	0.204	100	0.3	0.3	9.238	A
C-AB	24	6	577	0.042	24	0.0	0.0	6.513	A
C-A	22	5			22				
A-B	107	27			107				
A-C	12	3			12				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	494	0.165	82	0.3	0.2	8.734	A
C-AB	20	5	579	0.034	20	0.0	0.0	6.432	A
C-A	18	5			18				
A-B	88	22			88				
A-C	10	2			10				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	68	17	497	0.137	68	0.2	0.2	8.394	A
C-AB	16	4	581	0.028	16	0.0	0.0	6.377	A
C-A	15	4			15				
A-B	73	18			73				
A-C	8	2			8				

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		10.67	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	217	100.000
B - B1078		ONE HOUR	✓	265	100.000
C - B1079 North		ONE HOUR	✓	139	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	162	55	
B - B1078	236	0	29	
C - B1079 North	90	49	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	1	0	
B - B1078	3	0	7	
C - B1079 North	4	4	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.66	23.38	1.8	C	243	365
C-AB	0.11	6.67	0.1	A	52	79
C-A					75	112
A-B					148	223
A-C					51	76

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	199	50	465	0.429	197	0.0	0.7	13.257	B
C-AB	42	10	601	0.069	41	0.0	0.1	6.434	A
C-A	63	16			63				
A-B	122	30			122				
A-C	42	10			42				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	60	457	0.522	237	0.7	1.1	16.277	C
C-AB	51	13	602	0.085	51	0.1	0.1	6.529	A
C-A	74	18			74				
A-B	145	36			145				
A-C	50	12			50				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	292	73	445	0.656	289	1.1	1.8	22.628	C
C-AB	65	16	605	0.107	64	0.1	0.1	6.665	A
C-A	88	22			88				
A-B	178	45			178				
A-C	61	15			61				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	292	73	445	0.656	292	1.8	1.8	23.382	C
C-AB	65	16	605	0.107	65	0.1	0.1	6.667	A
C-A	88	22			88				
A-B	178	45			178				
A-C	61	15			61				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	60	457	0.522	241	1.8	1.1	16.910	C
C-AB	51	13	602	0.085	51	0.1	0.1	6.537	A
C-A	74	18			74				
A-B	145	36			145				
A-C	50	12			50				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	199	50	465	0.429	201	1.1	0.8	13.698	B
C-AB	42	10	601	0.069	42	0.1	0.1	6.443	A
C-A	63	16			63				
A-B	122	30			122				
A-C	42	10			42				

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		183.71	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	324	100.000
B - B1078		ONE HOUR	✓	447	100.000
C - B1079 North		ONE HOUR	✓	225	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	265	59	
B - B1078	395	0	52	
C - B1079 North	126	99	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	4	0	
B - B1078	3	0	6	
C - B1079 North	2	4	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.20	407.02	50.0	F	410	615
C-AB	0.23	7.76	0.4	A	113	170
C-A					93	140
A-B					243	365
A-C					54	81

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	336	84	442	0.761	325	0.0	2.8	28.599	D
C-AB	89	22	601	0.147	88	0.0	0.2	7.013	A
C-A	81	20			81				
A-B	200	50			200				
A-C	44	11			44				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	401	100	428	0.937	384	2.8	7.2	63.295	F
C-AB	110	27	603	0.182	110	0.2	0.3	7.306	A
C-A	93	23			93				
A-B	238	60			238				
A-C	53	13			53				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	492	123	410	1.200	404	7.2	29.1	183.565	F
C-AB	142	35	606	0.234	141	0.3	0.4	7.756	A
C-A	106	27			106				
A-B	292	73			292				
A-C	65	16			65				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	492	123	410	1.201	408	29.1	50.0	361.538	F
C-AB	142	35	606	0.234	142	0.4	0.4	7.765	A
C-A	106	27			106				
A-B	292	73			292				
A-C	65	16			65				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	401	100	428	0.938	420	50.0	45.4	407.021	F
C-AB	110	27	603	0.182	110	0.4	0.3	7.318	A
C-A	92	23			92				
A-B	238	60			238				
A-C	53	13			53				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	336	84	442	0.761	432	45.4	21.4	283.608	F
C-AB	89	22	601	0.148	89	0.3	0.2	7.039	A
C-A	81	20			81				
A-B	200	50			200				
A-C	44	11			44				

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		108.20	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	312	100.000
B - B1078		ONE HOUR	✓	444	100.000
C - B1079 North		ONE HOUR	✓	144	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	224	88
B - B1078	370	0	74
C - B1079 North	84	60	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	4	0
B - B1078	1	0	0
C - B1079 North	4	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.10	221.31	31.0	F	407	611
C-AB	0.14	7.31	0.2	A	64	96
C-A					68	103
A-B					206	309
A-C					81	121

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	334	84	472	0.708	325	0.0	2.2	23.289	C
C-AB	51	13	576	0.088	50	0.0	0.1	6.846	A
C-A	58	14			58				
A-B	169	42			169				
A-C	66	17			66				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	399	100	461	0.866	389	2.2	4.8	44.211	E
C-AB	62	16	574	0.108	62	0.1	0.1	7.035	A
C-A	68	17			68				
A-B	202	50			202				
A-C	79	20			79				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	489	122	445	1.098	432	4.8	19.1	121.040	F
C-AB	79	20	571	0.138	79	0.1	0.2	7.311	A
C-A	80	20			80				
A-B	247	62			247				
A-C	97	24			97				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	489	122	445	1.098	441	19.1	31.0	221.307	F
C-AB	79	20	571	0.138	79	0.2	0.2	7.313	A
C-A	80	20			80				
A-B	247	62			247				
A-C	97	24			97				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	399	100	461	0.866	446	31.0	19.2	206.413	F
C-AB	62	16	574	0.108	62	0.2	0.1	7.042	A
C-A	68	17			68				
A-B	202	50			202				
A-C	79	20			79				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	334	84	472	0.708	400	19.2	2.8	70.770	F
C-AB	51	13	576	0.088	51	0.1	0.1	6.860	A
C-A	58	14			58				
A-B	169	42			169				
A-C	66	17			66				

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		34.71	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	299	100.000
B - B1078		ONE HOUR	✓	379	100.000
C - B1079 North		ONE HOUR	✓	105	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	199	100
B - B1078		327	0	52
C - B1079 North		74	31	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	4	1
B - B1078		0	0	2
C - B1079 North		1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.92	71.83	7.7	F	348	522
C-AB	0.07	6.52	0.1	A	32	48
C-A					64	97
A-B					182	274
A-C					92	138

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	286	71	478	0.597	280	0.0	1.4	17.706	C
C-AB	26	6	599	0.043	26	0.0	0.1	6.273	A
C-A	54	13			54				
A-B	150	37			150				
A-C	75	19			75				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	341	85	468	0.728	337	1.4	2.4	26.534	D
C-AB	31	8	596	0.053	31	0.1	0.1	6.375	A
C-A	63	16			63				
A-B	179	45			179				
A-C	90	22			90				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	418	104	455	0.918	402	2.4	6.5	54.993	F
C-AB	40	10	592	0.067	40	0.1	0.1	6.520	A
C-A	76	19			76				
A-B	219	55			219				
A-C	110	28			110				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	418	104	455	0.918	413	6.5	7.7	71.834	F
C-AB	40	10	592	0.067	40	0.1	0.1	6.522	A
C-A	76	19			76				
A-B	219	55			219				
A-C	110	28			110				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	341	85	468	0.728	360	7.7	3.0	37.387	E
C-AB	31	8	596	0.053	32	0.1	0.1	6.382	A
C-A	63	16			63				
A-B	179	45			179				
A-C	90	22			90				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	286	71	478	0.597	291	3.0	1.6	19.811	C
C-AB	26	6	599	0.043	26	0.1	0.1	6.281	A
C-A	54	13			54				
A-B	150	37			150				
A-C	75	19			75				

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		3.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	121	100.000
B - B1078		ONE HOUR	✓	78	100.000
C - B1079 North		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	111	11
B - B1078		70	0	8
C - B1079 North		16	21	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	2	9
B - B1078		2	0	0
C - B1079 North		6	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	8.91	0.2	A	71	107
C-AB	0.04	6.60	0.0	A	20	30
C-A					14	21
A-B					101	152
A-C					10	15

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	15	497	0.117	58	0.0	0.1	8.180	A
C-AB	16	4	576	0.028	16	0.0	0.0	6.426	A
C-A	12	3			12				
A-B	83	21			83				
A-C	8	2			8				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	17	494	0.141	70	0.1	0.2	8.480	A
C-AB	19	5	573	0.034	19	0.0	0.0	6.497	A
C-A	14	3			14				
A-B	99	25			99				
A-C	10	2			10				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	85	21	489	0.175	85	0.2	0.2	8.906	A
C-AB	24	6	570	0.042	24	0.0	0.0	6.595	A
C-A	17	4			17				
A-B	122	30			122				
A-C	12	3			12				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	85	21	489	0.175	85	0.2	0.2	8.913	A
C-AB	24	6	570	0.042	24	0.0	0.0	6.598	A
C-A	17	4			17				
A-B	122	30			122				
A-C	12	3			12				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	17	494	0.141	70	0.2	0.2	8.492	A
C-AB	19	5	573	0.034	19	0.0	0.0	6.499	A
C-A	14	3			14				
A-B	99	25			99				
A-C	10	2			10				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	15	497	0.118	59	0.2	0.1	8.205	A
C-AB	16	4	576	0.028	16	0.0	0.0	6.429	A
C-A	12	3			12				
A-B	83	21			83				
A-C	8	2			8				

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		7.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	275	100.000
B - B1078		ONE HOUR	✓	221	100.000
C - B1079 North		ONE HOUR	✓	134	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	216	59
B - B1078		192	0	29
C - B1079 North		85	49	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	1	0
B - B1078		4	0	7
C - B1079 North		5	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.55	18.37	1.2	C	203	304
C-AB	0.11	6.90	0.1	A	52	78
C-A					70	106
A-B					198	297
A-C					54	82

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	166	42	461	0.361	164	0.0	0.6	12.040	B
C-AB	41	10	588	0.070	41	0.0	0.1	6.583	A
C-A	59	15			59				
A-B	162	41			162				
A-C	45	11			45				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	199	50	452	0.440	198	0.6	0.8	14.128	B
C-AB	51	13	587	0.086	51	0.1	0.1	6.711	A
C-A	69	17			69				
A-B	194	48			194				
A-C	53	13			53				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	243	61	439	0.554	242	0.8	1.2	18.080	C
C-AB	64	16	586	0.110	64	0.1	0.1	6.897	A
C-A	83	21			83				
A-B	238	59			238				
A-C	65	16			65				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	243	61	439	0.554	243	1.2	1.2	18.374	C
C-AB	64	16	586	0.110	64	0.1	0.1	6.903	A
C-A	83	21			83				
A-B	238	59			238				
A-C	65	16			65				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	199	50	452	0.440	200	1.2	0.8	14.416	B
C-AB	51	13	587	0.086	51	0.1	0.1	6.718	A
C-A	69	17			69				
A-B	194	48			194				
A-C	53	13			53				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	166	42	461	0.361	167	0.8	0.6	12.300	B
C-AB	41	10	588	0.070	42	0.1	0.1	6.592	A
C-A	59	15			59				
A-B	162	41			162				
A-C	45	11			45				

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		44.51	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	483	100.000
B - B1078		ONE HOUR	✓	356	100.000
C - B1079 North		ONE HOUR	✓	227	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	419	64	
B - B1078	304	0	52	
C - B1079 North	128	99	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	3	0	
B - B1078	4	0	6	
C - B1079 North	2	4	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.00	129.05	13.6	F	326	489
C-AB	0.26	8.52	0.4	A	116	173
C-A					93	139
A-B					385	577
A-C					59	88

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	268	67	430	0.622	262	0.0	1.5	20.642	C
C-AB	90	22	574	0.156	89	0.0	0.2	7.403	A
C-A	81	20			81				
A-B	316	79			316				
A-C	48	12			48				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	320	80	415	0.771	314	1.5	2.9	34.026	D
C-AB	112	28	572	0.195	111	0.2	0.3	7.823	A
C-A	93	23			93				
A-B	377	94			377				
A-C	57	14			57				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	392	98	393	0.997	364	2.9	9.8	83.763	F
C-AB	145	36	569	0.255	145	0.3	0.4	8.501	A
C-A	105	26			105				
A-B	462	115			462				
A-C	70	18			70				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	392	98	393	0.997	376	9.8	13.6	129.051	F
C-AB	145	36	569	0.256	145	0.4	0.4	8.516	A
C-A	105	26			105				
A-B	462	115			462				
A-C	70	18			70				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	320	80	414	0.772	358	13.6	4.1	75.769	F
C-AB	112	28	572	0.195	112	0.4	0.3	7.841	A
C-A	92	23			92				
A-B	377	94			377				
A-C	57	14			57				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	268	67	430	0.623	277	4.1	1.8	24.774	C
C-AB	90	22	575	0.156	90	0.3	0.2	7.436	A
C-A	81	20			81				
A-B	316	79			316				
A-C	48	12			48				

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		24.10	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	379	100.000
B - B1078		ONE HOUR	✓	355	100.000
C - B1079 North		ONE HOUR	✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	289	90	
B - B1078	281	0	74	
C - B1079 North	77	60	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	3	0	
B - B1078	1	0	0	
C - B1079 North	4	5	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.88	58.46	5.9	F	326	488
C-AB	0.14	7.65	0.2	A	63	95
C-A					63	94
A-B					266	398
A-C					83	124

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	267	67	473	0.565	262	0.0	1.2	16.721	C
C-AB	50	13	561	0.090	50	0.0	0.1	7.048	A
C-A	53	13			53				
A-B	218	54			218				
A-C	68	17			68				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	319	80	461	0.692	316	1.2	2.1	24.238	C
C-AB	62	15	556	0.111	62	0.1	0.1	7.289	A
C-A	62	15			62				
A-B	260	65			260				
A-C	81	20			81				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	391	98	444	0.880	378	2.1	5.2	47.645	E
C-AB	78	20	549	0.143	78	0.1	0.2	7.648	A
C-A	73	18			73				
A-B	319	80			319				
A-C	99	25			99				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	391	98	444	0.880	388	5.2	5.9	58.459	F
C-AB	78	20	549	0.143	78	0.2	0.2	7.653	A
C-A	73	18			73				
A-B	319	80			319				
A-C	99	25			99				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	319	80	461	0.693	333	5.9	2.4	30.569	D
C-AB	62	15	556	0.111	62	0.2	0.1	7.298	A
C-A	62	15			62				
A-B	260	65			260				
A-C	81	20			81				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	267	67	473	0.565	272	2.4	1.4	18.260	C
C-AB	50	13	561	0.090	51	0.1	0.1	7.063	A
C-A	53	13			53				
A-B	218	54			218				
A-C	68	17			68				

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		32.13	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	387	100.000
B - B1078		ONE HOUR	✓	372	100.000
C - B1079 North		ONE HOUR	✓	105	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	282	105	
B - B1078	320	0	52	
C - B1079 North	74	31	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	3	1	
B - B1078	0	0	2	
C - B1079 North	1	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.92	74.62	7.9	F	342	513
C-AB	0.07	6.81	0.1	A	32	49
C-A					64	96
A-B					259	388
A-C					96	145

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	280	70	471	0.595	275	0.0	1.4	17.848	C
C-AB	26	6	583	0.044	26	0.0	0.1	6.454	A
C-A	54	13			54				
A-B	212	53			212				
A-C	79	20			79				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	335	84	460	0.727	331	1.4	2.4	26.897	D
C-AB	32	8	577	0.055	31	0.1	0.1	6.597	A
C-A	63	16			63				
A-B	253	63			253				
A-C	94	24			94				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	410	103	445	0.921	393	2.4	6.6	56.609	F
C-AB	40	10	569	0.070	40	0.1	0.1	6.806	A
C-A	76	19			76				
A-B	310	78			310				
A-C	116	29			116				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	410	103	445	0.921	405	6.6	7.9	74.619	F
C-AB	40	10	569	0.070	40	0.1	0.1	6.811	A
C-A	76	19			76				
A-B	310	78			310				
A-C	116	29			116				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	335	84	460	0.727	355	7.9	3.0	38.454	E
C-AB	32	8	577	0.055	32	0.1	0.1	6.603	A
C-A	63	16			63				
A-B	253	63			253				
A-C	94	24			94				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	280	70	471	0.595	286	3.0	1.5	19.985	C
C-AB	26	6	583	0.044	26	0.1	0.1	6.459	A
C-A	53	13			53				
A-B	212	53			212				
A-C	79	20			79				

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		5.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	122	100.000
B - B1078		ONE HOUR	✓	144	100.000
C - B1079 North		ONE HOUR	✓	42	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	112	11	
B - B1078	136	0	8	
C - B1079 North	21	21	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	2	9	
B - B1078	1	0	0	
C - B1079 North	5	5	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	10.95	0.5	B	132	198
C-AB	0.04	6.56	0.0	A	20	30
C-A					18	28
A-B					102	154
A-C					10	15

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	108	27	496	0.218	107	0.0	0.3	9.241	A
C-AB	16	4	578	0.028	16	0.0	0.0	6.400	A
C-A	15	4			15				
A-B	84	21			84				
A-C	8	2			8				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	492	0.262	129	0.3	0.4	9.906	A
C-AB	20	5	576	0.034	19	0.0	0.0	6.466	A
C-A	18	5			18				
A-B	100	25			100				
A-C	10	2			10				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	158	40	487	0.325	158	0.4	0.5	10.914	B
C-AB	24	6	573	0.042	24	0.0	0.0	6.556	A
C-A	22	5			22				
A-B	123	31			123				
A-C	12	3			12				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	158	40	487	0.325	158	0.5	0.5	10.947	B
C-AB	24	6	573	0.042	24	0.0	0.0	6.556	A
C-A	22	5			22				
A-B	123	31			123				
A-C	12	3			12				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	492	0.263	130	0.5	0.4	9.950	A
C-AB	20	5	576	0.034	20	0.0	0.0	6.469	A
C-A	18	5			18				
A-B	100	25			100				
A-C	10	2			10				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	108	27	495	0.218	108	0.4	0.3	9.310	A
C-AB	16	4	578	0.028	16	0.0	0.0	6.403	A
C-A	15	4			15				
A-B	84	21			84				
A-C	8	2			8				

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		11.61	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	288	100.000
B - B1078		ONE HOUR	✓	280	100.000
C - B1079 North		ONE HOUR	✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	231	57
B - B1078	251	0	29
C - B1079 North	88	49	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	1	0
B - B1078	3	0	7
C - B1079 North	5	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.70	27.61	2.3	D	257	385
C-AB	0.11	6.92	0.2	A	52	79
C-A					73	109
A-B					212	318
A-C					53	79

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	211	53	460	0.458	207	0.0	0.8	14.072	B
C-AB	42	10	587	0.071	41	0.0	0.1	6.593	A
C-A	61	15			61				
A-B	174	43			174				
A-C	43	11			43				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	252	63	451	0.559	250	0.8	1.2	17.808	C
C-AB	51	13	586	0.087	51	0.1	0.1	6.724	A
C-A	72	18			72				
A-B	207	52			207				
A-C	51	13			51				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	308	77	437	0.705	304	1.2	2.2	26.291	D
C-AB	65	16	585	0.111	65	0.1	0.1	6.915	A
C-A	86	21			86				
A-B	254	64			254				
A-C	63	16			63				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	308	77	437	0.705	308	2.2	2.3	27.612	D
C-AB	65	16	585	0.111	65	0.1	0.2	6.921	A
C-A	86	21			86				
A-B	254	64			254				
A-C	63	16			63				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	252	63	451	0.559	256	2.3	1.3	18.807	C
C-AB	51	13	586	0.087	51	0.2	0.1	6.733	A
C-A	72	18			72				
A-B	207	52			207				
A-C	51	13			51				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	211	53	460	0.458	213	1.3	0.9	14.651	B
C-AB	42	10	587	0.071	42	0.1	0.1	6.605	A
C-A	61	15			61				
A-B	174	43			174				
A-C	43	11			43				

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		102.80	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	491	100.000
B - B1078		ONE HOUR	✓	406	100.000
C - B1079 North		ONE HOUR	✓	227	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	428	63	
B - B1078	354	0	52	
C - B1079 North	128	99	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	3	0	
B - B1078	3	0	6	
C - B1079 North	2	4	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.14	280.25	35.8	F	372	558
C-AB	0.26	8.56	0.4	A	116	174
C-A					93	139
A-B					393	590
A-C					58	86

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	305	76	430	0.711	296	0.0	2.2	25.602	D
C-AB	90	22	573	0.156	89	0.0	0.2	7.424	A
C-A	81	20			81				
A-B	322	81			322				
A-C	47	12			47				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	365	91	413	0.882	353	2.2	5.1	51.305	F
C-AB	112	28	570	0.196	111	0.2	0.3	7.852	A
C-A	92	23			92				
A-B	385	96			385				
A-C	56	14			56				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	447	112	391	1.141	382	5.1	21.3	147.830	F
C-AB	145	36	567	0.257	145	0.3	0.4	8.543	A
C-A	105	26			105				
A-B	472	118			472				
A-C	69	17			69				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	447	112	391	1.141	389	21.3	35.8	280.251	F
C-AB	146	36	567	0.257	146	0.4	0.4	8.557	A
C-A	104	26			104				
A-B	472	118			472				
A-C	69	17			69				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	365	91	413	0.882	402	35.8	26.4	280.001	F
C-AB	112	28	570	0.196	112	0.4	0.3	7.869	A
C-A	92	23			92				
A-B	385	96			385				
A-C	56	14			56				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	305	76	429	0.711	398	26.4	3.2	129.341	F
C-AB	90	22	573	0.157	90	0.3	0.2	7.455	A
C-A	81	20			81				
A-B	322	81			322				
A-C	47	12			47				

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		47.14	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	453	100.000
B - B1078		ONE HOUR	✓	390	100.000
C - B1079 North		ONE HOUR	✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	360	93	
B - B1078	316	0	74	
C - B1079 North	77	60	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	3	0	
B - B1078	1	0	0	
C - B1079 North	4	5	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.99	118.54	13.7	F	358	537
C-AB	0.15	7.97	0.2	A	64	96
C-A					62	93
A-B					331	496
A-C					85	128

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	293	73	465	0.632	287	0.0	1.6	19.617	C
C-AB	51	13	548	0.092	50	0.0	0.1	7.227	A
C-A	53	13			53				
A-B	271	68			271				
A-C	70	18			70				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	350	88	451	0.776	345	1.6	3.0	32.095	D
C-AB	62	15	540	0.115	62	0.1	0.1	7.523	A
C-A	62	15			62				
A-B	324	81			324				
A-C	84	21			84				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	429	107	433	0.991	401	3.0	10.0	77.745	F
C-AB	79	20	531	0.149	79	0.1	0.2	7.965	A
C-A	72	18			72				
A-B	397	99			397				
A-C	102	26			102				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	429	107	433	0.992	414	10.0	13.7	118.537	F
C-AB	79	20	531	0.149	79	0.2	0.2	7.970	A
C-A	72	18			72				
A-B	397	99			397				
A-C	102	26			102				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	350	88	451	0.777	388	13.7	4.2	68.717	F
C-AB	62	16	541	0.115	62	0.2	0.2	7.530	A
C-A	62	15			62				
A-B	324	81			324				
A-C	84	21			84				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	293	73	465	0.632	303	4.2	1.8	23.386	C
C-AB	51	13	548	0.092	51	0.2	0.1	7.246	A
C-A	53	13			53				
A-B	271	68			271				
A-C	70	18			70				

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		68.43	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	433	100.000
B - B1078		ONE HOUR	✓	413	100.000
C - B1079 North		ONE HOUR	✓	105	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	328	105	
B - B1078	361	0	52	
C - B1079 North	74	31	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	2	1	
B - B1078	0	0	2	
C - B1079 North	1	0	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.04	158.22	20.1	F	379	569
C-AB	0.07	6.97	0.1	A	33	49
C-A					64	96
A-B					301	451
A-C					96	145

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	311	78	466	0.667	304	0.0	1.9	21.282	C
C-AB	26	6	575	0.045	26	0.0	0.1	6.552	A
C-A	53	13			53				
A-B	247	62			247				
A-C	79	20			79				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	372	93	455	0.818	364	1.9	3.7	36.982	E
C-AB	32	8	567	0.056	32	0.1	0.1	6.720	A
C-A	63	16			63				
A-B	295	74			295				
A-C	94	24			94				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	455	114	438	1.038	416	3.7	13.4	94.897	F
C-AB	40	10	557	0.072	40	0.1	0.1	6.966	A
C-A	76	19			76				
A-B	361	90			361				
A-C	116	29			116				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	455	114	438	1.038	428	13.4	20.1	158.218	F
C-AB	40	10	557	0.072	40	0.1	0.1	6.972	A
C-A	76	19			76				
A-B	361	90			361				
A-C	116	29			116				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	372	93	455	0.818	427	20.1	6.3	115.641	F
C-AB	32	8	567	0.056	32	0.1	0.1	6.726	A
C-A	63	16			63				
A-B	295	74			295				
A-C	94	24			94				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	311	78	466	0.668	328	6.3	2.2	28.460	D
C-AB	26	6	575	0.045	26	0.1	0.1	6.561	A
C-A	53	13			53				
A-B	247	62			247				
A-C	79	20			79				

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		3.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	134	100.000
B - B1078		ONE HOUR	✓	83	100.000
C - B1079 North		ONE HOUR	✓	38	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	123	12	
B - B1078	75	0	8	
C - B1079 North	17	21	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	2	9	
B - B1078	3	0	0	
C - B1079 North	6	5	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.19	9.22	0.2	A	76	114
C-AB	0.04	6.63	0.0	A	20	30
C-A					15	22
A-B					112	169
A-C					11	16

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	62	16	490	0.127	62	0.0	0.1	8.391	A
C-AB	16	4	574	0.028	16	0.0	0.0	6.449	A
C-A	12	3			12				
A-B	92	23			92				
A-C	9	2			9				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	74	19	486	0.153	74	0.1	0.2	8.728	A
C-AB	19	5	571	0.034	19	0.0	0.0	6.525	A
C-A	15	4			15				
A-B	110	28			110				
A-C	11	3			11				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	91	23	481	0.189	91	0.2	0.2	9.209	A
C-AB	24	6	567	0.042	24	0.0	0.0	6.631	A
C-A	18	4			18				
A-B	135	34			135				
A-C	13	3			13				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	91	23	481	0.189	91	0.2	0.2	9.218	A
C-AB	24	6	567	0.042	24	0.0	0.0	6.634	A
C-A	18	4			18				
A-B	135	34			135				
A-C	13	3			13				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	74	19	486	0.153	74	0.2	0.2	8.744	A
C-AB	19	5	571	0.034	19	0.0	0.0	6.529	A
C-A	15	4			15				
A-B	110	28			110				
A-C	11	3			11				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	62	16	490	0.127	62	0.2	0.1	8.421	A
C-AB	16	4	574	0.028	16	0.0	0.0	6.452	A
C-A	12	3			12				
A-B	92	23			92				
A-C	9	2			9				

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		11.64	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	299	100.000
B - B1078		ONE HOUR	✓	279	100.000
C - B1079 North		ONE HOUR	✓	136	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	237	62	
B - B1078	250	0	29	
C - B1079 North	87	49	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	2	0	
B - B1078	3	0	7	
C - B1079 North	5	4	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.71	28.11	2.3	D	256	384
C-AB	0.11	6.97	0.2	A	52	79
C-A					72	108
A-B					217	326
A-C					57	86

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	53	457	0.459	207	0.0	0.8	14.191	B
C-AB	42	10	584	0.071	41	0.0	0.1	6.624	A
C-A	61	15			61				
A-B	178	45			178				
A-C	47	12			47				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	251	63	447	0.561	249	0.8	1.2	18.005	C
C-AB	51	13	583	0.087	51	0.1	0.1	6.763	A
C-A	71	18			71				
A-B	213	53			213				
A-C	56	14			56				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	307	77	434	0.708	303	1.2	2.2	26.726	D
C-AB	65	16	581	0.111	64	0.1	0.2	6.964	A
C-A	85	21			85				
A-B	261	65			261				
A-C	69	17			69				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	307	77	434	0.708	307	2.2	2.3	28.111	D
C-AB	65	16	581	0.111	65	0.2	0.2	6.967	A
C-A	85	21			85				
A-B	261	65			261				
A-C	69	17			69				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	251	63	447	0.561	255	2.3	1.3	19.046	C
C-AB	51	13	583	0.087	51	0.2	0.1	6.772	A
C-A	71	18			71				
A-B	213	53			213				
A-C	56	14			56				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	53	457	0.459	212	1.3	0.9	14.786	B
C-AB	42	10	584	0.071	42	0.1	0.1	6.636	A
C-A	60	15			60				
A-B	178	45			178				
A-C	47	12			47				

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		289.59	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	578	100.000
B - B1078		ONE HOUR	✓	471	100.000
C - B1079 North		ONE HOUR	✓	239	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	505	73	
B - B1078	419	0	52	
C - B1079 North	140	99	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	2	0	
B - B1078	3	0	6	
C - B1079 North	1	4	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.37	785.14	90.6	F	432	648
C-AB	0.27	8.92	0.5	A	119	179
C-A					100	150
A-B					464	695
A-C					67	100

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	354	89	420	0.844	338	0.0	4.1	38.596	E
C-AB	92	23	565	0.162	91	0.0	0.2	7.585	A
C-A	88	22			88				
A-B	380	95			380				
A-C	55	14			55				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	423	106	402	1.053	384	4.1	14.0	108.098	F
C-AB	115	29	561	0.205	115	0.2	0.3	8.081	A
C-A	100	25			100				
A-B	454	114			454				
A-C	65	16			65				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	518	130	377	1.374	376	14.0	49.6	324.737	F
C-AB	151	38	555	0.272	151	0.3	0.5	8.905	A
C-A	112	28			112				
A-B	556	139			556				
A-C	80	20			80				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	518	130	377	1.374	377	49.6	85.0	641.571	F
C-AB	151	38	556	0.273	151	0.5	0.5	8.923	A
C-A	112	28			112				
A-B	556	139			556				
A-C	80	20			80				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	423	106	401	1.054	401	85.0	90.6	785.145	F
C-AB	115	29	561	0.205	116	0.5	0.3	8.103	A
C-A	100	25			100				
A-B	454	114			454				
A-C	65	16			65				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	354	89	419	0.845	415	90.6	75.5	721.934	F
C-AB	92	23	565	0.163	92	0.3	0.2	7.623	A
C-A	88	22			88				
A-B	380	95			380				
A-C	55	14			55				

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		105.04	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	524	100.000
B - B1078		ONE HOUR	✓	433	100.000
C - B1079 North		ONE HOUR	✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	423	101	
B - B1078	359	0	74	
C - B1079 North	88	60	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	2	0	
B - B1078	1	0	0	
C - B1079 North	3	5	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.14	269.81	36.8	F	397	596
C-AB	0.16	8.17	0.2	A	65	98
C-A					71	106
A-B					389	583
A-C					93	139

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	326	81	455	0.716	317	0.0	2.3	24.627	C
C-AB	51	13	542	0.095	51	0.0	0.1	7.333	A
C-A	60	15			60				
A-B	319	80			319				
A-C	76	19			76				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	389	97	440	0.884	377	2.3	5.3	49.274	E
C-AB	63	16	533	0.119	63	0.1	0.2	7.663	A
C-A	70	17			70				
A-B	381	95			381				
A-C	91	23			91				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	477	119	420	1.135	410	5.3	22.0	141.835	F
C-AB	81	20	522	0.156	81	0.2	0.2	8.165	A
C-A	82	21			82				
A-B	466	117			466				
A-C	111	28			111				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	477	119	420	1.135	417	22.0	36.8	269.451	F
C-AB	81	20	522	0.156	81	0.2	0.2	8.172	A
C-A	82	21			82				
A-B	466	117			466				
A-C	111	28			111				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	389	97	440	0.884	429	36.8	27.0	269.811	F
C-AB	64	16	533	0.119	64	0.2	0.2	7.673	A
C-A	70	17			70				
A-B	381	95			381				
A-C	91	23			91				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	326	81	455	0.716	421	27.0	3.2	122.746	F
C-AB	52	13	542	0.095	52	0.2	0.1	7.352	A
C-A	60	15			60				
A-B	319	80			319				
A-C	76	19			76				

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		230.71	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	444	100.000
B - B1078		ONE HOUR	✓	485	100.000
C - B1079 North		ONE HOUR	✓	120	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	333	111
B - B1078	433	0	52
C - B1079 North	89	31	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	3	1
B - B1078	0	0	2
C - B1079 North	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.24	502.10	62.4	F	445	668
C-AB	0.07	6.87	0.1	A	33	50
C-A					77	116
A-B					305	458
A-C					102	153

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	365	91	460	0.794	352	0.0	3.3	30.567	D
C-AB	26	7	581	0.045	26	0.0	0.1	6.490	A
C-A	64	16			64				
A-B	251	63			251				
A-C	84	21			84				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	436	109	448	0.975	412	3.3	9.3	72.964	F
C-AB	32	8	574	0.056	32	0.1	0.1	6.643	A
C-A	76	19			76				
A-B	299	75			299				
A-C	100	25			100				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	534	134	431	1.241	427	9.3	36.2	212.096	F
C-AB	41	10	566	0.073	41	0.1	0.1	6.866	A
C-A	91	23			91				
A-B	366	92			366				
A-C	122	31			122				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	534	134	430	1.242	430	36.2	62.4	423.625	F
C-AB	41	10	566	0.073	41	0.1	0.1	6.872	A
C-A	91	23			91				
A-B	366	92			366				
A-C	122	31			122				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	436	109	448	0.975	442	62.4	61.0	502.096	F
C-AB	32	8	574	0.057	33	0.1	0.1	6.652	A
C-A	76	19			76				
A-B	299	75			299				
A-C	100	25			100				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	365	91	460	0.795	452	61.0	39.3	402.013	F
C-AB	26	7	581	0.046	26	0.1	0.1	6.496	A
C-A	64	16			64				
A-B	251	63			251				
A-C	84	21			84				

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		3.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	134	100.000
B - B1078		ONE HOUR	✓	82	100.000
C - B1079 North		ONE HOUR	✓	38	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	123	12	
B - B1078	74	0	8	
C - B1079 North	17	21	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	2	9	
B - B1078	3	0	0	
C - B1079 North	6	5	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.19	9.19	0.2	A	75	112
C-AB	0.04	6.63	0.0	A	20	30
C-A					15	22
A-B					112	169
A-C					11	16

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	490	0.125	61	0.0	0.1	8.377	A
C-AB	16	4	574	0.028	16	0.0	0.0	6.449	A
C-A	12	3			12				
A-B	92	23			92				
A-C	9	2			9				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	486	0.151	73	0.1	0.2	8.710	A
C-AB	19	5	571	0.034	19	0.0	0.0	6.525	A
C-A	15	4			15				
A-B	110	28			110				
A-C	11	3			11				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	481	0.187	90	0.2	0.2	9.184	A
C-AB	24	6	567	0.042	24	0.0	0.0	6.631	A
C-A	18	4			18				
A-B	135	34			135				
A-C	13	3			13				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	481	0.187	90	0.2	0.2	9.193	A
C-AB	24	6	567	0.042	24	0.0	0.0	6.634	A
C-A	18	4			18				
A-B	135	34			135				
A-C	13	3			13				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	486	0.151	74	0.2	0.2	8.724	A
C-AB	19	5	571	0.034	19	0.0	0.0	6.529	A
C-A	15	4			15				
A-B	110	28			110				
A-C	11	3			11				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	490	0.125	62	0.2	0.1	8.407	A
C-AB	16	4	574	0.028	16	0.0	0.0	6.452	A
C-A	12	3			12				
A-B	92	23			92				
A-C	9	2			9				

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		10.90	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	297	100.000
B - B1078		ONE HOUR	✓	272	100.000
C - B1079 North		ONE HOUR	✓	136	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	235	62
B - B1078	243	0	29
C - B1079 North	87	49	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	1	0
B - B1078	3	0	7
C - B1079 North	5	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.69	26.50	2.1	D	250	374
C-AB	0.11	6.96	0.2	A	52	79
C-A					72	108
A-B					215	323
A-C					57	86

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	205	51	457	0.448	202	0.0	0.8	13.909	B
C-AB	42	10	585	0.071	41	0.0	0.1	6.618	A
C-A	61	15			61				
A-B	177	44			177				
A-C	47	12			47				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	244	61	448	0.546	243	0.8	1.2	17.459	C
C-AB	51	13	584	0.087	51	0.1	0.1	6.755	A
C-A	71	18			71				
A-B	211	53			211				
A-C	56	14			56				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	299	75	434	0.690	296	1.2	2.0	25.365	D
C-AB	65	16	582	0.111	64	0.1	0.2	6.954	A
C-A	85	21			85				
A-B	259	65			259				
A-C	69	17			69				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	299	75	434	0.690	299	2.0	2.1	26.501	D
C-AB	65	16	582	0.111	65	0.2	0.2	6.960	A
C-A	85	21			85				
A-B	259	65			259				
A-C	69	17			69				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	244	61	448	0.546	248	2.1	1.3	18.342	C
C-AB	51	13	584	0.087	51	0.2	0.1	6.764	A
C-A	71	18			71				
A-B	211	53			211				
A-C	56	14			56				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	205	51	457	0.448	206	1.3	0.8	14.445	B
C-AB	42	10	585	0.071	42	0.1	0.1	6.630	A
C-A	60	15			60				
A-B	177	44			177				
A-C	47	12			47				

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		305.58	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	542	100.000
B - B1078		ONE HOUR	✓	477	100.000
C - B1079 North		ONE HOUR	✓	239	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	468	74
B - B1078		425	0	52
C - B1079 North		140	99	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - B1079 East	B - B1078	C - B1079 North
A - B1079 East		0	3	0
B - B1078		3	0	6
C - B1079 North		1	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.38	799.97	93.2	F	437	656
C-AB	0.27	8.72	0.5	A	119	178
C-A					101	151
A-B					430	645
A-C					68	102

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	359	90	422	0.850	342	0.0	4.3	39.156	E
C-AB	91	23	571	0.160	91	0.0	0.2	7.498	A
C-A	89	22			89				
A-B	353	88			353				
A-C	56	14			56				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	428	107	405	1.059	387	4.3	14.6	110.438	F
C-AB	115	29	568	0.202	114	0.2	0.3	7.945	A
C-A	100	25			100				
A-B	421	105			421				
A-C	66	17			66				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	525	131	381	1.378	379	14.6	50.9	330.157	F
C-AB	150	38	564	0.267	150	0.3	0.5	8.700	A
C-A	113	28			113				
A-B	516	129			516				
A-C	81	20			81				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	525	131	381	1.379	380	50.9	87.0	651.084	F
C-AB	151	38	564	0.267	151	0.5	0.5	8.717	A
C-A	113	28			113				
A-B	516	129			516				
A-C	81	20			81				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	428	107	404	1.060	404	87.0	93.2	799.969	F
C-AB	115	29	568	0.202	115	0.5	0.3	7.964	A
C-A	100	25			100				
A-B	421	105			421				
A-C	66	17			66				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	359	90	422	0.851	417	93.2	78.6	742.173	F
C-AB	92	23	571	0.161	92	0.3	0.2	7.519	A
C-A	88	22			88				
A-B	353	88			353				
A-C	56	14			56				

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		107.35	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	525	100.000
B - B1078		ONE HOUR	✓	434	100.000
C - B1079 North		ONE HOUR	✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	424	101	
B - B1078	360	0	74	
C - B1079 North	88	60	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - B1079 East	B - B1078	C - B1079 North	
A - B1079 East	0	2	0	
B - B1078	1	0	0	
C - B1079 North	3	5	0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.14	275.62	37.4	F	398	597
C-AB	0.16	8.18	0.2	A	65	98
C-A					71	106
A-B					389	584
A-C					93	139

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	327	82	455	0.718	317	0.0	2.3	24.754	C
C-AB	52	13	541	0.095	51	0.0	0.1	7.336	A
C-A	60	15			60				
A-B	320	80			320				
A-C	76	19			76				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	390	98	440	0.886	378	2.3	5.3	49.763	E
C-AB	63	16	533	0.119	63	0.1	0.2	7.666	A
C-A	70	17			70				
A-B	382	95			382				
A-C	91	23			91				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	478	119	420	1.138	410	5.3	22.3	143.519	F
C-AB	81	20	522	0.156	81	0.2	0.2	8.169	A
C-A	82	21			82				
A-B	467	117			467				
A-C	111	28			111				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	478	119	420	1.138	417	22.3	37.4	273.384	F
C-AB	81	20	522	0.156	81	0.2	0.2	8.177	A
C-A	82	21			82				
A-B	467	117			467				
A-C	111	28			111				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	390	98	440	0.886	429	37.4	27.8	275.615	F
C-AB	64	16	533	0.119	64	0.2	0.2	7.673	A
C-A	70	17			70				
A-B	382	95			382				
A-C	91	23			91				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	327	82	455	0.718	424	27.8	3.3	128.803	F
C-AB	52	13	541	0.095	52	0.2	0.1	7.352	A
C-A	60	15			60				
A-B	320	80			320				
A-C	76	19			76				

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - B1079 North - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J2	B1078 / B1079	T-Junction	Two-way		228.11	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1079 East		ONE HOUR	✓	449	100.000
B - B1078		ONE HOUR	✓	484	100.000
C - B1079 North		ONE HOUR	✓	120	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	338	111
B - B1078	432	0	52
C - B1079 North	89	31	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - B1079 East	B - B1078	C - B1079 North
A - B1079 East	0	2	1
B - B1078	0	0	2
C - B1079 North	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.24	499.33	62.0	F	444	667
C-AB	0.07	6.89	0.1	A	33	50
C-A					77	116
A-B					310	465
A-C					102	153

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	365	91	460	0.793	352	0.0	3.3	30.489	D
C-AB	26	7	580	0.046	26	0.0	0.1	6.501	A
C-A	64	16			64				
A-B	254	64			254				
A-C	84	21			84				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	435	109	447	0.974	412	3.3	9.2	72.633	F
C-AB	32	8	573	0.057	32	0.1	0.1	6.656	A
C-A	76	19			76				
A-B	304	76			304				
A-C	100	25			100				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	533	133	430	1.240	426	9.2	36.0	211.230	F
C-AB	41	10	564	0.073	41	0.1	0.1	6.883	A
C-A	91	23			91				
A-B	372	93			372				
A-C	122	31			122				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	533	133	430	1.240	429	36.0	62.0	421.846	F
C-AB	41	10	564	0.073	41	0.1	0.1	6.889	A
C-A	91	23			91				
A-B	372	93			372				
A-C	122	31			122				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	435	109	447	0.974	443	62.0	60.2	499.326	F
C-AB	32	8	573	0.057	33	0.1	0.1	6.662	A
C-A	76	19			76				
A-B	304	76			304				
A-C	100	25			100				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	365	91	460	0.794	452	60.2	38.3	395.264	F
C-AB	26	7	580	0.046	27	0.1	0.1	6.510	A
C-A	64	16			64				
A-B	254	64			254				
A-C	84	21			84				

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: 2019.05.17 J3_Model_Adjusted_v11.j9

Path: \\ser01cam1uk.uk.wspgroup.com\projects\50400326 - Sizewell C transport planning\ID Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\For Issue\Scoped In\v11 fixed\J3\Model
Report generation date: 13/03/2020 11:33:37

- »B1078 / B1116 - Base Year, 6-7 AM
- »B1078 / B1116 - Base Year, 7-8 AM
- »B1078 / B1116 - Base Year, 8-9 AM
- »B1078 / B1116 - Base Year, 3-4 PM
- »B1078 / B1116 - Base Year, 5-6 PM
- »B1078 / B1116 - 2023 Reference Case , 6-7 AM
- »B1078 / B1116 - 2023 Reference Case , 7-8 AM
- »B1078 / B1116 - 2023 Reference Case , 8-9 AM
- »B1078 / B1116 - 2023 Reference Case , 3-4 PM
- »B1078 / B1116 - 2023 Reference Case , 5-6 PM
- »B1078 / B1116 - 2023 Early Years , 6-7 AM
- »B1078 / B1116 - 2023 Early Years , 7-8 AM
- »B1078 / B1116 - 2023 Early Years , 8-9 AM
- »B1078 / B1116 - 2023 Early Years , 3-4 PM
- »B1078 / B1116 - 2023 Early Years , 5-6 PM
- »B1078 / B1116 - 2028 Reference Case , 6-7 AM
- »B1078 / B1116 - 2028 Reference Case , 7-8 AM
- »B1078 / B1116 - 2028 Reference Case , 8-9 AM
- »B1078 / B1116 - 2028 Reference Case , 3-4 PM
- »B1078 / B1116 - 2028 Reference Case , 5-6 PM
- »B1078 / B1116 - 2028 Peak Construction, 6-7 AM
- »B1078 / B1116 - 2028 Peak Construction, 7-8 AM
- »B1078 / B1116 - 2028 Peak Construction, 8-9 AM
- »B1078 / B1116 - 2028 Peak Construction, 3-4 PM
- »B1078 / B1116 - 2028 Peak Construction, 5-6 PM
- »B1078 / B1116 - 2034 Reference Case , 6-7 AM
- »B1078 / B1116 - 2034 Reference Case , 7-8 AM
- »B1078 / B1116 - 2034 Reference Case , 8-9 AM
- »B1078 / B1116 - 2034 Reference Case , 3-4 PM
- »B1078 / B1116 - 2034 Reference Case , 5-6 PM
- »B1078 / B1116 - 2034 Operational Led, 6-7 AM
- »B1078 / B1116 - 2034 Operational Led, 7-8 AM
- »B1078 / B1116 - 2034 Operational Led, 8-9 AM
- »B1078 / B1116 - 2034 Operational Led, 3-4 PM
- »B1078 / B1116 - 2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM				7-8 AM				8-9 AM				3-4 PM				5-6 PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
B1078 / B1116 - Base Year																				
A - B1116 North-West	0.2	5.74	0.15	A	0.8	9.10	0.44	A	2.4	18.96	0.72	C	0.6	8.25	0.36	A	0.7	9.08	0.41	A
B - B1078 South-West	0.1	2.68	0.05	A	0.2	3.13	0.14	A	0.2	3.51	0.20	A	0.2	3.35	0.19	A	0.3	3.32	0.21	A
C - B1078 South-East	0.1	3.24	0.11	A	0.5	4.36	0.33	A	0.7	5.12	0.42	A	0.6	4.63	0.37	A	0.6	4.43	0.36	A
D - A12 Slip-Road	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
B1078 / B1116 - 2023 Reference Case																				
A - B1116 North-West	0.2	5.81	0.16	A	0.9	9.82	0.47	A	3.3	24.57	0.78	C	0.7	9.26	0.41	A	0.8	9.64	0.44	A
B - B1078 South-West	0.1	2.67	0.06	A	0.2	3.16	0.15	A	0.3	3.58	0.22	A	0.3	3.56	0.24	A	0.3	3.42	0.22	A
C - B1078 South-East	0.1	3.23	0.12	A	0.5	4.43	0.34	A	0.7	5.14	0.42	A	0.7	4.90	0.41	A	0.6	4.61	0.38	A
D - A12 Slip-Road	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
B1078 / B1116 - 2023 Early Years																				
A - B1116 North-West	0.2	5.95	0.17	A	1.1	11.62	0.53	B	3.5	26.09	0.79	D	0.7	9.24	0.41	A	0.7	9.56	0.43	A
B - B1078 South-West	0.1	2.68	0.07	A	0.2	3.32	0.18	A	0.3	3.62	0.23	A	0.3	3.56	0.24	A	0.3	3.47	0.23	A
C - B1078 South-East	0.1	3.25	0.13	A	0.6	4.69	0.38	A	0.7	5.20	0.43	A	0.7	4.89	0.40	A	0.6	4.71	0.39	A
D - A12 Slip-Road	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.1	5.81	0.06	A
B1078 / B1116 - 2028 Reference Case																				
A - B1116 North-West	0.2	5.79	0.16	A	0.9	9.68	0.46	A	2.9	22.57	0.75	C	0.6	8.78	0.39	A	0.7	9.51	0.42	A

B - B1078 South-West	0.1	2.67	0.06	A	0.2	3.20	0.16	A	0.3	3.68	0.24	A	0.3	3.49	0.22	A	0.3	3.50	0.24	A
C - B1078 South-East	0.1	3.25	0.13	A	0.6	4.63	0.37	A	0.9	5.50	0.46	A	0.7	5.10	0.43	A	0.7	4.92	0.42	A
D - A12 Slip-Road	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
B1078 / B1116 - 2028 Peak Construction																				
A - B1116 North-West	0.3	8.05	0.24	A	1.3	14.21	0.57	B	3.5	27.02	0.79	D	0.7	9.27	0.40	A	0.7	9.80	0.43	A
B - B1078 South-West	0.2	3.16	0.13	A	0.3	3.73	0.23	A	0.3	3.81	0.26	A	0.3	3.65	0.25	A	0.3	3.60	0.25	A
C - B1078 South-East	0.5	4.25	0.33	A	1.0	5.87	0.50	A	1.1	6.22	0.52	A	0.9	5.79	0.48	A	0.8	5.33	0.45	A
D - A12 Slip-Road	0.0	4.91	0.01	A	0.1	5.90	0.07	A	0.1	6.63	0.08	A	0.3	7.06	0.24	A	0.2	6.55	0.17	A
B1078 / B1116 - 2034 Reference Case																				
A - B1116 North-West	0.2	5.84	0.17	A	0.9	10.25	0.48	B	3.7	27.22	0.80	D	0.8	9.87	0.44	A	0.9	10.67	0.48	B
B - B1078 South-West	0.1	2.67	0.06	A	0.2	3.30	0.18	A	0.4	3.83	0.26	A	0.3	3.66	0.25	A	0.4	3.66	0.27	A
C - B1078 South-East	0.2	3.29	0.13	A	0.6	4.73	0.39	A	1.1	6.22	0.53	A	0.9	5.58	0.48	A	0.7	4.96	0.43	A
D - A12 Slip-Road	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
B1078 / B1116 - 2034 Operational Led																				
A - B1116 North-West	0.2	5.85	0.17	A	0.9	10.25	0.48	B	3.8	28.15	0.80	D	0.8	9.91	0.45	A	0.9	10.61	0.47	B
B - B1078 South-West	0.1	2.67	0.06	A	0.2	3.30	0.18	A	0.4	3.83	0.26	A	0.3	3.68	0.26	A	0.4	3.66	0.27	A
C - B1078 South-East	0.2	3.29	0.13	A	0.6	4.72	0.39	A	1.1	6.18	0.52	A	0.9	5.59	0.48	A	0.8	5.00	0.43	A
D - A12 Slip-Road	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

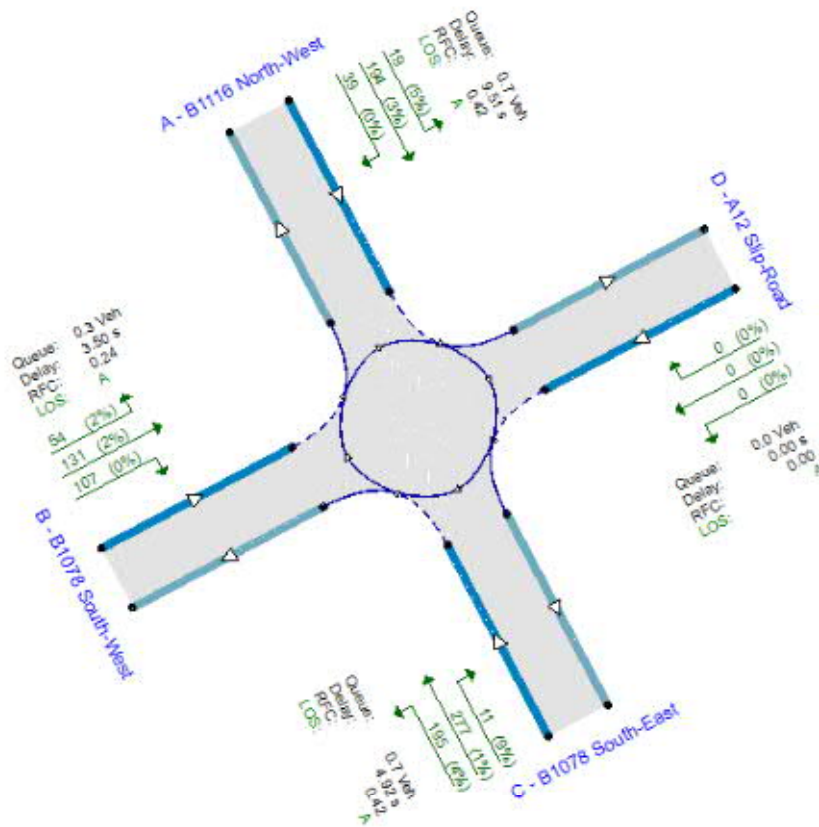
File summary

File Description

Title	B1078 / B1116
Location	52.161417°, 1.379211°
Site number	3
Date	28/09/2016
Version	
Status	(new file)
Identifier	JGM
Client	
Jobnumber	50400326
Enumerator	UKWSPGROUP\ukjgm001
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Flow and/or original traffic demand (veh/h)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queuing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
AJ3	B1078 / B1116	✓	100.000	100.000

B1078 / B1116 - Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	3.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	B1116 North-West	
B	B1078 South-West	
C	B1078 South-East	
D	A12 Slip-Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - B1116 North-West	3.00	3.00	0.0	12.9	46.0	42.0	
B - B1078 South-West	3.40	8.20	6.8	47.5	46.0	20.0	
C - B1078 South-East	3.50	7.40	3.7	15.2	46.0	29.0	
D - A12 Slip-Road	3.40	4.20	26.9	3.2	46.0	63.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - B1116 North-West	Direct		-50
B - B1078 South-West	None		
C - B1078 South-East	None		
D - A12 Slip-Road	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - B1116 North-West	0.438	797
B - B1078 South-West	0.618	1570
C - B1078 South-East	0.546	1315
D - A12 Slip-Road	0.338	787

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	103	100.000
B - B1078 South-West		ONE HOUR	✓	63	100.000
C - B1078 South-East		ONE HOUR	✓	130	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	5	92	6
	B - B1078 South-West	12	0	20	31
	C - B1078 South-East	62	65	0	3
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	20	3	0
	B - B1078 South-West	17	0	10	3
	C - B1078 South-East	6	3	0	0
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.15	5.74	0.2	A	95	142
B - B1078 South-West	0.05	2.68	0.1	A	58	87
C - B1078 South-East	0.11	3.24	0.1	A	119	179
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	78	19	41	749	0.104	77	56	0.0	0.1	5.355	A
B - B1078 South-West	47	12	49	1424	0.033	47	53	0.0	0.0	2.613	A
C - B1078 South-East	98	24	4	1254	0.078	98	84	0.0	0.1	3.111	A
D - A12 Slip-Road	0	0	88	756	0.000	0	30	0.0	0.0	0.000	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	93	23	49	745	0.124	92	66	0.1	0.1	5.515	A
B - B1078 South-West	57	14	58	1419	0.040	57	63	0.0	0.0	2.642	A
C - B1078 South-East	117	29	4	1254	0.093	117	101	0.1	0.1	3.165	A
D - A12 Slip-Road	0	0	105	750	0.000	0	36	0.0	0.0	0.000	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	113	28	59	740	0.153	113	81	0.1	0.2	5.738	A
B - B1078 South-West	69	17	72	1411	0.049	69	77	0.0	0.1	2.683	A
C - B1078 South-East	143	36	5	1253	0.114	143	123	0.1	0.1	3.241	A
D - A12 Slip-Road	0	0	129	741	0.000	0	44	0.0	0.0	0.000	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	113	28	59	740	0.153	113	81	0.2	0.2	5.740	A
B - B1078 South-West	69	17	72	1411	0.049	69	77	0.1	0.1	2.683	A
C - B1078 South-East	143	36	6	1253	0.114	143	123	0.1	0.1	3.241	A
D - A12 Slip-Road	0	0	129	741	0.000	0	44	0.0	0.0	0.000	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	113	28	59	740	0.153	113	81	0.2	0.2	5.740	A
B - B1078 South-West	69	17	72	1411	0.049	69	77	0.1	0.1	2.683	A
C - B1078 South-East	143	36	6	1253	0.114	143	123	0.1	0.1	3.241	A
D - A12 Slip-Road	0	0	129	741	0.000	0	44	0.0	0.0	0.000	A

A - B1116 North-West	93	23	49	745	0.124	93	67	0.2	0.1	5.520	A
B - B1078 South-West	57	14	58	1419	0.040	57	63	0.1	0.0	2.644	A
C - B1078 South-East	117	29	5	1254	0.093	117	101	0.1	0.1	3.165	A
D - A12 Slip-Road	0	0	105	749	0.000	0	36	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	78	19	41	749	0.104	78	56	0.1	0.1	5.366	A
B - B1078 South-West	47	12	49	1424	0.033	47	53	0.0	0.0	2.616	A
C - B1078 South-East	98	24	4	1254	0.078	98	84	0.1	0.1	3.112	A
D - A12 Slip-Road	0	0	88	756	0.000	0	30	0.0	0.0	0.000	A

B1078 / B1116 - Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	5.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	277	100.000
B - B1078 South-West		ONE HOUR	✓	167	100.000
C - B1078 South-East		ONE HOUR	✓	370	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	23	239	15
	B - B1078 South-West	31	0	62	74
	C - B1078 South-East	224	139	0	7
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	9	3	0
	B - B1078 South-West	0	0	3	9
	C - B1078 South-East	6	5	0	0
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.44	9.10	0.8	A	254	381
B - B1078 South-West	0.14	3.13	0.2	A	153	230
C - B1078 South-East	0.33	4.36	0.5	A	340	509
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	209	52	107	723	0.288	207	191	0.0	0.4	6.953	A
B - B1078 South-West	126	31	173	1382	0.091	125	121	0.0	0.1	2.864	A
C - B1078 South-East	279	70	17	1238	0.225	277	225	0.0	0.3	3.743	A
D - A12 Slip-Road	0	0	242	702	0.000	0	72	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	249	62	128	714	0.349	249	229	0.4	0.5	7.731	A
B - B1078 South-West	150	38	207	1361	0.110	150	145	0.1	0.1	2.972	A
C - B1078 South-East	333	83	21	1236	0.269	332	270	0.3	0.4	3.984	A
D - A12 Slip-Road	0	0	291	685	0.000	0	86	0.0	0.0	0.000	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	305	76	157	701	0.435	304	280	0.5	0.8	9.050	A
B - B1078 South-West	184	46	254	1332	0.138	184	178	0.1	0.2	3.134	A
C - B1078 South-East	407	102	25	1233	0.330	407	331	0.4	0.5	4.354	A
D - A12 Slip-Road	0	0	356	663	0.000	0	106	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	305	76	157	701	0.435	305	281	0.8	0.8	9.098	A
B - B1078 South-West	184	46	254	1332	0.138	184	178	0.2	0.2	3.135	A
C - B1078 South-East	407	102	25	1233	0.330	407	331	0.5	0.5	4.359	A
D - A12 Slip-Road	0	0	357	662	0.000	0	106	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	249	62	129	714	0.349	250	230	0.8	0.5	7.781	A
B - B1078 South-West	150	38	208	1361	0.110	150	146	0.2	0.1	2.974	A
C - B1078 South-East	333	83	21	1236	0.269	333	271	0.5	0.4	3.992	A
D - A12 Slip-Road	0	0	292	685	0.000	0	86	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	209	52	108	723	0.288	209	192	0.5	0.4	7.014	A
B - B1078 South-West	126	31	174	1382	0.091	126	122	0.1	0.1	2.868	A
C - B1078 South-East	279	70	17	1238	0.225	279	227	0.4	0.3	3.758	A
D - A12 Slip-Road	0	0	244	702	0.000	0	72	0.0	0.0	0.000	A

B1078 / B1116 - Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	10.04	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	432	100.000
B - B1078 South-West		ONE HOUR	✓	233	100.000
C - B1078 South-East		ONE HOUR	✓	464	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	52	354	26
	B - B1078 South-West	50	0	84	99
	C - B1078 South-East	265	193	0	6
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	4	5	12
	B - B1078 South-West	6	0	4	11
	C - B1078 South-East	5	6	0	17
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.72	18.96	2.4	C	396	595
B - B1078 South-West	0.20	3.51	0.2	A	214	321
C - B1078 South-East	0.42	5.12	0.7	A	426	639
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	325	81	142	694	0.468	322	236	0.0	0.9	9.580	A
B - B1078 South-West	175	44	203	1340	0.131	175	183	0.0	0.2	3.088	A
C - B1078 South-East	349	87	39	1224	0.285	348	327	0.0	0.4	4.099	A
D - A12 Slip-Road	0	0	365	658	0.000	0	98	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	388	97	170	682	0.570	387	283	0.9	1.3	12.133	B
B - B1078 South-West	209	52	243	1316	0.159	209	220	0.2	0.2	3.254	A
C - B1078 South-East	417	104	47	1220	0.342	417	392	0.4	0.5	4.478	A
D - A12 Slip-Road	0	0	439	632	0.000	0	118	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	476	119	208	664	0.716	471	346	1.3	2.4	18.233	C
B - B1078 South-West	257	64	298	1282	0.200	256	269	0.2	0.2	3.508	A
C - B1078 South-East	511	128	57	1215	0.421	510	479	0.5	0.7	5.106	A
D - A12 Slip-Road	0	0	535	598	0.000	0	144	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	476	119	208	664	0.716	475	347	2.4	2.4	18.963	C
B - B1078 South-West	257	64	298	1282	0.200	257	270	0.2	0.2	3.509	A
C - B1078 South-East	511	128	57	1214	0.421	511	482	0.7	0.7	5.117	A
D - A12 Slip-Road	0	0	539	597	0.000	0	144	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	388	97	170	681	0.570	393	284	2.4	1.4	12.642	B
B - B1078 South-West	209	52	244	1315	0.159	210	221	0.2	0.2	3.256	A
C - B1078 South-East	417	104	47	1220	0.342	418	397	0.7	0.5	4.494	A
D - A12 Slip-Road	0	0	445	630	0.000	0	118	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	325	81	142	694	0.469	327	237	1.4	0.9	9.862	A
B - B1078 South-West	175	44	204	1339	0.131	176	185	0.2	0.2	3.093	A
C - B1078 South-East	349	87	39	1224	0.285	350	331	0.5	0.4	4.120	A
D - A12 Slip-Road	0	0	371	656	0.000	0	99	0.0	0.0	0.000	A

B1078 / B1116 - Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	5.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	225	100.000
B - B1078 South-West		ONE HOUR	✓	229	100.000
C - B1078 South-East		ONE HOUR	✓	410	100.000
D - A12 Slip-Road		ONE HOUR	✓	1	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	1	41	169	14
	B - B1078 South-West	51	0	79	99
	C - B1078 South-East	263	139	1	7
	D - A12 Slip-Road	0	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	4	0
	B - B1078 South-West	2	0	5	4
	C - B1078 South-East	4	6	0	14
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.36	8.25	0.6	A	206	310
B - B1078 South-West	0.19	3.35	0.2	A	210	315
C - B1078 South-East	0.37	4.63	0.6	A	376	564
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	169	42	140	713	0.237	168	236	0.0	0.3	6.587	A
B - B1078 South-West	172	43	204	1384	0.125	172	135	0.0	0.1	2.968	A
C - B1078 South-East	309	77	31	1237	0.249	307	186	0.0	0.3	3.865	A
D - A12 Slip-Road	0	0	218	711	0.000	0	90	0.0	0.0	0.000	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	202	51	167	701	0.288	202	283	0.3	0.4	7.206	A
B - B1078 South-West	206	51	244	1359	0.151	206	162	0.1	0.2	3.120	A
C - B1078 South-East	369	92	38	1234	0.299	368	224	0.3	0.4	4.156	A
D - A12 Slip-Road	0	0	261	696	0.000	0	108	0.0	0.0	0.000	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	248	62	205	684	0.362	247	346	0.4	0.6	8.220	A
B - B1078 South-West	252	63	299	1325	0.190	252	198	0.2	0.2	3.353	A
C - B1078 South-East	451	113	46	1230	0.367	451	274	0.4	0.6	4.618	A
D - A12 Slip-Road	0	0	320	675	0.000	0	132	0.0	0.0	0.000	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	248	62	205	684	0.362	248	347	0.6	0.6	8.245	A
B - B1078 South-West	252	63	299	1325	0.190	252	198	0.2	0.2	3.354	A
C - B1078 South-East	451	113	46	1230	0.367	451	274	0.6	0.6	4.625	A
D - A12 Slip-Road	0	0	320	675	0.000	0	132	0.0	0.0	0.000	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	202	51	167	701	0.289	203	284	0.6	0.4	7.237	A
B - B1078 South-West	206	51	245	1359	0.152	206	162	0.2	0.2	3.125	A
C - B1078 South-East	369	92	38	1234	0.299	369	224	0.6	0.4	4.167	A
D - A12 Slip-Road	0	0	262	695	0.000	0	108	0.0	0.0	0.000	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	169	42	140	713	0.238	170	237	0.4	0.3	6.628	A
B - B1078 South-West	172	43	205	1383	0.125	173	136	0.2	0.1	2.975	A
C - B1078 South-East	309	77	32	1237	0.250	309	188	0.4	0.3	3.881	A
D - A12 Slip-Road	0	0	219	710	0.000	0	90	0.0	0.0	0.000	A

B1078 / B1116 - Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	5.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	251	100.000
B - B1078 South-West		ONE HOUR	✓	255	100.000
C - B1078 South-East		ONE HOUR	✓	409	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	36	197	18
	B - B1078 South-West	53	0	94	108
	C - B1078 South-East	253	144	2	10
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	6
	B - B1078 South-West	2	0	0	3
	C - B1078 South-East	1	5	0	10
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.41	9.08	0.7	A	230	345
B - B1078 South-West	0.21	3.32	0.3	A	234	351
C - B1078 South-East	0.36	4.43	0.6	A	375	563
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	189	47	161	705	0.268	188	229	0.0	0.4	6.933	A
B - B1078 South-West	192	48	199	1423	0.135	191	135	0.0	0.2	2.921	A
C - B1078 South-East	308	77	27	1269	0.243	307	219	0.0	0.3	3.735	A
D - A12 Slip-Road	0	0	246	702	0.000	0	102	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	226	56	192	692	0.326	225	275	0.4	0.5	7.711	A
B - B1078 South-West	229	57	238	1399	0.164	229	162	0.2	0.2	3.077	A
C - B1078 South-East	368	92	32	1266	0.290	367	263	0.3	0.4	4.002	A
D - A12 Slip-Road	0	0	295	685	0.000	0	122	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	276	69	235	673	0.411	276	337	0.5	0.7	9.043	A
B - B1078 South-West	281	70	291	1366	0.206	281	198	0.2	0.3	3.316	A
C - B1078 South-East	450	113	40	1262	0.357	450	322	0.4	0.6	4.427	A
D - A12 Slip-Road	0	0	361	663	0.000	0	150	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	276	69	236	673	0.411	276	337	0.7	0.7	9.081	A
B - B1078 South-West	281	70	292	1366	0.206	281	198	0.3	0.3	3.316	A
C - B1078 South-East	450	113	40	1262	0.357	450	323	0.6	0.6	4.433	A
D - A12 Slip-Road	0	0	362	662	0.000	0	150	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	226	56	193	691	0.326	226	275	0.7	0.5	7.757	A
B - B1078 South-West	229	57	239	1399	0.164	229	162	0.3	0.2	3.081	A
C - B1078 South-East	368	92	32	1266	0.290	368	264	0.6	0.4	4.013	A
D - A12 Slip-Road	0	0	297	685	0.000	0	122	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	189	47	161	705	0.268	189	231	0.5	0.4	6.988	A
B - B1078 South-West	192	48	200	1422	0.135	192	136	0.2	0.2	2.928	A
C - B1078 South-East	308	77	27	1269	0.243	308	221	0.4	0.3	3.750	A
D - A12 Slip-Road	0	0	248	702	0.000	0	102	0.0	0.0	0.000	A

B1078 / B1116 - 2023 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	3.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	111	100.000
B - B1078 South-West		ONE HOUR	✓	73	100.000
C - B1078 South-East		ONE HOUR	✓	139	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	6	99	7
	B - B1078 South-West	13	0	21	40
	C - B1078 South-East	65	70	0	4
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	17	3	0
	B - B1078 South-West	16	0	12	0
	C - B1078 South-East	5	2	0	0
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.16	5.81	0.2	A	102	152
B - B1078 South-West	0.06	2.67	0.1	A	67	100
C - B1078 South-East	0.12	3.23	0.1	A	127	191
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	83	21	48	751	0.111	83	58	0.0	0.1	5.386	A
B - B1078 South-West	55	14	51	1445	0.038	55	57	0.0	0.0	2.589	A
C - B1078 South-East	104	26	4	1268	0.082	104	89	0.0	0.1	3.094	A
D - A12 Slip-Road	0	0	93	754	0.000	0	37	0.0	0.0	0.000	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	100	25	57	747	0.133	99	70	0.1	0.2	5.562	A
B - B1078 South-West	65	16	62	1439	0.045	65	68	0.0	0.0	2.621	A
C - B1078 South-East	125	31	5	1267	0.098	125	107	0.1	0.1	3.150	A
D - A12 Slip-Road	0	0	112	747	0.000	0	45	0.0	0.0	0.000	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	122	30	70	741	0.164	122	85	0.2	0.2	5.812	A
B - B1078 South-West	80	20	75	1430	0.056	80	83	0.0	0.1	2.666	A
C - B1078 South-East	153	38	6	1266	0.121	153	131	0.1	0.1	3.231	A
D - A12 Slip-Road	0	0	137	738	0.000	0	55	0.0	0.0	0.000	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	122	30	70	741	0.164	122	85	0.2	0.2	5.814	A
B - B1078 South-West	80	20	76	1430	0.056	80	83	0.1	0.1	2.666	A
C - B1078 South-East	153	38	6	1266	0.121	153	131	0.1	0.1	3.231	A
D - A12 Slip-Road	0	0	137	738	0.000	0	55	0.0	0.0	0.000	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	100	25	57	747	0.133	100	70	0.2	0.2	5.565	A
B - B1078 South-West	65	16	62	1438	0.045	65	68	0.1	0.0	2.623	A
C - B1078 South-East	125	31	5	1267	0.098	125	107	0.1	0.1	3.151	A
D - A12 Slip-Road	0	0	112	747	0.000	0	45	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	83	21	48	751	0.111	83	58	0.2	0.1	5.397	A
B - B1078 South-West	55	14	52	1445	0.038	55	57	0.0	0.0	2.589	A
C - B1078 South-East	104	26	4	1268	0.082	105	90	0.1	0.1	3.094	A
D - A12 Slip-Road	0	0	94	754	0.000	0	37	0.0	0.0	0.000	A

B1078 / B1116 - 2023 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	6.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	301	100.000
B - B1078 South-West		ONE HOUR	✓	178	100.000
C - B1078 South-East		ONE HOUR	✓	384	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	24	262	16
	B - B1078 South-West	32	0	64	82
	C - B1078 South-East	234	143	0	7
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	8	3	0
	B - B1078 South-West	0	0	3	8
	C - B1078 South-East	5	5	0	0
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.47	9.82	0.9	A	276	414
B - B1078 South-West	0.15	3.16	0.2	A	163	245
C - B1078 South-East	0.34	4.43	0.5	A	352	528
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	227	57	115	722	0.314	225	199	0.0	0.5	7.211	A
B - B1078 South-West	134	33	181	1386	0.097	133	124	0.0	0.1	2.874	A
C - B1078 South-East	289	72	18	1239	0.233	288	244	0.0	0.3	3.777	A
D - A12 Slip-Road	0	0	261	696	0.000	0	79	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	271	68	138	712	0.380	270	239	0.5	0.6	8.132	A
B - B1078 South-West	160	40	217	1364	0.117	160	149	0.1	0.1	2.989	A
C - B1078 South-East	345	86	21	1237	0.279	345	293	0.3	0.4	4.032	A
D - A12 Slip-Road	0	0	314	678	0.000	0	94	0.0	0.0	0.000	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	332	83	169	698	0.475	330	292	0.6	0.9	9.756	A
B - B1078 South-West	196	49	265	1334	0.147	196	183	0.1	0.2	3.162	A
C - B1078 South-East	423	106	26	1235	0.342	422	358	0.4	0.5	4.427	A
D - A12 Slip-Road	0	0	384	653	0.000	0	115	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	332	83	169	698	0.475	331	293	0.9	0.9	9.816	A
B - B1078 South-West	196	49	266	1334	0.147	196	183	0.2	0.2	3.163	A
C - B1078 South-East	423	106	26	1235	0.342	423	359	0.5	0.5	4.432	A
D - A12 Slip-Road	0	0	385	653	0.000	0	115	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	271	68	138	712	0.380	272	239	0.9	0.6	8.197	A
B - B1078 South-West	160	40	217	1364	0.117	160	150	0.2	0.1	2.993	A
C - B1078 South-East	345	86	21	1237	0.279	346	294	0.5	0.4	4.039	A
D - A12 Slip-Road	0	0	315	677	0.000	0	94	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	227	57	115	722	0.314	227	200	0.6	0.5	7.284	A
B - B1078 South-West	134	33	182	1386	0.097	134	125	0.1	0.1	2.878	A
C - B1078 South-East	289	72	18	1239	0.233	289	246	0.4	0.3	3.789	A
D - A12 Slip-Road	0	0	264	695	0.000	0	79	0.0	0.0	0.000	A

B1078 / B1116 - 2023 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	12.28	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	462	100.000
B - B1078 South-West		ONE HOUR	✓	265	100.000
C - B1078 South-East		ONE HOUR	✓	465	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	53	383	27
	B - B1078 South-West	49	0	88	127
	C - B1078 South-East	275	184	0	6
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	4	4	11
	B - B1078 South-West	6	0	4	7
	C - B1078 South-East	5	7	0	14
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.78	24.57	3.3	C	424	636
B - B1078 South-West	0.22	3.58	0.3	A	243	364
C - B1078 South-East	0.42	5.14	0.7	A	427	640
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	348	87	166	688	0.506	344	243	0.0	1.0	10.360	B
B - B1078 South-West	199	50	211	1357	0.147	199	177	0.0	0.2	3.107	A
C - B1078 South-East	350	88	39	1222	0.286	348	351	0.0	0.4	4.112	A
D - A12 Slip-Road	0	0	390	649	0.000	0	120	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	416	104	199	673	0.617	413	292	1.0	1.6	13.735	B
B - B1078 South-West	238	60	253	1331	0.179	238	212	0.2	0.2	3.293	A
C - B1078 South-East	418	105	47	1218	0.343	418	422	0.4	0.5	4.493	A
D - A12 Slip-Road	0	0	469	622	0.000	0	143	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	509	127	243	653	0.779	502	357	1.6	3.2	22.900	C
B - B1078 South-West	292	73	309	1296	0.225	291	259	0.2	0.3	3.582	A
C - B1078 South-East	512	128	57	1213	0.422	511	513	0.5	0.7	5.124	A
D - A12 Slip-Road	0	0	571	586	0.000	0	175	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	509	127	244	653	0.779	508	358	3.2	3.3	24.566	C
B - B1078 South-West	292	73	310	1296	0.225	292	260	0.3	0.3	3.583	A
C - B1078 South-East	512	128	58	1212	0.422	512	518	0.7	0.7	5.139	A
D - A12 Slip-Road	0	0	576	584	0.000	0	176	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	416	104	199	673	0.618	422	292	3.3	1.7	14.708	B
B - B1078 South-West	238	60	253	1330	0.179	238	213	0.3	0.2	3.299	A
C - B1078 South-East	418	105	48	1218	0.343	419	429	0.7	0.5	4.512	A
D - A12 Slip-Road	0	0	477	619	0.000	0	144	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	348	87	167	687	0.506	351	245	1.7	1.0	10.768	B
B - B1078 South-West	199	50	212	1356	0.147	200	178	0.2	0.2	3.115	A
C - B1078 South-East	350	88	40	1222	0.286	351	357	0.5	0.4	4.133	A
D - A12 Slip-Road	0	0	397	647	0.000	0	120	0.0	0.0	0.000	A

B1078 / B1116 - 2023 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	5.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	249	100.000
B - B1078 South-West		ONE HOUR	✓	282	100.000
C - B1078 South-East		ONE HOUR	✓	456	100.000
D - A12 Slip-Road		ONE HOUR	✓	1	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	1	43	190	15
	B - B1078 South-West	53	0	88	141
	C - B1078 South-East	294	153	1	8
	D - A12 Slip-Road	0	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	0
	B - B1078 South-West	2	0	4	2
	C - B1078 South-East	3	6	0	13
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.41	9.26	0.7	A	228	342
B - B1078 South-West	0.24	3.56	0.3	A	259	388
C - B1078 South-East	0.41	4.90	0.7	A	418	627
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	187	47	178	699	0.268	186	260	0.0	0.4	6.990	A
B - B1078 South-West	212	53	227	1387	0.153	211	147	0.0	0.2	3.061	A
C - B1078 South-East	343	86	33	1244	0.276	342	209	0.0	0.4	3.984	A
D - A12 Slip-Road	0	0	241	703	0.000	0	123	0.0	0.0	0.000	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	223	56	214	684	0.327	223	312	0.4	0.5	7.806	A
B - B1078 South-West	253	63	272	1359	0.186	253	176	0.2	0.2	3.255	A
C - B1078 South-East	410	102	39	1240	0.330	409	251	0.4	0.5	4.329	A
D - A12 Slip-Road	0	0	290	686	0.000	0	147	0.0	0.0	0.000	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	274	68	262	663	0.413	273	382	0.5	0.7	9.218	A
B - B1078 South-West	310	78	333	1321	0.235	310	215	0.2	0.3	3.561	A
C - B1078 South-East	502	125	48	1236	0.406	501	307	0.5	0.7	4.894	A
D - A12 Slip-Road	0	0	355	664	0.000	0	180	0.0	0.0	0.000	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	274	68	262	662	0.413	274	382	0.7	0.7	9.259	A
B - B1078 South-West	310	78	334	1320	0.235	310	216	0.3	0.3	3.562	A
C - B1078 South-East	502	125	48	1236	0.406	502	307	0.7	0.7	4.904	A
D - A12 Slip-Road	0	0	355	663	0.000	0	180	0.0	0.0	0.000	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	223	56	214	684	0.327	224	313	0.7	0.5	7.854	A
B - B1078 South-West	253	63	273	1358	0.187	254	176	0.3	0.2	3.261	A
C - B1078 South-East	410	102	39	1240	0.330	410	252	0.7	0.5	4.343	A
D - A12 Slip-Road	0	0	291	686	0.000	0	147	0.0	0.0	0.000	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	187	47	179	699	0.268	188	262	0.5	0.4	7.049	A
B - B1078 South-West	212	53	229	1386	0.153	212	148	0.2	0.2	3.069	A
C - B1078 South-East	343	86	33	1244	0.276	343	211	0.5	0.4	4.001	A
D - A12 Slip-Road	0	0	244	702	0.000	0	123	0.0	0.0	0.000	A

B1078 / B1116 - 2023 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	5.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	264	100.000
B - B1078 South-West		ONE HOUR	✓	274	100.000
C - B1078 South-East		ONE HOUR	✓	439	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	37	209	19
	B - B1078 South-West	54	0	98	122
	C - B1078 South-East	271	155	2	11
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	5
	B - B1078 South-West	2	0	0	3
	C - B1078 South-East	1	4	0	9
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.44	9.64	0.8	A	242	363
B - B1078 South-West	0.22	3.42	0.3	A	252	378
C - B1078 South-East	0.38	4.61	0.6	A	403	605
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	199	50	175	699	0.284	197	244	0.0	0.4	7.147	A
B - B1078 South-West	207	52	213	1415	0.146	206	144	0.0	0.2	2.975	A
C - B1078 South-East	331	83	27	1272	0.260	329	231	0.0	0.3	3.814	A
D - A12 Slip-Road	0	0	258	698	0.000	0	114	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	237	59	209	684	0.347	237	292	0.4	0.5	8.032	A
B - B1078 South-West	247	62	255	1389	0.178	247	172	0.2	0.2	3.149	A
C - B1078 South-East	395	99	33	1269	0.311	394	277	0.3	0.4	4.114	A
D - A12 Slip-Road	0	0	310	680	0.000	0	136	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	290	73	256	664	0.438	290	358	0.5	0.8	9.591	A
B - B1078 South-West	302	76	312	1354	0.223	302	211	0.2	0.3	3.421	A
C - B1078 South-East	484	121	40	1265	0.382	483	339	0.4	0.6	4.598	A
D - A12 Slip-Road	0	0	379	656	0.000	0	166	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	290	73	257	664	0.438	290	358	0.8	0.8	9.640	A
B - B1078 South-West	302	76	313	1354	0.223	302	211	0.3	0.3	3.422	A
C - B1078 South-East	484	121	40	1265	0.382	484	340	0.6	0.6	4.606	A
D - A12 Slip-Road	0	0	380	656	0.000	0	167	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	237	59	210	684	0.347	238	293	0.8	0.5	8.087	A
B - B1078 South-West	247	62	256	1389	0.178	247	173	0.3	0.2	3.152	A
C - B1078 South-East	395	99	33	1269	0.311	396	279	0.6	0.5	4.124	A
D - A12 Slip-Road	0	0	311	680	0.000	0	136	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	199	50	176	699	0.284	199	245	0.5	0.4	7.210	A
B - B1078 South-West	207	52	214	1415	0.146	207	145	0.2	0.2	2.982	A
C - B1078 South-East	331	83	28	1272	0.260	331	233	0.5	0.4	3.827	A
D - A12 Slip-Road	0	0	261	697	0.000	0	114	0.0	0.0	0.000	A

B1078 / B1116 - 2023 Early Years , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	3.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	115	100.000
B - B1078 South-West		ONE HOUR	✓	89	100.000
C - B1078 South-East		ONE HOUR	✓	148	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	6	100	10
	B - B1078 South-West	13	0	21	56
	C - B1078 South-East	65	72	0	11
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	17	3	0
	B - B1078 South-West	16	0	12	0
	C - B1078 South-East	5	2	0	0
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.17	5.95	0.2	A	105	158
B - B1078 South-West	0.07	2.68	0.1	A	81	122
C - B1078 South-East	0.13	3.25	0.1	A	136	203
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	86	22	65	744	0.116	86	58	0.0	0.1	5.459	A
B - B1078 South-West	67	17	57	1457	0.046	67	58	0.0	0.0	2.588	A
C - B1078 South-East	111	28	4	1270	0.088	111	90	0.0	0.1	3.105	A
D - A12 Slip-Road	0	0	94	754	0.000	0	57	0.0	0.0	0.000	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	103	26	78	739	0.140	103	70	0.1	0.2	5.661	A
B - B1078 South-West	80	20	68	1450	0.055	80	70	0.0	0.1	2.625	A
C - B1078 South-East	133	33	5	1270	0.105	133	108	0.1	0.1	3.165	A
D - A12 Slip-Road	0	0	113	747	0.000	0	68	0.0	0.0	0.000	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	126	32	95	731	0.173	126	85	0.2	0.2	5.950	A
B - B1078 South-West	98	24	83	1441	0.068	98	85	0.1	0.1	2.679	A
C - B1078 South-East	163	41	6	1269	0.128	163	132	0.1	0.1	3.252	A
D - A12 Slip-Road	0	0	138	738	0.000	0	83	0.0	0.0	0.000	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	126	32	96	731	0.173	126	85	0.2	0.2	5.952	A
B - B1078 South-West	98	24	83	1441	0.068	98	85	0.1	0.1	2.679	A
C - B1078 South-East	163	41	6	1269	0.128	163	132	0.1	0.1	3.252	A
D - A12 Slip-Road	0	0	138	738	0.000	0	83	0.0	0.0	0.000	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	103	26	78	739	0.140	103	70	0.2	0.2	5.669	A
B - B1078 South-West	80	20	68	1450	0.055	80	70	0.1	0.1	2.628	A
C - B1078 South-East	133	33	5	1270	0.105	133	108	0.1	0.1	3.166	A
D - A12 Slip-Road	0	0	113	747	0.000	0	68	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	86	22	65	744	0.116	86	58	0.2	0.1	5.474	A
B - B1078 South-West	67	17	57	1457	0.046	67	59	0.1	0.0	2.590	A
C - B1078 South-East	111	28	4	1270	0.088	111	91	0.1	0.1	3.105	A
D - A12 Slip-Road	0	0	95	753	0.000	0	57	0.0	0.0	0.000	A

B1078 / B1116 - 2023 Early Years , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	6.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	321	100.000
B - B1078 South-West		ONE HOUR	✓	211	100.000
C - B1078 South-East		ONE HOUR	✓	430	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	24	266	32
	B - B1078 South-West	33	0	64	114
	C - B1078 South-East	230	148	0	52
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	8	3	0
	B - B1078 South-West	0	0	3	6
	C - B1078 South-East	6	5	0	0
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.53	11.62	1.1	B	295	442
B - B1078 South-West	0.18	3.32	0.2	A	193	290
C - B1078 South-East	0.38	4.69	0.6	A	394	592
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	242	60	173	699	0.346	240	197	0.0	0.5	7.804	A
B - B1078 South-West	159	40	212	1378	0.115	158	128	0.0	0.1	2.949	A
C - B1078 South-East	324	81	18	1246	0.260	322	247	0.0	0.3	3.891	A
D - A12 Slip-Road	0	0	264	695	0.000	0	148	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	289	72	207	684	0.422	288	236	0.5	0.7	9.072	A
B - B1078 South-West	189	47	253	1352	0.140	189	154	0.1	0.2	3.096	A
C - B1078 South-East	386	97	21	1244	0.311	386	296	0.3	0.4	4.193	A
D - A12 Slip-Road	0	0	317	676	0.000	0	178	0.0	0.0	0.000	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	354	88	253	663	0.533	352	289	0.7	1.1	11.501	B
B - B1078 South-West	232	58	310	1317	0.176	232	188	0.2	0.2	3.318	A
C - B1078 South-East	473	118	26	1241	0.381	473	362	0.4	0.6	4.678	A
D - A12 Slip-Road	0	0	388	652	0.000	0	217	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	354	88	254	663	0.533	353	289	1.1	1.1	11.616	B
B - B1078 South-West	232	58	311	1316	0.176	232	188	0.2	0.2	3.319	A
C - B1078 South-East	473	118	26	1241	0.381	473	363	0.6	0.6	4.686	A
D - A12 Slip-Road	0	0	389	651	0.000	0	218	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	289	72	207	684	0.422	290	237	1.1	0.7	9.185	A
B - B1078 South-West	189	47	254	1351	0.140	190	154	0.2	0.2	3.101	A
C - B1078 South-East	386	97	21	1244	0.311	387	298	0.6	0.5	4.205	A
D - A12 Slip-Road	0	0	319	676	0.000	0	178	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	242	60	174	699	0.346	243	198	0.7	0.5	7.909	A
B - B1078 South-West	159	40	213	1377	0.115	159	129	0.2	0.1	2.956	A
C - B1078 South-East	324	81	18	1246	0.260	324	249	0.5	0.4	3.906	A
D - A12 Slip-Road	0	0	267	694	0.000	0	149	0.0	0.0	0.000	A

B1078 / B1116 - 2023 Early Years , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	12.82	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	463	100.000
B - B1078 South-West		ONE HOUR	✓	270	100.000
C - B1078 South-East		ONE HOUR	✓	473	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	53	379	32
	B - B1078 South-West	49	0	88	132
	C - B1078 South-East	274	181	0	18
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	4	4	9
	B - B1078 South-West	6	0	4	7
	C - B1078 South-East	5	7	0	5
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.79	26.09	3.5	D	425	638
B - B1078 South-West	0.23	3.62	0.3	A	248	371
C - B1078 South-East	0.43	5.20	0.7	A	434	651
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	349	87	179	682	0.511	345	243	0.0	1.0	10.539	B
B - B1078 South-West	203	51	219	1353	0.150	202	175	0.0	0.2	3.127	A
C - B1078 South-East	356	89	39	1224	0.291	354	348	0.0	0.4	4.135	A
D - A12 Slip-Road	0	0	387	651	0.000	0	136	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	416	104	214	667	0.625	414	291	1.0	1.6	14.112	B
B - B1078 South-West	243	61	262	1326	0.183	242	209	0.2	0.2	3.320	A
C - B1078 South-East	425	106	47	1219	0.349	425	418	0.4	0.5	4.527	A
D - A12 Slip-Road	0	0	465	623	0.000	0	163	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	510	128	262	646	0.790	503	356	1.6	3.4	24.110	C
B - B1078 South-West	297	74	321	1290	0.230	297	256	0.2	0.3	3.622	A
C - B1078 South-East	521	130	57	1214	0.429	520	509	0.5	0.7	5.181	A
D - A12 Slip-Road	0	0	566	588	0.000	0	199	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	510	128	262	645	0.790	509	356	3.4	3.5	26.089	D
B - B1078 South-West	297	74	322	1290	0.230	297	257	0.3	0.3	3.624	A
C - B1078 South-East	521	130	58	1214	0.429	521	514	0.7	0.7	5.196	A
D - A12 Slip-Road	0	0	572	586	0.000	0	200	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	416	104	215	667	0.625	424	292	3.5	1.7	15.229	C
B - B1078 South-West	243	61	263	1326	0.183	243	211	0.3	0.2	3.326	A
C - B1078 South-East	425	106	48	1219	0.349	426	426	0.7	0.5	4.545	A
D - A12 Slip-Road	0	0	474	620	0.000	0	164	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	349	87	180	682	0.511	351	244	1.7	1.1	10.975	B
B - B1078 South-West	203	51	220	1352	0.150	203	176	0.2	0.2	3.133	A
C - B1078 South-East	356	89	40	1223	0.291	357	354	0.5	0.4	4.156	A
D - A12 Slip-Road	0	0	394	648	0.000	0	137	0.0	0.0	0.000	A

B1078 / B1116 - 2023 Early Years , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	5.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	247	100.000
B - B1078 South-West		ONE HOUR	✓	285	100.000
C - B1078 South-East		ONE HOUR	✓	454	100.000
D - A12 Slip-Road		ONE HOUR	✓	1	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	1	43	188	15
	B - B1078 South-West	53	0	88	144
	C - B1078 South-East	289	156	1	8
	D - A12 Slip-Road	0	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	0
	B - B1078 South-West	2	0	4	2
	C - B1078 South-East	3	6	0	13
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.41	9.24	0.7	A	226	339
B - B1078 South-West	0.24	3.56	0.3	A	261	392
C - B1078 South-East	0.40	4.89	0.7	A	416	624
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	186	46	181	698	0.266	184	257	0.0	0.4	6.984	A
B - B1078 South-West	214	54	224	1390	0.154	214	149	0.0	0.2	3.060	A
C - B1078 South-East	342	85	33	1244	0.275	340	207	0.0	0.4	3.978	A
D - A12 Slip-Road	0	0	240	703	0.000	0	125	0.0	0.0	0.000	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	222	55	216	682	0.325	221	307	0.4	0.5	7.797	A
B - B1078 South-West	256	64	268	1362	0.188	256	179	0.2	0.2	3.254	A
C - B1078 South-East	408	102	39	1240	0.329	407	249	0.4	0.5	4.321	A
D - A12 Slip-Road	0	0	288	687	0.000	0	150	0.0	0.0	0.000	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	272	68	265	661	0.411	271	376	0.5	0.7	9.202	A
B - B1078 South-West	314	78	328	1324	0.237	313	219	0.2	0.3	3.560	A
C - B1078 South-East	499	125	48	1236	0.404	499	305	0.5	0.7	4.880	A
D - A12 Slip-Road	0	0	352	664	0.000	0	183	0.0	0.0	0.000	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	272	68	265	661	0.411	271	377	0.7	0.7	9.243	A
B - B1078 South-West	314	78	328	1324	0.237	314	219	0.3	0.3	3.561	A
C - B1078 South-East	499	125	48	1235	0.404	499	305	0.7	0.7	4.890	A
D - A12 Slip-Road	0	0	353	664	0.000	0	183	0.0	0.0	0.000	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	222	55	217	682	0.325	223	308	0.7	0.5	7.844	A
B - B1078 South-West	256	64	269	1361	0.188	256	179	0.3	0.2	3.257	A
C - B1078 South-East	408	102	39	1240	0.329	409	250	0.7	0.5	4.334	A
D - A12 Slip-Road	0	0	289	686	0.000	0	150	0.0	0.0	0.000	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	186	46	181	698	0.266	186	258	0.5	0.4	7.044	A
B - B1078 South-West	214	54	225	1389	0.154	215	150	0.2	0.2	3.068	A
C - B1078 South-East	342	85	33	1243	0.275	342	209	0.5	0.4	3.995	A
D - A12 Slip-Road	0	0	242	703	0.000	0	126	0.0	0.0	0.000	A

B1078 / B1116 - 2023 Early Years , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	5.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	259	100.000
B - B1078 South-West		ONE HOUR	✓	278	100.000
C - B1078 South-East		ONE HOUR	✓	447	100.000
D - A12 Slip-Road		ONE HOUR	✓	34	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	37	204	19
	B - B1078 South-West	54	0	100	124
	C - B1078 South-East	275	159	2	11
	D - A12 Slip-Road	14	2	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	5
	B - B1078 South-West	2	0	0	2
	C - B1078 South-East	1	4	0	9
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.43	9.56	0.7	A	238	356
B - B1078 South-West	0.23	3.47	0.3	A	256	383
C - B1078 South-East	0.39	4.71	0.6	A	410	616
D - A12 Slip-Road	0.06	5.81	0.1	A	31	47

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	195	49	178	698	0.279	193	258	0.0	0.4	7.117	A
B - B1078 South-West	210	52	226	1407	0.149	209	148	0.0	0.2	3.002	A
C - B1078 South-East	337	84	39	1266	0.266	335	242	0.0	0.4	3.862	A
D - A12 Slip-Road	26	6	256	699	0.037	25	115	0.0	0.0	5.345	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	233	58	213	682	0.341	232	308	0.4	0.5	7.987	A
B - B1078 South-West	250	63	271	1380	0.181	250	178	0.2	0.2	3.186	A
C - B1078 South-East	402	101	47	1262	0.319	402	291	0.4	0.5	4.183	A
D - A12 Slip-Road	31	8	307	681	0.045	31	138	0.0	0.0	5.533	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	285	71	261	662	0.431	284	378	0.5	0.7	9.509	A
B - B1078 South-West	307	77	332	1342	0.228	306	217	0.2	0.3	3.474	A
C - B1078 South-East	492	123	58	1256	0.392	492	356	0.5	0.6	4.705	A
D - A12 Slip-Road	37	9	376	657	0.057	37	169	0.0	0.1	5.805	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	285	71	261	662	0.431	285	378	0.7	0.7	9.556	A
B - B1078 South-West	307	77	332	1342	0.228	307	218	0.3	0.3	3.475	A
C - B1078 South-East	492	123	58	1256	0.392	492	357	0.6	0.6	4.713	A
D - A12 Slip-Road	37	9	377	657	0.057	37	169	0.1	0.1	5.808	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	233	58	213	682	0.341	234	309	0.7	0.5	8.039	A
B - B1078 South-West	250	63	272	1379	0.182	251	178	0.3	0.2	3.189	A
C - B1078 South-East	402	101	47	1262	0.319	403	292	0.6	0.5	4.195	A
D - A12 Slip-Road	31	8	309	681	0.045	31	138	0.1	0.0	5.540	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	195	49	179	697	0.279	195	259	0.5	0.4	7.182	A
B - B1078 South-West	210	52	228	1407	0.149	210	149	0.2	0.2	3.010	A
C - B1078 South-East	337	84	40	1266	0.266	337	244	0.5	0.4	3.879	A
D - A12 Slip-Road	26	6	258	698	0.037	26	116	0.0	0.0	5.354	A

B1078 / B1116 - 2028 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	3.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	108	100.000
B - B1078 South-West		ONE HOUR	✓	74	100.000
C - B1078 South-East		ONE HOUR	✓	145	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	6	96	7
	B - B1078 South-West	13	0	22	40
	C - B1078 South-East	68	73	0	4
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	17	3	0
	B - B1078 South-West	16	0	11	0
	C - B1078 South-East	5	2	0	0
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.16	5.79	0.2	A	99	148
B - B1078 South-West	0.06	2.67	0.1	A	68	102
C - B1078 South-East	0.13	3.25	0.1	A	133	199
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	81	20	49	750	0.108	81	60	0.0	0.1	5.376	A
B - B1078 South-West	56	14	54	1445	0.038	55	59	0.0	0.0	2.591	A
C - B1078 South-East	109	27	4	1269	0.086	109	88	0.0	0.1	3.101	A
D - A12 Slip-Road	0	0	92	754	0.000	0	37	0.0	0.0	0.000	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	97	24	58	746	0.130	97	72	0.1	0.1	5.548	A
B - B1078 South-West	66	17	64	1438	0.046	66	71	0.0	0.0	2.623	A
C - B1078 South-East	130	33	5	1269	0.103	130	105	0.1	0.1	3.160	A
D - A12 Slip-Road	0	0	110	748	0.000	0	45	0.0	0.0	0.000	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	119	30	71	740	0.160	118	89	0.1	0.2	5.791	A
B - B1078 South-West	81	20	79	1429	0.057	81	87	0.0	0.1	2.669	A
C - B1078 South-East	159	40	6	1268	0.126	159	129	0.1	0.1	3.245	A
D - A12 Slip-Road	0	0	135	739	0.000	0	55	0.0	0.0	0.000	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	119	30	71	740	0.160	119	89	0.2	0.2	5.794	A
B - B1078 South-West	81	20	79	1429	0.057	81	87	0.1	0.1	2.669	A
C - B1078 South-East	159	40	6	1268	0.126	159	129	0.1	0.1	3.245	A
D - A12 Slip-Road	0	0	135	739	0.000	0	55	0.0	0.0	0.000	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	97	24	58	746	0.130	97	73	0.2	0.2	5.553	A
B - B1078 South-West	66	17	64	1438	0.046	66	71	0.1	0.0	2.626	A
C - B1078 South-East	130	33	5	1269	0.103	130	105	0.1	0.1	3.161	A
D - A12 Slip-Road	0	0	110	748	0.000	0	45	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	81	20	49	750	0.108	81	61	0.2	0.1	5.386	A
B - B1078 South-West	56	14	54	1444	0.038	56	59	0.0	0.0	2.591	A
C - B1078 South-East	109	27	4	1269	0.086	109	88	0.1	0.1	3.104	A
D - A12 Slip-Road	0	0	92	754	0.000	0	37	0.0	0.0	0.000	A

B1078 / B1116 - 2028 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	5.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	292	100.000
B - B1078 South-West		ONE HOUR	✓	188	100.000
C - B1078 South-East		ONE HOUR	✓	419	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	25	252	16
	B - B1078 South-West	33	0	64	91
	C - B1078 South-East	242	170	0	7
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	8	3	0
	B - B1078 South-West	0	0	3	7
	C - B1078 South-East	5	4	0	0
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.46	9.68	0.9	A	268	402
B - B1078 South-West	0.16	3.20	0.2	A	172	258
C - B1078 South-East	0.37	4.63	0.6	A	384	577
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	220	55	122	719	0.306	218	206	0.0	0.4	7.166	A
B - B1078 South-West	141	35	187	1386	0.102	141	145	0.0	0.1	2.891	A
C - B1078 South-East	315	79	18	1244	0.253	314	236	0.0	0.3	3.864	A
D - A12 Slip-Road	0	0	255	698	0.000	0	85	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	263	66	146	708	0.371	262	247	0.4	0.6	8.060	A
B - B1078 South-West	169	42	224	1363	0.124	169	174	0.1	0.1	3.013	A
C - B1078 South-East	377	94	22	1242	0.303	376	284	0.3	0.4	4.155	A
D - A12 Slip-Road	0	0	306	680	0.000	0	102	0.0	0.0	0.000	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	322	80	179	693	0.464	321	302	0.6	0.8	9.627	A
B - B1078 South-West	207	52	274	1332	0.155	207	213	0.1	0.2	3.199	A
C - B1078 South-East	461	115	27	1239	0.372	461	347	0.4	0.6	4.618	A
D - A12 Slip-Road	0	0	374	657	0.000	0	125	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	322	80	179	693	0.464	322	303	0.8	0.9	9.681	A
B - B1078 South-West	207	52	274	1332	0.155	207	214	0.2	0.2	3.199	A
C - B1078 South-East	461	115	27	1239	0.372	461	348	0.6	0.6	4.625	A
D - A12 Slip-Road	0	0	375	656	0.000	0	125	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	263	66	146	708	0.371	264	247	0.9	0.6	8.122	A
B - B1078 South-West	169	42	224	1363	0.124	169	175	0.2	0.1	3.015	A
C - B1078 South-East	377	94	22	1242	0.303	377	285	0.6	0.4	4.164	A
D - A12 Slip-Road	0	0	307	680	0.000	0	102	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	220	55	122	719	0.306	221	207	0.6	0.4	7.238	A
B - B1078 South-West	141	35	188	1385	0.102	141	146	0.1	0.1	2.893	A
C - B1078 South-East	315	79	19	1244	0.253	316	239	0.4	0.3	3.880	A
D - A12 Slip-Road	0	0	257	697	0.000	0	86	0.0	0.0	0.000	A

B1078 / B1116 - 2028 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	11.16	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	441	100.000
B - B1078 South-West		ONE HOUR	✓	286	100.000
C - B1078 South-East		ONE HOUR	✓	510	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	58	356	28
	B - B1078 South-West	52	0	90	143
	C - B1078 South-East	287	217	0	6
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	3	5	11
	B - B1078 South-West	6	0	4	6
	C - B1078 South-East	4	6	0	14
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.75	22.57	2.9	C	405	607
B - B1078 South-West	0.24	3.68	0.3	A	262	393
C - B1078 South-East	0.46	5.50	0.9	A	468	702
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	332	83	180	681	0.488	328	255	0.0	0.9	10.121	B
B - B1078 South-West	215	54	220	1357	0.159	214	205	0.0	0.2	3.150	A
C - B1078 South-East	384	96	43	1226	0.313	382	333	0.0	0.5	4.256	A
D - A12 Slip-Road	0	0	376	654	0.000	0	132	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	397	99	215	665	0.597	395	305	0.9	1.4	13.219	B
B - B1078 South-West	257	64	263	1330	0.193	257	246	0.2	0.2	3.354	A
C - B1078 South-East	459	115	51	1222	0.375	458	400	0.5	0.6	4.710	A
D - A12 Slip-Road	0	0	451	628	0.000	0	159	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	486	121	263	644	0.755	480	373	1.4	2.8	21.314	C
B - B1078 South-West	315	79	322	1294	0.243	314	301	0.2	0.3	3.676	A
C - B1078 South-East	562	140	63	1216	0.462	561	487	0.6	0.8	5.477	A
D - A12 Slip-Road	0	0	549	593	0.000	0	194	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	486	121	263	644	0.755	485	374	2.8	2.9	22.573	C
B - B1078 South-West	315	79	323	1293	0.243	315	302	0.3	0.3	3.677	A
C - B1078 South-East	562	140	63	1215	0.462	562	491	0.8	0.9	5.505	A
D - A12 Slip-Road	0	0	554	591	0.000	0	195	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	397	99	215	665	0.597	402	306	2.9	1.5	13.992	B
B - B1078 South-West	257	64	264	1329	0.193	257	248	0.3	0.2	3.360	A
C - B1078 South-East	459	115	52	1221	0.375	459	406	0.9	0.6	4.731	A
D - A12 Slip-Road	0	0	458	625	0.000	0	159	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	332	83	180	680	0.488	334	256	1.5	1.0	10.478	B
B - B1078 South-West	215	54	221	1356	0.159	215	207	0.2	0.2	3.159	A
C - B1078 South-East	384	96	44	1226	0.313	385	338	0.6	0.5	4.281	A
D - A12 Slip-Road	0	0	381	652	0.000	0	133	0.0	0.0	0.000	A

B1078 / B1116 - 2028 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	5.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	237	100.000
B - B1078 South-West		ONE HOUR	✓	265	100.000
C - B1078 South-East		ONE HOUR	✓	482	100.000
D - A12 Slip-Road		ONE HOUR	✓	1	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	1	46	175	15
	B - B1078 South-West	55	0	86	124
	C - B1078 South-East	286	187	1	8
	D - A12 Slip-Road	0	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	0
	B - B1078 South-West	2	0	4	2
	C - B1078 South-East	3	5	0	13
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.39	8.78	0.6	A	217	326
B - B1078 South-West	0.22	3.49	0.3	A	243	365
C - B1078 South-East	0.43	5.10	0.7	A	442	663
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	178	45	164	705	0.253	177	256	0.0	0.3	6.805	A
B - B1078 South-West	199	50	221	1388	0.144	199	174	0.0	0.2	3.025	A
C - B1078 South-East	363	91	35	1245	0.291	361	196	0.0	0.4	4.063	A
D - A12 Slip-Road	0	0	231	706	0.000	0	110	0.0	0.0	0.000	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	213	53	197	690	0.308	212	307	0.3	0.4	7.526	A
B - B1078 South-West	238	60	265	1361	0.175	238	209	0.2	0.2	3.205	A
C - B1078 South-East	433	108	42	1242	0.349	433	235	0.4	0.5	4.446	A
D - A12 Slip-Road	0	0	277	690	0.000	0	132	0.0	0.0	0.000	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	260	65	241	671	0.388	260	375	0.4	0.6	8.745	A
B - B1078 South-West	292	73	325	1324	0.220	291	256	0.2	0.3	3.486	A
C - B1078 South-East	530	133	51	1237	0.429	529	288	0.5	0.7	5.083	A
D - A12 Slip-Road	0	0	339	669	0.000	0	161	0.0	0.0	0.000	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	260	65	241	671	0.388	260	376	0.6	0.6	8.778	A
B - B1078 South-West	292	73	325	1324	0.220	292	256	0.3	0.3	3.487	A
C - B1078 South-East	530	133	51	1237	0.429	530	289	0.7	0.7	5.095	A
D - A12 Slip-Road	0	0	340	668	0.000	0	161	0.0	0.0	0.000	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	213	53	197	690	0.308	213	307	0.6	0.5	7.563	A
B - B1078 South-West	238	60	266	1360	0.175	238	210	0.3	0.2	3.211	A
C - B1078 South-East	433	108	42	1242	0.349	434	236	0.7	0.5	4.461	A
D - A12 Slip-Road	0	0	278	690	0.000	0	132	0.0	0.0	0.000	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	178	45	165	704	0.253	179	257	0.5	0.3	6.855	A
B - B1078 South-West	199	50	223	1387	0.144	200	176	0.2	0.2	3.030	A
C - B1078 South-East	363	91	35	1245	0.291	363	198	0.5	0.4	4.083	A
D - A12 Slip-Road	0	0	233	706	0.000	0	110	0.0	0.0	0.000	A

B1078 / B1116 - 2028 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	5.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	251	100.000
B - B1078 South-West		ONE HOUR	✓	292	100.000
C - B1078 South-East		ONE HOUR	✓	485	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	39	194	19
	B - B1078 South-West	54	0	107	131
	C - B1078 South-East	277	195	2	11
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	5
	B - B1078 South-West	2	0	0	2
	C - B1078 South-East	1	4	0	9
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.42	9.51	0.7	A	230	345
B - B1078 South-West	0.24	3.50	0.3	A	268	403
C - B1078 South-East	0.42	4.92	0.7	A	445	668
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	189	47	188	693	0.273	187	249	0.0	0.4	7.106	A
B - B1078 South-West	220	55	217	1414	0.156	219	175	0.0	0.2	3.012	A
C - B1078 South-East	365	91	29	1274	0.287	364	227	0.0	0.4	3.950	A
D - A12 Slip-Road	0	0	255	699	0.000	0	120	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	225	56	225	676	0.333	225	298	0.4	0.5	7.965	A
B - B1078 South-West	263	66	260	1387	0.190	263	210	0.2	0.2	3.200	A
C - B1078 South-East	436	109	35	1271	0.343	436	272	0.4	0.5	4.310	A
D - A12 Slip-Road	0	0	306	681	0.000	0	144	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	276	69	276	655	0.422	275	364	0.5	0.7	9.469	A
B - B1078 South-West	322	81	319	1352	0.238	322	257	0.2	0.3	3.496	A
C - B1078 South-East	534	134	42	1267	0.422	533	333	0.5	0.7	4.906	A
D - A12 Slip-Road	0	0	375	658	0.000	0	176	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	276	69	276	654	0.422	276	365	0.7	0.7	9.514	A
B - B1078 South-West	322	81	319	1351	0.238	322	257	0.3	0.3	3.497	A
C - B1078 South-East	534	134	42	1267	0.422	534	333	0.7	0.7	4.916	A
D - A12 Slip-Road	0	0	376	658	0.000	0	177	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	225	56	226	676	0.333	226	299	0.7	0.5	8.016	A
B - B1078 South-West	263	66	261	1387	0.190	263	211	0.3	0.2	3.206	A
C - B1078 South-East	436	109	35	1271	0.343	437	273	0.7	0.5	4.324	A
D - A12 Slip-Road	0	0	308	681	0.000	0	144	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	189	47	189	692	0.273	189	250	0.5	0.4	7.168	A
B - B1078 South-West	220	55	219	1413	0.156	220	176	0.2	0.2	3.018	A
C - B1078 South-East	365	91	29	1274	0.287	366	229	0.5	0.4	3.969	A
D - A12 Slip-Road	0	0	258	698	0.000	0	121	0.0	0.0	0.000	A

B1078 / B1116 - 2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	4.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	130	100.000
B - B1078 South-West		ONE HOUR	✓	159	100.000
C - B1078 South-East		ONE HOUR	✓	379	100.000
D - A12 Slip-Road		ONE HOUR	✓	6	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	6	96	29
	B - B1078 South-West	13	0	22	125
	C - B1078 South-East	68	73	0	238
	D - A12 Slip-Road	1	1	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	17	3	0
	B - B1078 South-West	16	0	11	0
	C - B1078 South-East	5	2	0	4
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.24	8.05	0.3	A	119	179
B - B1078 South-West	0.13	3.16	0.2	A	146	219
C - B1078 South-East	0.33	4.25	0.5	A	348	521
D - A12 Slip-Road	0.01	4.91	0.0	A	6	8

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	98	24	288	649	0.150	97	61	0.0	0.2	6.513	A
B - B1078 South-West	120	30	230	1382	0.086	119	60	0.0	0.1	2.851	A
C - B1078 South-East	285	71	6	1265	0.225	284	91	0.0	0.3	3.665	A
D - A12 Slip-Road	5	1	92	754	0.006	4	293	0.0	0.0	4.800	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	117	29	345	624	0.187	116	73	0.2	0.2	7.088	A
B - B1078 South-West	143	36	275	1353	0.105	143	72	0.1	0.1	2.972	A
C - B1078 South-East	340	85	7	1265	0.269	340	109	0.3	0.4	3.892	A
D - A12 Slip-Road	5	1	110	748	0.007	5	351	0.0	0.0	4.848	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	143	36	422	590	0.242	142	90	0.2	0.3	8.037	A
B - B1078 South-West	175	44	337	1315	0.133	175	88	0.1	0.2	3.157	A
C - B1078 South-East	417	104	8	1264	0.330	416	133	0.4	0.5	4.245	A
D - A12 Slip-Road	7	2	135	739	0.009	7	430	0.0	0.0	4.913	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	143	36	423	590	0.242	143	90	0.3	0.3	8.053	A
B - B1078 South-West	175	44	338	1315	0.133	175	88	0.2	0.2	3.157	A
C - B1078 South-East	417	104	8	1264	0.330	417	133	0.5	0.5	4.250	A
D - A12 Slip-Road	7	2	135	739	0.009	7	430	0.0	0.0	4.914	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	117	29	345	624	0.187	117	73	0.3	0.2	7.111	A
B - B1078 South-West	143	36	276	1353	0.105	143	72	0.2	0.1	2.976	A
C - B1078 South-East	340	85	7	1265	0.269	341	109	0.5	0.4	3.900	A
D - A12 Slip-Road	5	1	111	748	0.007	5	352	0.0	0.0	4.849	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	98	24	289	648	0.151	98	61	0.2	0.2	6.543	A
B - B1078 South-West	120	30	231	1381	0.087	120	60	0.1	0.1	2.853	A
C - B1078 South-East	285	71	6	1265	0.225	285	91	0.4	0.3	3.673	A
D - A12 Slip-Road	5	1	93	754	0.006	5	294	0.0	0.0	4.802	A

B1078 / B1116 - 2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	7.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	308	100.000
B - B1078 South-West		ONE HOUR	✓	260	100.000
C - B1078 South-East		ONE HOUR	✓	556	100.000
D - A12 Slip-Road		ONE HOUR	✓	41	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	25	252	32
	B - B1078 South-West	34	0	66	160
	C - B1078 South-East	238	173	0	145
	D - A12 Slip-Road	4	12	25	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	8	3	0
	B - B1078 South-West	0	0	3	4
	C - B1078 South-East	5	4	0	6
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.57	14.21	1.3	B	283	424
B - B1078 South-West	0.23	3.73	0.3	A	238	358
C - B1078 South-East	0.50	5.87	1.0	A	510	765
D - A12 Slip-Road	0.07	5.90	0.1	A	38	56

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	232	58	278	650	0.357	230	207	0.0	0.5	8.517	A
B - B1078 South-West	196	49	290	1337	0.146	195	157	0.0	0.2	3.150	A
C - B1078 South-East	418	105	30	1233	0.339	416	256	0.0	0.5	4.398	A
D - A12 Slip-Road	31	8	256	698	0.044	31	252	0.0	0.0	5.395	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	277	69	333	626	0.443	276	248	0.5	0.8	10.266	B
B - B1078 South-West	234	58	348	1301	0.180	233	188	0.2	0.2	3.372	A
C - B1078 South-East	500	125	36	1230	0.406	499	308	0.5	0.7	4.922	A
D - A12 Slip-Road	37	9	307	680	0.054	37	302	0.0	0.1	5.598	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	339	85	408	592	0.573	337	303	0.8	1.3	13.988	B
B - B1078 South-West	286	72	426	1251	0.229	286	230	0.2	0.3	3.728	A
C - B1078 South-East	612	153	44	1225	0.499	611	376	0.7	1.0	5.845	A
D - A12 Slip-Road	45	11	375	656	0.069	45	370	0.1	0.1	5.891	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	339	85	409	592	0.573	339	304	1.3	1.3	14.213	B
B - B1078 South-West	286	72	426	1251	0.229	286	230	0.3	0.3	3.730	A
C - B1078 South-East	612	153	45	1225	0.499	612	378	1.0	1.0	5.869	A
D - A12 Slip-Road	45	11	377	655	0.069	45	371	0.1	0.1	5.897	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	277	69	334	625	0.443	279	248	1.3	0.8	10.453	B
B - B1078 South-West	234	58	349	1300	0.180	234	189	0.3	0.2	3.380	A
C - B1078 South-East	500	125	37	1230	0.406	501	310	1.0	0.7	4.949	A
D - A12 Slip-Road	37	9	310	679	0.054	37	303	0.1	0.1	5.607	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	232	58	280	650	0.357	233	208	0.8	0.6	8.659	A
B - B1078 South-West	196	49	292	1336	0.146	196	158	0.2	0.2	3.160	A
C - B1078 South-East	418	105	31	1233	0.339	419	259	0.7	0.5	4.429	A
D - A12 Slip-Road	31	8	259	697	0.044	31	254	0.1	0.0	5.407	A

B1078 / B1116 - 2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	12.57	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	449	100.000
B - B1078 South-West		ONE HOUR	✓	298	100.000
C - B1078 South-East		ONE HOUR	✓	569	100.000
D - A12 Slip-Road		ONE HOUR	✓	43	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	59	357	34
	B - B1078 South-West	52	0	92	153
	C - B1078 South-East	288	249	0	32
	D - A12 Slip-Road	5	12	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	3	5	9
	B - B1078 South-West	6	0	4	6
	C - B1078 South-East	4	5	0	12
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.79	27.02	3.5	D	412	618
B - B1078 South-West	0.26	3.81	0.3	A	273	410
C - B1078 South-East	0.52	6.22	1.1	A	522	783
D - A12 Slip-Road	0.08	6.63	0.1	A	39	59

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	338	85	208	668	0.506	334	259	0.0	1.0	10.655	B
B - B1078 South-West	224	56	244	1344	0.167	223	239	0.0	0.2	3.211	A
C - B1078 South-East	428	107	56	1220	0.351	426	354	0.0	0.5	4.526	A
D - A12 Slip-Road	32	8	378	654	0.050	32	164	0.0	0.1	5.792	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	404	101	249	650	0.621	402	310	1.0	1.6	14.345	B
B - B1078 South-West	268	67	292	1314	0.204	267	286	0.2	0.3	3.439	A
C - B1078 South-East	512	128	68	1214	0.422	511	425	0.5	0.7	5.117	A
D - A12 Slip-Road	39	10	454	627	0.062	39	196	0.1	0.1	6.120	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	495	124	305	625	0.791	488	380	1.6	3.4	24.879	C
B - B1078 South-West	328	82	357	1274	0.257	328	350	0.3	0.3	3.805	A
C - B1078 South-East	627	157	82	1206	0.520	625	518	0.7	1.1	6.184	A
D - A12 Slip-Road	47	12	552	592	0.080	47	240	0.1	0.1	6.606	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	495	124	305	625	0.791	494	381	3.4	3.5	27.019	D
B - B1078 South-West	328	82	358	1273	0.258	328	351	0.3	0.3	3.807	A
C - B1078 South-East	627	157	83	1205	0.520	626	523	1.1	1.1	6.218	A
D - A12 Slip-Road	47	12	558	590	0.080	47	241	0.1	0.1	6.632	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	404	101	250	650	0.622	411	312	3.5	1.7	15.518	C
B - B1078 South-West	268	67	293	1313	0.204	268	289	0.3	0.3	3.447	A
C - B1078 South-East	512	128	69	1213	0.422	513	433	1.1	0.7	5.154	A
D - A12 Slip-Road	39	10	463	624	0.062	39	197	0.1	0.1	6.155	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	338	85	209	668	0.506	341	261	1.7	1.1	11.096	B
B - B1078 South-West	224	56	245	1343	0.167	224	241	0.3	0.2	3.221	A
C - B1078 South-East	428	107	57	1219	0.351	429	360	0.7	0.5	4.561	A
D - A12 Slip-Road	32	8	385	651	0.050	32	165	0.1	0.1	5.819	A

B1078 / B1116 - 2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	6.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	236	100.000
B - B1078 South-West		ONE HOUR	✓	291	100.000
C - B1078 South-East		ONE HOUR	✓	516	100.000
D - A12 Slip-Road		ONE HOUR	✓	145	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	1	46	172	17
	B - B1078 South-West	55	0	87	149
	C - B1078 South-East	282	210	1	23
	D - A12 Slip-Road	14	42	89	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	0
	B - B1078 South-West	2	0	4	2
	C - B1078 South-East	4	4	0	40
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.40	9.27	0.7	A	216	324
B - B1078 South-West	0.25	3.65	0.3	A	267	400
C - B1078 South-East	0.48	5.79	0.9	A	473	710
D - A12 Slip-Road	0.24	7.06	0.3	A	133	200

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	177	44	195	689	0.258	176	263	0.0	0.3	7.002	A
B - B1078 South-West	219	55	240	1377	0.159	218	223	0.0	0.2	3.106	A
C - B1078 South-East	388	97	77	1208	0.321	386	261	0.0	0.5	4.369	A
D - A12 Slip-Road	109	27	229	707	0.154	108	141	0.0	0.2	6.007	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	212	53	233	671	0.315	211	315	0.3	0.5	7.818	A
B - B1078 South-West	261	65	288	1346	0.194	261	267	0.2	0.2	3.317	A
C - B1078 South-East	464	116	92	1200	0.386	463	313	0.5	0.6	4.877	A
D - A12 Slip-Road	130	33	275	691	0.189	130	169	0.2	0.2	6.418	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	259	65	286	648	0.401	259	386	0.5	0.7	9.235	A
B - B1078 South-West	320	80	352	1305	0.245	320	327	0.2	0.3	3.653	A
C - B1078 South-East	568	142	113	1190	0.477	567	384	0.6	0.9	5.766	A
D - A12 Slip-Road	160	40	337	669	0.238	159	207	0.2	0.3	7.052	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	259	65	286	647	0.401	259	387	0.7	0.7	9.275	A
B - B1078 South-West	320	80	353	1305	0.245	320	328	0.3	0.3	3.654	A
C - B1078 South-East	568	142	113	1190	0.477	568	385	0.9	0.9	5.787	A
D - A12 Slip-Road	160	40	338	669	0.239	160	208	0.3	0.3	7.064	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	212	53	234	671	0.316	213	317	0.7	0.5	7.866	A
B - B1078 South-West	261	65	289	1346	0.194	262	268	0.3	0.2	3.323	A
C - B1078 South-East	464	116	92	1200	0.386	465	315	0.9	0.6	4.902	A
D - A12 Slip-Road	130	33	277	690	0.189	131	170	0.3	0.2	6.435	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	177	44	196	688	0.258	178	265	0.5	0.4	7.060	A
B - B1078 South-West	219	55	242	1376	0.159	219	225	0.2	0.2	3.114	A
C - B1078 South-East	388	97	77	1208	0.321	389	263	0.6	0.5	4.399	A
D - A12 Slip-Road	109	27	231	706	0.155	109	142	0.2	0.2	6.035	A

B1078 / B1116 - 2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	5.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	249	100.000
B - B1078 South-West		ONE HOUR	✓	302	100.000
C - B1078 South-East		ONE HOUR	✓	495	100.000
D - A12 Slip-Road		ONE HOUR	✓	99	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	40	190	20
	B - B1078 South-West	54	0	108	140
	C - B1078 South-East	278	195	2	20
	D - A12 Slip-Road	10	30	59	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	5
	B - B1078 South-West	2	0	0	2
	C - B1078 South-East	1	4	0	51
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.43	9.80	0.7	A	228	342
B - B1078 South-West	0.25	3.60	0.3	A	278	416
C - B1078 South-East	0.45	5.33	0.8	A	454	682
D - A12 Slip-Road	0.17	6.55	0.2	A	91	136

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	187	47	203	683	0.274	186	257	0.0	0.4	7.212	A
B - B1078 South-West	228	57	232	1401	0.163	227	198	0.0	0.2	3.064	A
C - B1078 South-East	373	93	59	1236	0.302	371	268	0.0	0.4	4.154	A
D - A12 Slip-Road	75	19	254	700	0.107	74	135	0.0	0.1	5.752	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	224	56	243	666	0.336	223	308	0.4	0.5	8.130	A
B - B1078 South-West	272	68	278	1372	0.198	272	238	0.2	0.2	3.271	A
C - B1078 South-East	445	111	71	1230	0.362	445	322	0.4	0.6	4.584	A
D - A12 Slip-Road	89	22	305	682	0.130	89	161	0.1	0.1	6.067	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	274	68	297	641	0.427	273	376	0.5	0.7	9.750	A
B - B1078 South-West	333	83	341	1333	0.250	333	291	0.2	0.3	3.600	A
C - B1078 South-East	545	136	87	1221	0.447	544	394	0.6	0.8	5.311	A
D - A12 Slip-Road	109	27	373	659	0.166	109	197	0.1	0.2	6.547	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	274	68	297	641	0.427	274	377	0.7	0.7	9.801	A
B - B1078 South-West	333	83	341	1332	0.250	333	292	0.3	0.3	3.601	A
C - B1078 South-East	545	136	88	1221	0.447	545	395	0.8	0.8	5.326	A
D - A12 Slip-Road	109	27	374	658	0.166	109	198	0.2	0.2	6.553	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	224	56	243	665	0.336	225	308	0.7	0.5	8.183	A
B - B1078 South-West	272	68	279	1372	0.198	272	239	0.3	0.2	3.274	A
C - B1078 South-East	445	111	72	1229	0.362	446	324	0.8	0.6	4.601	A
D - A12 Slip-Road	89	22	306	682	0.131	89	162	0.2	0.2	6.081	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	187	47	203	683	0.274	188	258	0.5	0.4	7.276	A
B - B1078 South-West	228	57	234	1400	0.163	228	200	0.2	0.2	3.070	A
C - B1078 South-East	373	93	60	1236	0.302	373	271	0.6	0.4	4.178	A
D - A12 Slip-Road	75	19	256	699	0.107	75	135	0.2	0.1	5.771	A

B1078 / B1116 - 2034 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	3.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	113	100.000
B - B1078 South-West		ONE HOUR	✓	76	100.000
C - B1078 South-East		ONE HOUR	✓	153	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	6	101	7
	B - B1078 South-West	13	0	22	42
	C - B1078 South-East	72	77	0	4
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	17	3	0
	B - B1078 South-West	16	0	11	0
	C - B1078 South-East	5	3	0	0
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.17	5.84	0.2	A	103	155
B - B1078 South-West	0.06	2.67	0.1	A	70	104
C - B1078 South-East	0.13	3.29	0.2	A	140	210
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	85	21	50	750	0.113	84	63	0.0	0.1	5.403	A
B - B1078 South-West	57	14	57	1445	0.039	57	62	0.0	0.0	2.593	A
C - B1078 South-East	115	29	4	1264	0.091	115	91	0.0	0.1	3.133	A
D - A12 Slip-Road	0	0	96	753	0.000	0	39	0.0	0.0	0.000	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	101	25	60	746	0.136	101	76	0.1	0.2	5.584	A
B - B1078 South-West	68	17	68	1438	0.047	68	74	0.0	0.0	2.626	A
C - B1078 South-East	137	34	5	1263	0.109	137	110	0.1	0.1	3.197	A
D - A12 Slip-Road	0	0	115	746	0.000	0	46	0.0	0.0	0.000	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	124	31	73	740	0.168	124	93	0.2	0.2	5.842	A
B - B1078 South-West	83	21	83	1429	0.058	83	91	0.0	0.1	2.674	A
C - B1078 South-East	168	42	6	1262	0.133	168	134	0.1	0.2	3.289	A
D - A12 Slip-Road	0	0	140	737	0.000	0	57	0.0	0.0	0.000	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	124	31	73	740	0.168	124	93	0.2	0.2	5.844	A
B - B1078 South-West	83	21	83	1429	0.058	83	91	0.1	0.1	2.674	A
C - B1078 South-East	168	42	6	1262	0.133	168	135	0.2	0.2	3.289	A
D - A12 Slip-Road	0	0	141	737	0.000	0	57	0.0	0.0	0.000	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	101	25	60	746	0.136	101	76	0.2	0.2	5.587	A
B - B1078 South-West	68	17	68	1438	0.047	68	74	0.1	0.0	2.629	A
C - B1078 South-East	137	34	5	1263	0.109	137	110	0.2	0.1	3.197	A
D - A12 Slip-Road	0	0	115	746	0.000	0	47	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	85	21	50	750	0.113	85	64	0.2	0.1	5.414	A
B - B1078 South-West	57	14	57	1445	0.039	57	62	0.0	0.0	2.593	A
C - B1078 South-East	115	29	4	1264	0.091	115	92	0.1	0.1	3.134	A
D - A12 Slip-Road	0	0	96	753	0.000	0	39	0.0	0.0	0.000	A

B1078 / B1116 - 2034 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	6.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	298	100.000
B - B1078 South-West		ONE HOUR	✓	221	100.000
C - B1078 South-East		ONE HOUR	✓	436	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	25	258	16
	B - B1078 South-West	35	0	67	119
	C - B1078 South-East	254	175	0	7
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	8	3	0
	B - B1078 South-West	0	0	3	5
	C - B1078 South-East	5	4	0	0
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.48	10.25	0.9	B	274	410
B - B1078 South-West	0.18	3.30	0.2	A	203	304
C - B1078 South-East	0.39	4.73	0.6	A	400	600
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	224	56	145	709	0.316	223	216	0.0	0.5	7.370	A
B - B1078 South-West	166	42	196	1390	0.120	166	149	0.0	0.1	2.939	A
C - B1078 South-East	328	82	18	1246	0.263	327	243	0.0	0.4	3.909	A
D - A12 Slip-Road	0	0	261	696	0.000	0	106	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	268	67	174	697	0.385	267	259	0.5	0.6	8.373	A
B - B1078 South-West	198	50	235	1365	0.145	198	179	0.1	0.2	3.084	A
C - B1078 South-East	392	98	22	1244	0.315	391	292	0.4	0.5	4.219	A
D - A12 Slip-Road	0	0	314	678	0.000	0	127	0.0	0.0	0.000	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	328	82	213	679	0.483	327	318	0.6	0.9	10.183	B
B - B1078 South-West	243	61	287	1333	0.182	243	219	0.2	0.2	3.303	A
C - B1078 South-East	480	120	27	1242	0.387	479	357	0.5	0.6	4.718	A
D - A12 Slip-Road	0	0	384	653	0.000	0	156	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	328	82	213	679	0.483	328	318	0.9	0.9	10.251	B
B - B1078 South-West	243	61	288	1332	0.182	243	219	0.2	0.2	3.304	A
C - B1078 South-East	480	120	27	1242	0.387	480	358	0.6	0.6	4.726	A
D - A12 Slip-Road	0	0	385	653	0.000	0	156	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	268	67	174	697	0.385	269	260	0.9	0.6	8.446	A
B - B1078 South-West	198	50	235	1365	0.145	199	179	0.2	0.2	3.086	A
C - B1078 South-East	392	98	22	1244	0.315	392	293	0.6	0.5	4.229	A
D - A12 Slip-Road	0	0	315	677	0.000	0	128	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	224	56	146	709	0.317	225	218	0.6	0.5	7.447	A
B - B1078 South-West	166	42	197	1389	0.120	166	150	0.2	0.1	2.946	A
C - B1078 South-East	328	82	19	1246	0.263	329	245	0.5	0.4	3.924	A
D - A12 Slip-Road	0	0	264	695	0.000	0	107	0.0	0.0	0.000	A

B1078 / B1116 - 2034 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	12.89	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	463	100.000
B - B1078 South-West		ONE HOUR	✓	302	100.000
C - B1078 South-East		ONE HOUR	✓	584	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	61	375	28
	B - B1078 South-West	58	0	98	145
	C - B1078 South-East	317	260	0	7
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	3	4	11
	B - B1078 South-West	5	0	3	7
	C - B1078 South-East	4	5	0	12
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.80	27.22	3.7	D	425	638
B - B1078 South-West	0.26	3.83	0.4	A	277	415
C - B1078 South-East	0.53	6.22	1.1	A	536	804
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	349	87	188	678	0.514	345	282	0.0	1.0	10.663	B
B - B1078 South-West	227	57	243	1342	0.169	226	240	0.0	0.2	3.225	A
C - B1078 South-East	440	110	45	1233	0.357	437	353	0.0	0.5	4.511	A
D - A12 Slip-Road	0	0	398	647	0.000	0	135	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	416	104	225	662	0.629	414	337	1.0	1.6	14.386	B
B - B1078 South-West	271	68	291	1313	0.207	271	287	0.2	0.3	3.455	A
C - B1078 South-East	525	131	54	1228	0.428	524	424	0.5	0.7	5.109	A
D - A12 Slip-Road	0	0	478	619	0.000	0	161	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	510	128	275	640	0.797	503	413	1.6	3.5	24.996	C
B - B1078 South-West	332	83	356	1273	0.261	332	351	0.3	0.4	3.822	A
C - B1078 South-East	643	161	66	1222	0.526	642	515	0.7	1.1	6.189	A
D - A12 Slip-Road	0	0	581	583	0.000	0	197	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	510	128	276	639	0.798	509	414	3.5	3.7	27.223	D
B - B1078 South-West	332	83	357	1273	0.261	332	353	0.4	0.4	3.827	A
C - B1078 South-East	643	161	67	1221	0.526	643	521	1.1	1.1	6.223	A
D - A12 Slip-Road	0	0	587	580	0.000	0	198	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	416	104	225	662	0.629	424	339	3.7	1.8	15.602	C
B - B1078 South-West	271	68	292	1312	0.207	272	290	0.4	0.3	3.462	A
C - B1078 South-East	525	131	55	1227	0.428	526	432	1.1	0.8	5.147	A
D - A12 Slip-Road	0	0	487	616	0.000	0	162	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	349	87	189	678	0.514	352	283	1.8	1.1	11.118	B
B - B1078 South-West	227	57	245	1341	0.169	227	242	0.3	0.2	3.231	A
C - B1078 South-East	440	110	46	1233	0.357	440	359	0.8	0.6	4.551	A
D - A12 Slip-Road	0	0	405	645	0.000	0	136	0.0	0.0	0.000	A

B1078 / B1116 - 2034 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	6.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	265	100.000
B - B1078 South-West		ONE HOUR	✓	303	100.000
C - B1078 South-East		ONE HOUR	✓	540	100.000
D - A12 Slip-Road		ONE HOUR	✓	1	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	1	51	196	17
	B - B1078 South-West	58	0	96	149
	C - B1078 South-East	305	226	1	8
	D - A12 Slip-Road	0	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	0
	B - B1078 South-West	2	0	4	2
	C - B1078 South-East	3	4	0	13
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.44	9.87	0.8	A	243	364
B - B1078 South-West	0.25	3.66	0.3	A	278	417
C - B1078 South-East	0.48	5.58	0.9	A	495	743
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	199	50	190	695	0.287	198	272	0.0	0.4	7.212	A
B - B1078 South-West	228	57	235	1384	0.165	227	207	0.0	0.2	3.109	A
C - B1078 South-East	406	102	38	1249	0.325	404	219	0.0	0.5	4.255	A
D - A12 Slip-Road	0	0	258	697	0.000	0	130	0.0	0.0	0.000	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	238	59	228	679	0.351	237	326	0.4	0.5	8.150	A
B - B1078 South-West	272	68	282	1355	0.201	272	249	0.2	0.3	3.322	A
C - B1078 South-East	485	121	46	1245	0.390	485	263	0.5	0.6	4.732	A
D - A12 Slip-Road	0	0	309	679	0.000	0	156	0.0	0.0	0.000	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	291	73	279	656	0.444	290	399	0.5	0.8	9.819	A
B - B1078 South-West	333	83	345	1316	0.253	333	304	0.3	0.3	3.663	A
C - B1078 South-East	594	149	57	1239	0.480	593	322	0.6	0.9	5.563	A
D - A12 Slip-Road	0	0	379	655	0.000	0	191	0.0	0.0	0.000	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	291	73	279	656	0.444	291	400	0.8	0.8	9.874	A
B - B1078 South-West	333	83	346	1316	0.253	333	305	0.3	0.3	3.664	A
C - B1078 South-East	594	149	57	1239	0.480	594	323	0.9	0.9	5.582	A
D - A12 Slip-Road	0	0	380	655	0.000	0	191	0.0	0.0	0.000	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	238	59	228	678	0.351	239	327	0.8	0.5	8.209	A
B - B1078 South-West	272	68	283	1355	0.201	273	250	0.3	0.3	3.326	A
C - B1078 South-East	485	121	47	1244	0.390	486	264	0.9	0.6	4.754	A
D - A12 Slip-Road	0	0	311	679	0.000	0	156	0.0	0.0	0.000	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	199	50	191	695	0.287	200	274	0.5	0.4	7.280	A
B - B1078 South-West	228	57	237	1384	0.165	228	209	0.3	0.2	3.115	A
C - B1078 South-East	406	102	39	1248	0.325	407	221	0.6	0.5	4.282	A
D - A12 Slip-Road	0	0	260	697	0.000	0	131	0.0	0.0	0.000	A

B1078 / B1116 - 2034 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	6.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	278	100.000
B - B1078 South-West		ONE HOUR	✓	322	100.000
C - B1078 South-East		ONE HOUR	✓	489	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	42	216	21
	B - B1078 South-West	56	0	119	147
	C - B1078 South-East	297	179	2	11
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	5
	B - B1078 South-West	2	0	0	2
	C - B1078 South-East	1	4	0	9
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.48	10.67	0.9	B	255	382
B - B1078 South-West	0.27	3.66	0.4	A	296	444
C - B1078 South-East	0.43	4.96	0.7	A	449	673
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	209	52	209	685	0.305	207	265	0.0	0.4	7.503	A
B - B1078 South-West	243	61	232	1407	0.173	242	165	0.0	0.2	3.090	A
C - B1078 South-East	368	92	31	1273	0.289	367	252	0.0	0.4	3.965	A
D - A12 Slip-Road	0	0	283	690	0.000	0	134	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	250	62	251	668	0.374	249	317	0.4	0.6	8.590	A
B - B1078 South-West	290	72	278	1378	0.210	290	198	0.2	0.3	3.306	A
C - B1078 South-East	440	110	37	1269	0.346	439	302	0.4	0.5	4.333	A
D - A12 Slip-Road	0	0	340	670	0.000	0	160	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	306	76	307	643	0.476	305	389	0.6	0.9	10.597	B
B - B1078 South-West	355	89	341	1340	0.265	355	243	0.3	0.4	3.654	A
C - B1078 South-East	539	135	46	1265	0.426	538	370	0.5	0.7	4.946	A
D - A12 Slip-Road	0	0	415	644	0.000	0	196	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	306	76	307	643	0.476	306	389	0.9	0.9	10.672	B
B - B1078 South-West	355	89	341	1340	0.265	355	243	0.4	0.4	3.655	A
C - B1078 South-East	539	135	46	1265	0.426	539	371	0.7	0.7	4.956	A
D - A12 Slip-Road	0	0	417	644	0.000	0	196	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	250	62	251	667	0.374	251	318	0.9	0.6	8.668	A
B - B1078 South-West	290	72	279	1378	0.210	290	199	0.4	0.3	3.310	A
C - B1078 South-East	440	110	37	1269	0.347	441	304	0.7	0.5	4.348	A
D - A12 Slip-Road	0	0	341	670	0.000	0	161	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	209	52	210	685	0.305	210	266	0.6	0.4	7.586	A
B - B1078 South-West	243	61	234	1406	0.173	243	167	0.3	0.2	3.096	A
C - B1078 South-East	368	92	31	1273	0.289	369	254	0.5	0.4	3.985	A
D - A12 Slip-Road	0	0	286	689	0.000	0	134	0.0	0.0	0.000	A

B1078 / B1116 - 2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	3.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	113	100.000
B - B1078 South-West		ONE HOUR	✓	77	100.000
C - B1078 South-East		ONE HOUR	✓	153	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	6	101	7
	B - B1078 South-West	13	0	22	43
	C - B1078 South-East	72	77	0	4
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	17	3	0
	B - B1078 South-West	16	0	11	0
	C - B1078 South-East	5	3	0	0
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.17	5.85	0.2	A	103	155
B - B1078 South-West	0.06	2.67	0.1	A	70	106
C - B1078 South-East	0.13	3.29	0.2	A	140	210
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	85	21	51	750	0.113	84	63	0.0	0.1	5.405	A
B - B1078 South-West	58	14	57	1446	0.040	58	62	0.0	0.0	2.592	A
C - B1078 South-East	115	29	4	1264	0.091	115	91	0.0	0.1	3.133	A
D - A12 Slip-Road	0	0	96	753	0.000	0	40	0.0	0.0	0.000	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	101	25	61	746	0.136	101	76	0.1	0.2	5.587	A
B - B1078 South-West	69	17	68	1439	0.048	69	74	0.0	0.1	2.626	A
C - B1078 South-East	137	34	5	1263	0.109	137	110	0.1	0.1	3.197	A
D - A12 Slip-Road	0	0	115	746	0.000	0	47	0.0	0.0	0.000	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	124	31	75	739	0.168	124	93	0.2	0.2	5.846	A
B - B1078 South-West	84	21	83	1430	0.059	84	91	0.1	0.1	2.674	A
C - B1078 South-East	168	42	6	1262	0.133	168	134	0.1	0.2	3.289	A
D - A12 Slip-Road	0	0	140	737	0.000	0	58	0.0	0.0	0.000	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	124	31	75	739	0.168	124	93	0.2	0.2	5.849	A
B - B1078 South-West	84	21	83	1430	0.059	84	91	0.1	0.1	2.675	A
C - B1078 South-East	168	42	6	1262	0.133	168	135	0.2	0.2	3.289	A
D - A12 Slip-Road	0	0	141	737	0.000	0	58	0.0	0.0	0.000	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	101	25	61	745	0.136	101	76	0.2	0.2	5.592	A
B - B1078 South-West	69	17	68	1439	0.048	69	74	0.1	0.1	2.628	A
C - B1078 South-East	137	34	5	1263	0.109	137	110	0.2	0.1	3.197	A
D - A12 Slip-Road	0	0	115	746	0.000	0	47	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	85	21	51	750	0.113	85	64	0.2	0.1	5.416	A
B - B1078 South-West	58	14	57	1446	0.040	58	62	0.1	0.0	2.594	A
C - B1078 South-East	115	29	4	1264	0.091	115	92	0.1	0.1	3.136	A
D - A12 Slip-Road	0	0	96	753	0.000	0	40	0.0	0.0	0.000	A

B1078 / B1116 - 2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	6.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	299	100.000
B - B1078 South-West		ONE HOUR	✓	219	100.000
C - B1078 South-East		ONE HOUR	✓	435	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	25	259	16
	B - B1078 South-West	35	0	67	117
	C - B1078 South-East	255	173	0	7
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	8	3	0
	B - B1078 South-West	0	0	3	5
	C - B1078 South-East	5	4	0	0
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.48	10.25	0.9	B	274	412
B - B1078 South-West	0.18	3.30	0.2	A	201	301
C - B1078 South-East	0.39	4.72	0.6	A	399	599
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	225	56	144	710	0.317	223	217	0.0	0.5	7.368	A
B - B1078 South-West	165	41	197	1389	0.119	164	148	0.0	0.1	2.938	A
C - B1078 South-East	327	82	18	1246	0.263	326	244	0.0	0.4	3.906	A
D - A12 Slip-Road	0	0	262	696	0.000	0	105	0.0	0.0	0.000	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	269	67	172	697	0.386	268	260	0.5	0.6	8.374	A
B - B1078 South-West	197	49	236	1364	0.144	197	177	0.1	0.2	3.082	A
C - B1078 South-East	391	98	22	1244	0.314	391	293	0.4	0.5	4.215	A
D - A12 Slip-Road	0	0	315	677	0.000	0	125	0.0	0.0	0.000	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	329	82	210	680	0.484	328	319	0.6	0.9	10.186	B
B - B1078 South-West	241	60	288	1331	0.181	241	217	0.2	0.2	3.300	A
C - B1078 South-East	479	120	27	1241	0.386	478	358	0.5	0.6	4.712	A
D - A12 Slip-Road	0	0	385	653	0.000	0	154	0.0	0.0	0.000	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	329	82	211	680	0.484	329	319	0.9	0.9	10.254	B
B - B1078 South-West	241	60	289	1331	0.181	241	217	0.2	0.2	3.301	A
C - B1078 South-East	479	120	27	1241	0.386	479	359	0.6	0.6	4.719	A
D - A12 Slip-Road	0	0	386	652	0.000	0	154	0.0	0.0	0.000	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	269	67	172	697	0.386	270	261	0.9	0.6	8.448	A
B - B1078 South-West	197	49	236	1364	0.144	197	178	0.2	0.2	3.084	A
C - B1078 South-East	391	98	22	1244	0.314	392	294	0.6	0.5	4.227	A
D - A12 Slip-Road	0	0	316	677	0.000	0	126	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	225	56	144	710	0.317	226	218	0.6	0.5	7.448	A
B - B1078 South-West	165	41	198	1388	0.119	165	149	0.2	0.1	2.942	A
C - B1078 South-East	327	82	19	1246	0.263	328	246	0.5	0.4	3.922	A
D - A12 Slip-Road	0	0	265	695	0.000	0	105	0.0	0.0	0.000	A

B1078 / B1116 - 2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	13.25	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	467	100.000
B - B1078 South-West		ONE HOUR	✓	303	100.000
C - B1078 South-East		ONE HOUR	✓	580	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	61	379	28
	B - B1078 South-West	58	0	98	146
	C - B1078 South-East	318	255	0	7
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	3	4	11
	B - B1078 South-West	5	0	3	7
	C - B1078 South-East	4	5	0	12
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.80	28.15	3.8	D	429	643
B - B1078 South-West	0.26	3.83	0.4	A	278	417
C - B1078 South-East	0.52	6.18	1.1	A	532	798
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	352	88	189	678	0.519	348	282	0.0	1.1	10.757	B
B - B1078 South-West	228	57	244	1342	0.170	227	236	0.0	0.2	3.227	A
C - B1078 South-East	437	109	45	1233	0.354	434	356	0.0	0.5	4.499	A
D - A12 Slip-Road	0	0	401	646	0.000	0	135	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	420	105	226	662	0.635	418	338	1.1	1.7	14.588	B
B - B1078 South-West	272	68	292	1313	0.207	272	283	0.2	0.3	3.459	A
C - B1078 South-East	521	130	54	1228	0.425	521	427	0.5	0.7	5.086	A
D - A12 Slip-Road	0	0	481	618	0.000	0	162	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	514	129	276	639	0.805	507	414	1.7	3.6	25.698	D
B - B1078 South-West	333	83	357	1273	0.262	333	346	0.3	0.4	3.828	A
C - B1078 South-East	639	160	66	1222	0.523	637	519	0.7	1.1	6.146	A
D - A12 Slip-Road	0	0	585	581	0.000	0	198	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	514	129	277	639	0.805	514	415	3.6	3.8	28.155	D
B - B1078 South-West	333	83	358	1272	0.262	333	347	0.4	0.4	3.833	A
C - B1078 South-East	639	160	67	1221	0.523	639	525	1.1	1.1	6.180	A
D - A12 Slip-Road	0	0	591	579	0.000	0	199	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	420	105	226	662	0.635	428	340	3.8	1.8	15.913	C
B - B1078 South-West	272	68	293	1312	0.208	273	285	0.4	0.3	3.464	A
C - B1078 South-East	521	130	55	1227	0.425	523	436	1.1	0.7	5.123	A
D - A12 Slip-Road	0	0	491	614	0.000	0	163	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	352	88	189	678	0.519	355	284	1.8	1.1	11.234	B
B - B1078 South-West	228	57	245	1341	0.170	228	238	0.3	0.2	3.237	A
C - B1078 South-East	437	109	46	1232	0.354	437	362	0.7	0.6	4.534	A
D - A12 Slip-Road	0	0	408	644	0.000	0	136	0.0	0.0	0.000	A

B1078 / B1116 - 2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	6.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	265	100.000
B - B1078 South-West		ONE HOUR	✓	306	100.000
C - B1078 South-East		ONE HOUR	✓	541	100.000
D - A12 Slip-Road		ONE HOUR	✓	1	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	1	51	196	17
	B - B1078 South-West	58	0	96	152
	C - B1078 South-East	305	227	1	8
	D - A12 Slip-Road	0	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	0
	B - B1078 South-West	2	0	4	2
	C - B1078 South-East	3	4	0	13
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.45	9.91	0.8	A	243	364
B - B1078 South-West	0.26	3.68	0.3	A	281	421
C - B1078 South-East	0.48	5.59	0.9	A	496	744
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	199	50	193	694	0.287	198	272	0.0	0.4	7.227	A
B - B1078 South-West	230	58	235	1385	0.166	229	208	0.0	0.2	3.114	A
C - B1078 South-East	407	102	38	1249	0.326	405	219	0.0	0.5	4.258	A
D - A12 Slip-Road	0	0	258	697	0.000	0	132	0.0	0.0	0.000	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	238	59	231	677	0.351	237	326	0.4	0.5	8.171	A
B - B1078 South-West	275	69	282	1356	0.203	275	249	0.2	0.3	3.330	A
C - B1078 South-East	486	122	46	1245	0.391	485	263	0.5	0.6	4.737	A
D - A12 Slip-Road	0	0	309	679	0.000	0	159	0.0	0.0	0.000	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	291	73	282	655	0.445	290	399	0.5	0.8	9.857	A
B - B1078 South-West	337	84	345	1316	0.256	336	305	0.3	0.3	3.674	A
C - B1078 South-East	595	149	57	1239	0.480	594	322	0.6	0.9	5.572	A
D - A12 Slip-Road	0	0	379	655	0.000	0	194	0.0	0.0	0.000	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	291	73	283	654	0.445	291	400	0.8	0.8	9.913	A
B - B1078 South-West	337	84	346	1316	0.256	337	306	0.3	0.3	3.675	A
C - B1078 South-East	595	149	57	1239	0.480	595	323	0.9	0.9	5.591	A
D - A12 Slip-Road	0	0	380	655	0.000	0	194	0.0	0.0	0.000	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	238	59	231	677	0.351	239	327	0.8	0.5	8.233	A
B - B1078 South-West	275	69	283	1355	0.203	275	250	0.3	0.3	3.334	A
C - B1078 South-East	486	122	47	1244	0.391	487	264	0.9	0.6	4.761	A
D - A12 Slip-Road	0	0	311	679	0.000	0	159	0.0	0.0	0.000	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	199	50	194	694	0.287	200	274	0.5	0.4	7.294	A
B - B1078 South-West	230	58	237	1384	0.166	230	210	0.3	0.2	3.123	A
C - B1078 South-East	407	102	39	1248	0.326	408	221	0.6	0.5	4.286	A
D - A12 Slip-Road	0	0	260	697	0.000	0	133	0.0	0.0	0.000	A

B1078 / B1116 - 2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J3	B1078 / B1116	Standard Roundabout		C, B, A, D	6.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1116 North-West		ONE HOUR	✓	276	100.000
B - B1078 South-West		ONE HOUR	✓	322	100.000
C - B1078 South-East		ONE HOUR	✓	495	100.000
D - A12 Slip-Road		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	42	214	21
	B - B1078 South-West	56	0	119	147
	C - B1078 South-East	298	184	2	11
	D - A12 Slip-Road	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1116 North-West	B - B1078 South-West	C - B1078 South-East	D - A12 Slip-Road
From	A - B1116 North-West	0	0	3	5
	B - B1078 South-West	2	0	0	2
	C - B1078 South-East	1	4	0	9
	D - A12 Slip-Road	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - B1116 North-West	0.47	10.61	0.9	B	253	380
B - B1078 South-West	0.27	3.66	0.4	A	296	444
C - B1078 South-East	0.43	5.00	0.8	A	454	682
D - A12 Slip-Road	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	208	52	209	685	0.303	206	266	0.0	0.4	7.481	A
B - B1078 South-West	243	61	233	1406	0.173	242	169	0.0	0.2	3.091	A
C - B1078 South-East	373	93	31	1273	0.293	371	250	0.0	0.4	3.984	A
D - A12 Slip-Road	0	0	281	690	0.000	0	134	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	248	62	251	667	0.372	247	318	0.4	0.6	8.556	A
B - B1078 South-West	290	72	279	1378	0.210	290	203	0.2	0.3	3.308	A
C - B1078 South-East	445	111	37	1270	0.351	445	301	0.4	0.5	4.360	A
D - A12 Slip-Road	0	0	338	671	0.000	0	160	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	304	76	307	643	0.472	303	390	0.6	0.9	10.534	B
B - B1078 South-West	355	89	342	1339	0.265	355	248	0.3	0.4	3.657	A
C - B1078 South-East	545	136	46	1265	0.431	544	368	0.5	0.8	4.987	A
D - A12 Slip-Road	0	0	413	645	0.000	0	196	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	304	76	307	643	0.472	304	390	0.9	0.9	10.606	B
B - B1078 South-West	355	89	342	1339	0.265	355	249	0.4	0.4	3.658	A
C - B1078 South-East	545	136	46	1265	0.431	545	369	0.8	0.8	4.999	A
D - A12 Slip-Road	0	0	414	644	0.000	0	196	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	248	62	251	667	0.372	249	319	0.9	0.6	8.634	A
B - B1078 South-West	290	72	280	1377	0.211	290	203	0.4	0.3	3.312	A
C - B1078 South-East	445	111	37	1270	0.351	446	302	0.8	0.5	4.375	A
D - A12 Slip-Road	0	0	340	670	0.000	0	161	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - B1116 North-West	208	52	210	685	0.303	208	267	0.6	0.4	7.561	A
B - B1078 South-West	243	61	234	1405	0.173	243	170	0.3	0.2	3.097	A
C - B1078 South-East	373	93	31	1273	0.293	373	253	0.5	0.4	4.005	A
D - A12 Slip-Road	0	0	284	689	0.000	0	134	0.0	0.0	0.000	A

Junctions 9
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Report generation date: 13/03/2020 11:48:58

- »Base Year, 6-7 AM
- »Base Year, 7-8 AM
- »Base Year, 8-9 AM
- »Base Year, 3-4 PM
- »Base Year, 5-6 PM
- »2023 Reference Case , 6-7 AM
- »2023 Reference Case , 7-8 AM
- »2023 Reference Case , 8-9 AM
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- »2023 Reference Case , 5-6 PM
- »2023 Early Years , 6-7 AM
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- »2028 Reference Case , 6-7 AM
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- »2028 Peak Construction, 6-7 AM
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- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case , 6-7 AM
- »2034 Reference Case , 7-8 AM
- »2034 Reference Case , 8-9 AM
- »2034 Reference Case , 3-4 PM
- »2034 Reference Case , 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM				7-8 AM				8-9 AM				3-4 PM				5-6 PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
Base Year																				
Stream B-AC	0.4	11.40	0.31	B	1.9	25.63	0.66	D	1.4	21.96	0.59	C	1.7	26.52	0.63	D	0.9	17.28	0.49	C
Stream C-AB	0.0	11.73	0.01	B	0.1	7.39	0.04	A	0.0	7.48	0.02	A	0.0	5.43	0.02	A	0.0	5.77	0.01	A
2023 Reference Case																				
Stream B-AC	0.7	13.76	0.41	B	5.1	58.26	0.86	F	2.2	32.63	0.70	D	3.5	48.51	0.80	E	6.8	75.72	0.91	F
Stream C-AB	0.0	12.01	0.02	B	0.1	7.73	0.05	A	0.1	7.29	0.06	A	0.0	6.32	0.03	A	0.0	5.78	0.02	A
2023 Early Years																				
Stream B-AC	0.8	14.72	0.44	B	7.0	77.76	0.91	F	2.6	36.57	0.74	E	4.4	58.88	0.84	F	24.5	207.61	1.08	F
Stream C-AB	0.0	11.40	0.02	B	0.1	7.76	0.06	A	0.1	7.28	0.06	A	0.0	6.32	0.03	A	0.0	5.80	0.02	A
2028 Reference Case																				
Stream B-AC	0.8	15.73	0.46	C	5.6	63.17	0.87	F	2.0	29.55	0.68	D	3.2	44.53	0.78	E	6.7	73.59	0.90	F
Stream C-AB	0.0	11.99	0.02	B	0.1	7.66	0.05	A	0.1	7.32	0.06	A	0.0	6.30	0.03	A	0.0	5.73	0.02	A
2028 Peak Construction																				
Stream B-AC	0.8	15.14	0.45	C	8.6	93.25	0.94	F	2.8	39.42	0.75	E	9.0	104.50	0.95	F	26.8	224.39	1.09	F

Stream C-AB	0.1	8.48	0.05	A	0.1	7.80	0.09	A	0.1	7.31	0.06	A	0.0	6.31	0.03	A	0.0	6.31	0.02	A
2034 Reference Case																				
Stream B-AC	0.7	14.26	0.43	B	4.9	56.03	0.85	F	2.0	29.49	0.68	D	5.4	68.77	0.87	F	1.8	27.03	0.65	D
Stream C-AB	0.0	11.77	0.01	B	0.1	7.34	0.05	A	0.0	7.76	0.03	A	0.0	5.78	0.02	A	0.0	5.65	0.02	A
2034 Operational Led																				
Stream B-AC	0.7	14.20	0.43	B	5.3	60.90	0.87	F	2.6	35.92	0.73	E	5.6	70.23	0.88	F	1.8	26.76	0.65	D
Stream C-AB	0.0	11.82	0.01	B	0.1	7.87	0.06	A	0.1	7.30	0.06	A	0.0	5.79	0.02	A	0.0	6.23	0.02	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

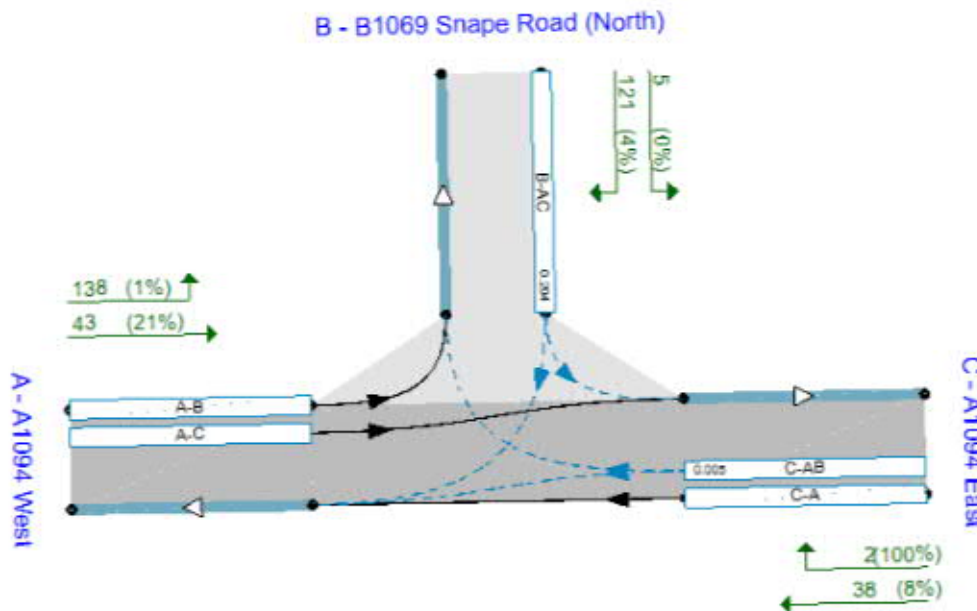
File summary

File Description

Title	B1069 / A1094 (Snape Road, East)
Location	52.178882°, 1.537732°
Site number	5
Date	12/10/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKWSPGROUP\ukjgm001
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Flow shown originates from demand (100%)
 Streams shown represent 100%

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		4.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A1094 West		Major
B	B1069 Snape Road (North)		Minor
C	A1094 East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A1094 East	6.07			51.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - B1069 Snape Road (North)	One lane	3.00	30	33

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	504	0.091	0.231	0.145	0.330
B-C	645	0.099	0.249	-	-
C-B	603	0.233	0.233	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	181	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	126	100.000
C - A1094 East		ONE HOUR	✓	40	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	138	43
	B - B1069 Snape Road (North)	121	0	5
	C - A1094 East	38	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	1	21
	B - B1069 Snape Road (North)	4	0	0
	C - A1094 East	8	100	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.31	11.40	0.4	B	116	173
C-AB	0.01	11.73	0.0	B	2	3
C-A					35	52
A-B					127	190
A-C					39	59

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	465	0.204	94	0.0	0.3	9.668	A
C-AB	2	0.41	309	0.005	2	0.0	0.0	11.727	B
C-A	28	7			28				
A-B	104	26			104				
A-C	32	8			32				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	461	0.246	113	0.3	0.3	10.344	B
C-AB	2	0.51	310	0.007	2	0.0	0.0	11.729	B
C-A	34	8			34				
A-B	124	31			124				
A-C	39	10			39				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	454	0.305	138	0.3	0.4	11.369	B
C-AB	3	1	312	0.008	3	0.0	0.0	11.686	B
C-A	41	10			41				
A-B	152	38			152				
A-C	47	12			47				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	454	0.305	139	0.4	0.4	11.400	B
C-AB	3	1	312	0.008	3	0.0	0.0	11.626	B
C-A	41	10			41				
A-B	152	38			152				
A-C	47	12			47				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	461	0.246	114	0.4	0.3	10.388	B
C-AB	2	0.51	310	0.007	2	0.0	0.0	11.602	B

C-A	34	8			34				
A-B	124	31			124				
A-C	39	10			39				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	24	465	0.204	95	0.3	0.3	9.734	A
C-AB	2	0.42	309	0.005	2	0.0	0.0	11.666	B
C-A	28	7			28				
A-B	104	26			104				
A-C	32	8			32				

Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		9.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	324	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	248	100.000
C - A1094 East		ONE HOUR	✓	115	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	200	124
B - B1069 Snape Road (North)	238	0	10
C - A1094 East	101	14	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	4	12
B - B1069 Snape Road (North)	4	0	0
C - A1094 East	1	21	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.66	25.63	1.9	D	228	341
C-AB	0.04	7.39	0.1	A	16	24
C-A					90	135
A-B					184	275
A-C					114	171

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	187	47	437	0.428	184	0.0	0.7	14.089	B
C-AB	12	3	504	0.025	12	0.0	0.0	7.322	A
C-A	74	19			74				
A-B	151	38			151				
A-C	93	23			93				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	223	56	426	0.523	222	0.7	1.1	17.453	C
C-AB	15	4	506	0.030	15	0.0	0.0	7.357	A
C-A	88	22			88				
A-B	180	45			180				
A-C	111	28			111				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	273	68	413	0.662	270	1.1	1.8	24.700	C
C-AB	20	5	509	0.039	20	0.0	0.1	7.387	A
C-A	107	27			107				
A-B	220	55			220				
A-C	137	34			137				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	273	68	413	0.662	273	1.8	1.9	25.628	D
C-AB	20	5	509	0.039	20	0.1	0.1	7.368	A
C-A	107	27			107				
A-B	220	55			220				
A-C	137	34			137				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	223	56	426	0.523	226	1.9	1.1	18.209	C
C-AB	15	4	506	0.030	15	0.1	0.0	7.312	A
C-A	88	22			88				
A-B	180	45			180				
A-C	111	28			111				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	187	47	437	0.428	188	1.1	0.8	14.583	B
C-AB	12	3	504	0.025	12	0.0	0.0	7.306	A
C-A	74	19			74				
A-B	151	38			151				
A-C	93	23			93				

Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		6.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	346	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	216	100.000
C - A1094 East		ONE HOUR	✓	127	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	157	189
	B - B1069 Snape Road (North)	202	0	14
	C - A1094 East	120	7	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	4	6
	B - B1069 Snape Road (North)	5	0	0
	C - A1094 East	6	29	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.59	21.96	1.4	C	198	297
C-AB	0.02	7.48	0.0	A	8	13
C-A					108	162
A-B					144	216
A-C					173	260

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	163	41	429	0.379	160	0.0	0.6	13.297	B
C-AB	6	2	488	0.013	6	0.0	0.0	7.479	A
C-A	89	22			89				
A-B	118	30			118				
A-C	142	36			142				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	49	417	0.465	193	0.6	0.8	15.998	C
C-AB	8	2	492	0.016	8	0.0	0.0	7.459	A
C-A	106	27			106				
A-B	141	35			141				
A-C	170	42			170				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	59	401	0.593	236	0.8	1.4	21.456	C
C-AB	11	3	498	0.021	10	0.0	0.0	7.409	A
C-A	129	32			129				
A-B	173	43			173				
A-C	208	52			208				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	59	401	0.593	238	1.4	1.4	21.961	C
C-AB	11	3	498	0.021	11	0.0	0.0	7.384	A
C-A	129	32			129				
A-B	173	43			173				
A-C	208	52			208				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	49	417	0.466	196	1.4	0.9	16.446	C
C-AB	8	2	492	0.016	8	0.0	0.0	7.404	A
C-A	106	27			106				
A-B	141	35			141				
A-C	170	42			170				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	163	41	429	0.379	164	0.9	0.6	13.646	B
C-AB	6	2	488	0.013	6	0.0	0.0	7.453	A
C-A	89	22			89				
A-B	118	30			118				
A-C	142	36			142				

Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		6.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	386	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	212	100.000
C - A1094 East		ONE HOUR	✓	265	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	180	206
	B - B1069 Snape Road (North)	208	0	4
	C - A1094 East	259	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	2
	B - B1069 Snape Road (North)	6	0	0
	C - A1094 East	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.63	26.52	1.7	D	195	292
C-AB	0.02	5.43	0.0	A	9	13
C-A					235	352
A-B					165	248
A-C					189	284

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	160	40	403	0.396	157	0.0	0.6	14.482	B
C-AB	6	2	670	0.010	6	0.0	0.0	5.421	A
C-A	193	48			193				
A-B	136	34			136				
A-C	155	39			155				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	191	48	389	0.490	189	0.6	0.9	17.962	C
C-AB	8	2	685	0.012	8	0.0	0.0	5.316	A
C-A	230	58			230				
A-B	162	40			162				
A-C	185	46			185				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	233	58	368	0.634	231	0.9	1.6	25.622	D
C-AB	11	3	706	0.016	11	0.0	0.0	5.175	A
C-A	281	70			281				
A-B	198	50			198				
A-C	227	57			227				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	233	58	368	0.634	233	1.6	1.7	26.519	D
C-AB	11	3	706	0.016	11	0.0	0.0	5.177	A
C-A	281	70			281				
A-B	198	50			198				
A-C	227	57			227				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	191	48	389	0.490	193	1.7	1.0	18.672	C
C-AB	8	2	685	0.012	8	0.0	0.0	5.320	A
C-A	230	58			230				
A-B	162	40			162				
A-C	185	46			185				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	160	40	403	0.396	161	1.0	0.7	14.939	B
C-AB	6	2	670	0.010	6	0.0	0.0	5.425	A
C-A	193	48			193				
A-B	136	34			136				
A-C	155	39			155				

Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		4.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	383	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	179	100.000
C - A1094 East		ONE HOUR	✓	189	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	215	168
	B - B1069 Snape Road (North)	170	0	9
	C - A1094 East	183	6	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	4	1
	B - B1069 Snape Road (North)	2	0	0
	C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.49	17.28	0.9	C	164	246
C-AB	0.01	5.77	0.0	A	8	11
C-A					166	249
A-B					197	296
A-C					154	231

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	135	34	435	0.309	133	0.0	0.4	11.837	B
C-AB	6	1	631	0.009	6	0.0	0.0	5.760	A
C-A	137	34			137				
A-B	162	40			162				
A-C	126	32			126				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	423	0.381	160	0.4	0.6	13.684	B
C-AB	7	2	637	0.011	7	0.0	0.0	5.712	A
C-A	163	41			163				
A-B	193	48			193				
A-C	151	38			151				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	197	49	405	0.486	196	0.6	0.9	17.089	C
C-AB	10	2	647	0.015	10	0.0	0.0	5.645	A
C-A	198	50			198				
A-B	237	59			237				
A-C	185	46			185				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	197	49	405	0.486	197	0.9	0.9	17.282	C
C-AB	10	2	647	0.015	10	0.0	0.0	5.651	A
C-A	198	50			198				
A-B	237	59			237				
A-C	185	46			185				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	423	0.381	162	0.9	0.6	13.877	B
C-AB	7	2	637	0.011	7	0.0	0.0	5.721	A
C-A	163	41			163				
A-B	193	48			193				
A-C	151	38			151				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	135	34	435	0.310	135	0.6	0.5	12.031	B
C-AB	6	1	631	0.009	6	0.0	0.0	5.766	A
C-A	136	34			136				
A-B	162	40			162				
A-C	126	32			126				

2023 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		4.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	314	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	164	100.000
C - A1094 East		ONE HOUR	✓	45	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	269	45
B - B1069 Snape Road (North)	158	0	6
C - A1094 East	41	4	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	1	20
B - B1069 Snape Road (North)	3	0	13
C - A1094 East	7	93	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.41	13.76	0.7	B	150	226
C-AB	0.02	12.01	0.0	B	4	7
C-A					37	56
A-B					247	370
A-C					42	62

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	123	31	458	0.270	122	0.0	0.4	10.678	B
C-AB	4	1	308	0.012	4	0.0	0.0	11.816	B
C-A	31	8			31				
A-B	202	51			202				
A-C	34	9			34				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	147	37	451	0.327	147	0.4	0.5	11.817	B
C-AB	4	1	308	0.014	4	0.0	0.0	11.920	B
C-A	36	9			36				
A-B	242	60			242				
A-C	41	10			41				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	181	45	442	0.408	180	0.5	0.7	13.681	B
C-AB	6	1	307	0.018	6	0.0	0.0	12.011	B
C-A	44	11			44				
A-B	296	74			296				
A-C	50	12			50				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	181	45	442	0.408	181	0.7	0.7	13.760	B
C-AB	6	1	307	0.018	6	0.0	0.0	11.940	B
C-A	44	11			44				
A-B	296	74			296				
A-C	50	12			50				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	147	37	451	0.327	148	0.7	0.5	11.912	B
C-AB	4	1	308	0.014	4	0.0	0.0	11.780	B
C-A	36	9			36				
A-B	242	60			242				
A-C	41	10			41				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	123	31	458	0.270	124	0.5	0.4	10.801	B
C-AB	4	1	308	0.012	4	0.0	0.0	11.752	B
C-A	31	8			31				
A-B	202	51			202				
A-C	34	9			34				

2023 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		22.58	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	367	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	306	100.000
C - A1094 East		ONE HOUR	✓	122	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	232	135
	B - B1069 Snape Road (North)	296	0	11
	C - A1094 East	106	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	8	11
	B - B1069 Snape Road (North)	7	0	8
	C - A1094 East	1	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.86	58.26	5.1	F	281	422
C-AB	0.05	7.73	0.1	A	18	27
C-A					94	141
A-B					213	319
A-C					124	186

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	231	58	418	0.552	226	0.0	1.2	18.310	C
C-AB	14	3	486	0.029	14	0.0	0.0	7.626	A
C-A	78	19			78				
A-B	175	44			175				
A-C	102	25			102				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	69	407	0.676	273	1.2	1.9	26.065	D
C-AB	17	4	487	0.036	17	0.0	0.0	7.681	A
C-A	92	23			92				
A-B	208	52			208				
A-C	122	30			122				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	337	84	392	0.860	327	1.9	4.5	48.661	E
C-AB	23	6	490	0.046	22	0.0	0.1	7.732	A
C-A	112	28			112				
A-B	255	64			255				
A-C	149	37			149				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	337	84	392	0.860	335	4.5	5.1	58.264	F
C-AB	23	6	490	0.046	23	0.1	0.1	7.703	A
C-A	112	28			112				
A-B	255	64			255				
A-C	149	37			149				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	69	407	0.676	287	5.1	2.3	32.049	D
C-AB	17	4	488	0.036	17	0.1	0.0	7.619	A
C-A	92	23			92				
A-B	208	52			208				
A-C	122	30			122				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	231	58	418	0.552	235	2.3	1.3	20.001	C
C-AB	14	4	486	0.029	14	0.0	0.0	7.601	A
C-A	78	19			78				
A-B	175	44			175				
A-C	102	25			102				

2023 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		9.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	467	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	233	100.000
C - A1094 East		ONE HOUR	✓	145	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	261	206
	B - B1069 Snape Road (North)	219	0	15
	C - A1094 East	126	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	6	5
	B - B1069 Snape Road (North)	9	0	6
	C - A1094 East	5	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.70	32.63	2.2	D	214	321
C-AB	0.06	7.29	0.1	A	23	34
C-A					110	166
A-B					240	359
A-C					189	283

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	176	44	399	0.441	173	0.0	0.8	15.740	C
C-AB	18	4	523	0.034	17	0.0	0.0	7.117	A
C-A	92	23			92				
A-B	197	49			197				
A-C	155	39			155				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	52	385	0.545	208	0.8	1.1	20.211	C
C-AB	22	6	523	0.042	22	0.0	0.1	7.195	A
C-A	109	27			109				
A-B	235	59			235				
A-C	185	46			185				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	257	64	366	0.702	253	1.1	2.1	30.832	D
C-AB	29	7	523	0.055	29	0.1	0.1	7.293	A
C-A	131	33			131				
A-B	287	72			287				
A-C	226	57			226				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	257	64	366	0.703	257	2.1	2.2	32.633	D
C-AB	29	7	523	0.055	29	0.1	0.1	7.286	A
C-A	131	33			131				
A-B	287	72			287				
A-C	226	57			226				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	52	385	0.545	214	2.2	1.3	21.503	C
C-AB	22	6	523	0.042	22	0.1	0.1	7.174	A
C-A	109	27			109				
A-B	235	59			235				
A-C	185	46			185				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	176	44	398	0.441	178	1.3	0.8	16.426	C
C-AB	18	4	523	0.034	18	0.1	0.0	7.111	A
C-A	92	23			92				
A-B	197	49			197				
A-C	155	39			155				

2023 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		13.03	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	438	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	249	100.000
C - A1094 East		ONE HOUR	✓	287	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	211	227
	B - B1069 Snape Road (North)	244	0	6
	C - A1094 East	280	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	7	2
	B - B1069 Snape Road (North)	9	0	17
	C - A1094 East	1	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.80	48.51	3.5	E	229	343
C-AB	0.03	6.32	0.0	A	12	18
C-A					251	377
A-B					194	291
A-C					208	312

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	383	0.490	184	0.0	0.9	17.807	C
C-AB	9	2	578	0.015	9	0.0	0.0	6.323	A
C-A	207	52			207				
A-B	159	40			159				
A-C	171	43			171				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	224	56	367	0.611	222	0.9	1.5	24.437	C
C-AB	12	3	599	0.020	12	0.0	0.0	6.161	A
C-A	246	62			246				
A-B	190	47			190				
A-C	204	51			204				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	345	0.795	268	1.5	3.2	42.993	E
C-AB	16	4	628	0.026	16	0.0	0.0	5.917	A
C-A	300	75			300				
A-B	232	58			232				
A-C	249	62			249				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	345	0.795	273	3.2	3.5	48.506	E
C-AB	16	4	629	0.026	16	0.0	0.0	5.881	A
C-A	300	75			300				
A-B	232	58			232				
A-C	249	62			249				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	224	56	367	0.611	231	3.5	1.7	27.762	D
C-AB	12	3	599	0.020	12	0.0	0.0	6.074	A
C-A	246	62			246				
A-B	190	47			190				
A-C	204	51			204				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	383	0.490	190	1.7	1.0	18.970	C
C-AB	9	2	579	0.015	9	0.0	0.0	6.278	A
C-A	207	52			207				
A-B	159	40			159				
A-C	171	43			171				

2023 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		25.31	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	432	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	319	100.000
C - A1094 East		ONE HOUR	✓	206	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	250	182
	B - B1069 Snape Road (North)	298	0	20
	C - A1094 East	199	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	8	0
	B - B1069 Snape Road (North)	4	0	0
	C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.91	75.72	6.8	F	293	439
C-AB	0.02	5.78	0.0	A	9	13
C-A					180	270
A-B					229	344
A-C					167	251

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	240	60	420	0.571	235	0.0	1.3	18.940	C
C-AB	7	2	629	0.011	7	0.0	0.0	5.779	A
C-A	148	37			148				
A-B	188	47			188				
A-C	137	34			137				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	287	72	407	0.705	283	1.3	2.2	28.265	D
C-AB	8	2	636	0.013	8	0.0	0.0	5.733	A
C-A	176	44			176				
A-B	225	56			225				
A-C	164	41			164				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	351	88	387	0.906	337	2.2	5.8	58.586	F
C-AB	11	3	646	0.017	11	0.0	0.0	5.668	A
C-A	215	54			215				
A-B	275	69			275				
A-C	201	50			201				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	351	88	387	0.906	347	5.8	6.8	75.721	F
C-AB	11	3	646	0.017	11	0.0	0.0	5.671	A
C-A	215	54			215				
A-B	275	69			275				
A-C	201	50			201				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	287	72	407	0.705	303	6.8	2.6	38.945	E
C-AB	8	2	636	0.013	8	0.0	0.0	5.739	A
C-A	176	44			176				
A-B	225	56			225				
A-C	164	41			164				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	240	60	420	0.571	245	2.6	1.4	21.066	C
C-AB	7	2	629	0.011	7	0.0	0.0	5.785	A
C-A	148	37			148				
A-B	188	47			188				
A-C	137	34			137				

2023 Early Years , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		4.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	384	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	174	100.000
C - A1094 East		ONE HOUR	✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	339	45
	B - B1069 Snape Road (North)	167	0	7
	C - A1094 East	42	5	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	1	20
	B - B1069 Snape Road (North)	3	0	11
	C - A1094 East	7	76	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.44	14.72	0.8	B	160	239
C-AB	0.02	11.40	0.0	B	6	8
C-A					38	57
A-B					311	466
A-C					42	62

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	454	0.289	129	0.0	0.4	11.040	B
C-AB	4	1	330	0.013	4	0.0	0.0	11.058	B
C-A	31	8			31				
A-B	255	64			255				
A-C	34	9			34				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	39	446	0.350	156	0.4	0.5	12.369	B
C-AB	5	1	328	0.016	5	0.0	0.0	11.216	B
C-A	37	9			37				
A-B	304	76			304				
A-C	41	10			41				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	192	48	436	0.439	191	0.5	0.8	14.617	B
C-AB	7	2	324	0.021	7	0.0	0.0	11.396	B
C-A	45	11			45				
A-B	373	93			373				
A-C	50	12			50				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	192	48	436	0.439	192	0.8	0.8	14.724	B
C-AB	7	2	324	0.021	7	0.0	0.0	11.339	B
C-A	45	11			45				
A-B	373	93			373				
A-C	50	12			50				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	39	446	0.350	157	0.8	0.6	12.494	B
C-AB	5	1	328	0.016	5	0.0	0.0	11.103	B
C-A	37	9			37				
A-B	304	76			304				
A-C	41	10			41				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	454	0.289	132	0.6	0.4	11.187	B
C-AB	4	1	330	0.013	4	0.0	0.0	11.006	B
C-A	31	8			31				
A-B	255	64			255				
A-C	34	9			34				

2023 Early Years , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		27.62	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	451	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	316	100.000
C - A1094 East		ONE HOUR	✓	133	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	316	135
	B - B1069 Snape Road (North)	305	0	12
	C - A1094 East	114	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	6	11
	B - B1069 Snape Road (North)	7	0	7
	C - A1094 East	1	21	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.91	77.76	7.0	F	290	436
C-AB	0.06	7.76	0.1	A	22	33
C-A					100	150
A-B					290	435
A-C					124	186

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	60	412	0.578	233	0.0	1.3	19.551	C
C-AB	17	4	493	0.034	17	0.0	0.0	7.563	A
C-A	83	21			83				
A-B	238	59			238				
A-C	102	25			102				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	285	71	400	0.711	281	1.3	2.2	29.200	D
C-AB	21	5	493	0.043	21	0.0	0.1	7.657	A
C-A	98	25			98				
A-B	284	71			284				
A-C	122	30			122				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	348	87	383	0.909	334	2.2	5.8	59.932	F
C-AB	27	7	493	0.056	27	0.1	0.1	7.762	A
C-A	119	30			119				
A-B	348	87			348				
A-C	149	37			149				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	348	87	383	0.909	344	5.8	7.0	77.759	F
C-AB	27	7	493	0.056	27	0.1	0.1	7.735	A
C-A	119	30			119				
A-B	348	87			348				
A-C	149	37			149				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	285	71	400	0.711	301	7.0	2.7	40.822	E
C-AB	21	5	493	0.043	21	0.1	0.1	7.599	A
C-A	98	25			98				
A-B	284	71			284				
A-C	122	30			122				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	60	412	0.578	243	2.7	1.4	21.907	C
C-AB	17	4	493	0.034	17	0.1	0.0	7.541	A
C-A	83	21			83				
A-B	238	59			238				
A-C	102	25			102				

2023 Early Years , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		10.83	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	468	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	245	100.000
C - A1094 East		ONE HOUR	✓	147	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	262	206
	B - B1069 Snape Road (North)	231	0	15
	C - A1094 East	128	19	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	6	5
	B - B1069 Snape Road (North)	9	0	6
	C - A1094 East	5	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.74	36.57	2.6	E	225	338
C-AB	0.06	7.28	0.1	A	23	34
C-A					112	168
A-B					240	361
A-C					189	283

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	185	46	400	0.463	181	0.0	0.8	16.275	C
C-AB	18	4	524	0.034	17	0.0	0.0	7.104	A
C-A	93	23			93				
A-B	197	49			197				
A-C	155	39			155				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	221	55	386	0.572	219	0.8	1.3	21.338	C
C-AB	22	6	524	0.042	22	0.0	0.1	7.182	A
C-A	110	28			110				
A-B	236	59			236				
A-C	185	46			185				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	270	68	367	0.737	265	1.3	2.5	33.977	D
C-AB	29	7	525	0.055	29	0.1	0.1	7.276	A
C-A	133	33			133				
A-B	289	72			289				
A-C	226	57			226				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	270	68	367	0.737	270	2.5	2.6	36.573	E
C-AB	29	7	525	0.055	29	0.1	0.1	7.263	A
C-A	133	33			133				
A-B	289	72			289				
A-C	226	57			226				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	221	55	386	0.572	226	2.6	1.4	23.091	C
C-AB	22	6	524	0.042	22	0.1	0.1	7.160	A
C-A	110	28			110				
A-B	236	59			236				
A-C	185	46			185				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	185	46	399	0.463	187	1.4	0.9	17.094	C
C-AB	18	4	524	0.034	18	0.1	0.0	7.101	A
C-A	93	23			93				
A-B	197	49			197				
A-C	155	39			155				

2023 Early Years , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		16.40	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	439	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	264	100.000
C - A1094 East		ONE HOUR	✓	287	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	212	227
B - B1069 Snape Road (North)	259	0	6
C - A1094 East	280	8	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	7	2
B - B1069 Snape Road (North)	8	0	17
C - A1094 East	1	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.84	58.88	4.4	F	242	364
C-AB	0.03	6.32	0.0	A	12	18
C-A					251	377
A-B					195	292
A-C					208	312

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	199	50	384	0.518	195	0.0	1.0	18.628	C
C-AB	9	2	578	0.015	9	0.0	0.0	6.324	A
C-A	207	52			207				
A-B	160	40			160				
A-C	171	43			171				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	59	368	0.645	235	1.0	1.7	26.424	D
C-AB	12	3	599	0.020	12	0.0	0.0	6.163	A
C-A	246	62			246				
A-B	191	48			191				
A-C	204	51			204				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	291	73	346	0.840	282	1.7	4.0	49.800	E
C-AB	16	4	628	0.026	16	0.0	0.0	5.919	A
C-A	300	75			300				
A-B	234	58			234				
A-C	249	62			249				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	291	73	346	0.840	289	4.0	4.4	58.877	F
C-AB	16	4	628	0.026	16	0.0	0.0	5.881	A
C-A	300	75			300				
A-B	234	58			234				
A-C	249	62			249				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	59	368	0.645	247	4.4	2.0	31.737	D
C-AB	12	3	599	0.020	12	0.0	0.0	6.078	A
C-A	246	62			246				
A-B	191	48			191				
A-C	204	51			204				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	199	50	384	0.518	202	2.0	1.1	20.130	C
C-AB	9	2	578	0.015	9	0.0	0.0	6.282	A
C-A	207	52			207				
A-B	160	40			160				
A-C	171	43			171				

2023 Early Years , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		76.09	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	446	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	379	100.000
C - A1094 East		ONE HOUR	✓	207	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	257	189
	B - B1069 Snape Road (North)	356	0	22
	C - A1094 East	200	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	7	0
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.08	207.61	24.5	F	348	521
C-AB	0.02	5.80	0.0	A	9	13
C-A					181	271
A-B					236	354
A-C					174	261

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	285	71	421	0.678	277	0.0	1.9	24.018	C
C-AB	7	2	628	0.011	7	0.0	0.0	5.795	A
C-A	149	37			149				
A-B	193	48			193				
A-C	143	36			143				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	341	85	406	0.838	332	1.9	4.1	43.915	E
C-AB	8	2	634	0.013	8	0.0	0.0	5.751	A
C-A	177	44			177				
A-B	231	58			231				
A-C	170	43			170				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	417	104	387	1.079	371	4.1	15.5	117.973	F
C-AB	11	3	644	0.018	11	0.0	0.0	5.689	A
C-A	216	54			216				
A-B	283	71			283				
A-C	209	52			209				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	417	104	387	1.079	381	15.5	24.5	207.611	F
C-AB	11	3	644	0.018	11	0.0	0.0	5.692	A
C-A	216	54			216				
A-B	283	71			283				
A-C	209	52			209				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	341	85	406	0.838	390	24.5	12.0	175.582	F
C-AB	9	2	634	0.013	9	0.0	0.0	5.760	A
C-A	177	44			177				
A-B	231	58			231				
A-C	170	43			170				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	285	71	421	0.678	324	12.0	2.3	47.640	E
C-AB	7	2	628	0.011	7	0.0	0.0	5.801	A
C-A	149	37			149				
A-B	193	48			193				
A-C	143	36			143				

2028 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		5.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	322	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	176	100.000
C - A1094 East		ONE HOUR	✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	275	47
	B - B1069 Snape Road (North)	170	0	6
	C - A1094 East	43	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	19
	B - B1069 Snape Road (North)	7	0	13
	C - A1094 East	7	93	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.46	15.73	0.8	C	161	242
C-AB	0.02	11.99	0.0	B	5	7
C-A					39	58
A-B					252	378
A-C					43	65

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	132	33	438	0.303	131	0.0	0.4	11.658	B
C-AB	4	1	309	0.012	4	0.0	0.0	11.799	B
C-A	32	8			32				
A-B	207	52			207				
A-C	36	9			36				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	158	40	431	0.367	158	0.4	0.6	13.120	B
C-AB	4	1	308	0.014	4	0.0	0.0	11.901	B
C-A	38	10			38				
A-B	247	62			247				
A-C	43	11			43				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	48	422	0.459	193	0.6	0.8	15.597	C
C-AB	6	1	308	0.018	6	0.0	0.0	11.988	B
C-A	47	12			47				
A-B	302	76			302				
A-C	52	13			52				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	48	422	0.459	194	0.8	0.8	15.728	C
C-AB	6	1	308	0.018	6	0.0	0.0	11.913	B
C-A	47	12			47				
A-B	302	76			302				
A-C	52	13			52				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	158	40	431	0.367	159	0.8	0.6	13.269	B
C-AB	4	1	309	0.014	4	0.0	0.0	11.754	B
C-A	38	10			38				
A-B	247	62			247				
A-C	43	11			43				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	132	33	438	0.303	133	0.6	0.4	11.833	B
C-AB	4	1	309	0.012	4	0.0	0.0	11.729	B
C-A	32	8			32				
A-B	207	52			207				
A-C	36	9			36				

2028 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		23.87	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	392	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	310	100.000
C - A1094 East		ONE HOUR	✓	129	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	248	144
	B - B1069 Snape Road (North)	300	0	11
	C - A1094 East	112	17	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	4	10
	B - B1069 Snape Road (North)	6	0	8
	C - A1094 East	1	24	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.87	63.17	5.6	F	285	427
C-AB	0.05	7.66	0.1	A	19	29
C-A					99	148
A-B					227	341
A-C					132	199

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	234	58	418	0.559	229	0.0	1.2	18.574	C
C-AB	15	4	492	0.031	15	0.0	0.0	7.545	A
C-A	82	20			82				
A-B	187	47			187				
A-C	109	27			109				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	279	70	407	0.686	276	1.2	2.0	26.822	D
C-AB	19	5	494	0.038	19	0.0	0.1	7.602	A
C-A	97	24			97				
A-B	223	56			223				
A-C	130	32			130				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	342	85	391	0.875	330	2.0	4.9	51.609	F
C-AB	24	6	496	0.049	24	0.1	0.1	7.656	A
C-A	118	29			118				
A-B	273	68			273				
A-C	159	40			159				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	342	85	391	0.875	339	4.9	5.6	63.173	F
C-AB	24	6	496	0.049	24	0.1	0.1	7.630	A
C-A	118	29			118				
A-B	273	68			273				
A-C	159	40			159				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	279	70	407	0.686	292	5.6	2.4	34.002	D
C-AB	19	5	494	0.038	19	0.1	0.1	7.542	A
C-A	97	24			97				
A-B	223	56			223				
A-C	130	32			130				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	234	58	418	0.559	238	2.4	1.3	20.413	C
C-AB	15	4	492	0.031	15	0.1	0.0	7.521	A
C-A	82	20			82				
A-B	187	47			187				
A-C	109	27			109				

2028 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		8.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	494	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	229	100.000
C - A1094 East		ONE HOUR	✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	273	221
	B - B1069 Snape Road (North)	215	0	15
	C - A1094 East	129	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	5
	B - B1069 Snape Road (North)	6	0	6
	C - A1094 East	5	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.68	29.55	2.0	D	211	316
C-AB	0.06	7.32	0.1	A	23	35
C-A					113	170
A-B					251	376
A-C					203	304

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	173	43	408	0.423	170	0.0	0.7	14.928	B
C-AB	18	4	522	0.034	18	0.0	0.0	7.134	A
C-A	94	23			94				
A-B	206	51			206				
A-C	166	42			166				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	206	52	394	0.524	205	0.7	1.1	18.925	C
C-AB	22	6	522	0.043	22	0.0	0.1	7.218	A
C-A	111	28			111				
A-B	245	61			245				
A-C	198	50			198				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	373	0.677	249	1.1	1.9	28.206	D
C-AB	29	7	522	0.056	29	0.1	0.1	7.318	A
C-A	134	34			134				
A-B	301	75			301				
A-C	243	61			243				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	373	0.677	252	1.9	2.0	29.550	D
C-AB	29	7	522	0.056	29	0.1	0.1	7.311	A
C-A	134	34			134				
A-B	301	75			301				
A-C	243	61			243				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	206	52	394	0.524	210	2.0	1.1	19.915	C
C-AB	22	6	522	0.043	22	0.1	0.1	7.196	A
C-A	111	28			111				
A-B	245	61			245				
A-C	198	50			198				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	173	43	408	0.423	174	1.1	0.8	15.489	C
C-AB	18	4	522	0.034	18	0.1	0.0	7.130	A
C-A	94	23			94				
A-B	206	51			206				
A-C	166	42			166				

2028 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		11.60	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	446	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	249	100.000
C - A1094 East		ONE HOUR	✓	292	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	215	231
	B - B1069 Snape Road (North)	244	0	6
	C - A1094 East	285	8	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	6	2
	B - B1069 Snape Road (North)	6	0	17
	C - A1094 East	1	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.78	44.53	3.2	E	229	343
C-AB	0.03	6.30	0.0	A	12	19
C-A					256	383
A-B					197	296
A-C					212	317

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	391	0.479	184	0.0	0.9	17.084	C
C-AB	9	2	580	0.015	9	0.0	0.0	6.301	A
C-A	211	53			211				
A-B	162	40			162				
A-C	174	43			174				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	224	56	375	0.597	222	0.9	1.4	23.201	C
C-AB	12	3	601	0.020	12	0.0	0.0	6.137	A
C-A	251	63			251				
A-B	193	48			193				
A-C	207	52			207				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	352	0.779	268	1.4	3.0	40.047	E
C-AB	16	4	632	0.026	16	0.0	0.0	5.889	A
C-A	305	76			305				
A-B	237	59			237				
A-C	254	63			254				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	352	0.779	273	3.0	3.2	44.525	E
C-AB	16	4	632	0.026	16	0.0	0.0	5.853	A
C-A	305	76			305				
A-B	237	59			237				
A-C	254	63			254				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	224	56	375	0.598	231	3.2	1.6	25.913	D
C-AB	12	3	602	0.020	12	0.0	0.0	6.049	A
C-A	251	63			251				
A-B	193	48			193				
A-C	207	52			207				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	391	0.479	190	1.6	1.0	18.092	C
C-AB	9	2	581	0.016	9	0.0	0.0	6.258	A
C-A	211	53			211				
A-B	162	40			162				
A-C	174	43			174				

2028 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		23.97	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	443	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	323	100.000
C - A1094 East		ONE HOUR	✓	218	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	253	190
	B - B1069 Snape Road (North)	302	0	20
	C - A1094 East	211	7	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	5	0
	B - B1069 Snape Road (North)	1	0	0
	C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.90	73.59	6.7	F	296	444
C-AB	0.02	5.73	0.0	A	9	13
C-A					191	286
A-B					232	348
A-C					175	262

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	243	61	428	0.567	238	0.0	1.2	18.461	C
C-AB	7	2	635	0.011	7	0.0	0.0	5.730	A
C-A	157	39			157				
A-B	190	48			190				
A-C	143	36			143				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	290	73	414	0.701	287	1.2	2.1	27.504	D
C-AB	9	2	643	0.013	9	0.0	0.0	5.675	A
C-A	187	47			187				
A-B	227	57			227				
A-C	171	43			171				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	355	89	393	0.903	341	2.1	5.7	57.195	F
C-AB	12	3	654	0.018	12	0.0	0.0	5.597	A
C-A	228	57			228				
A-B	278	70			278				
A-C	210	52			210				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	355	89	393	0.903	351	5.7	6.7	73.590	F
C-AB	12	3	654	0.018	12	0.0	0.0	5.602	A
C-A	228	57			228				
A-B	278	70			278				
A-C	210	52			210				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	290	73	414	0.701	307	6.7	2.6	37.430	E
C-AB	9	2	643	0.013	9	0.0	0.0	5.683	A
C-A	187	47			187				
A-B	227	57			227				
A-C	171	43			171				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	243	61	428	0.567	248	2.6	1.4	20.434	C
C-AB	7	2	635	0.011	7	0.0	0.0	5.734	A
C-A	157	39			157				
A-B	190	48			190				
A-C	143	36			143				

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		4.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	383	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	176	100.000
C - A1094 East		ONE HOUR	✓	60	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	336	47
	B - B1069 Snape Road (North)	169	0	7
	C - A1094 East	42	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	19
	B - B1069 Snape Road (North)	3	0	11
	C - A1094 East	5	22	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.45	15.14	0.8	C	161	242
C-AB	0.05	8.48	0.1	A	18	28
C-A					37	55
A-B					308	462
A-C					43	65

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	132	33	451	0.294	131	0.0	0.4	11.192	B
C-AB	15	4	462	0.032	15	0.0	0.0	8.045	A
C-A	31	8			31				
A-B	253	63			253				
A-C	36	9			36				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	158	40	443	0.357	158	0.4	0.5	12.603	B
C-AB	18	4	456	0.039	18	0.0	0.0	8.228	A
C-A	36	9			36				
A-B	302	75			302				
A-C	43	11			43				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	48	431	0.449	193	0.5	0.8	15.018	C
C-AB	22	6	447	0.050	22	0.0	0.1	8.482	A
C-A	44	11			44				
A-B	370	92			370				
A-C	52	13			52				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	48	431	0.449	194	0.8	0.8	15.138	C
C-AB	22	6	447	0.050	22	0.1	0.1	8.471	A
C-A	44	11			44				
A-B	370	92			370				
A-C	52	13			52				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	158	40	443	0.357	159	0.8	0.6	12.741	B
C-AB	18	4	456	0.039	18	0.1	0.0	8.208	A
C-A	36	9			36				
A-B	302	75			302				
A-C	43	11			43				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	132	33	451	0.294	133	0.6	0.4	11.348	B
C-AB	15	4	462	0.032	15	0.0	0.0	8.041	A
C-A	31	8			31				
A-B	253	63			253				
A-C	36	9			36				

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		32.86	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	457	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	321	100.000
C - A1094 East		ONE HOUR	✓	146	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	313	144
	B - B1069 Snape Road (North)	309	0	13
	C - A1094 East	113	33	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	6	10
	B - B1069 Snape Road (North)	7	0	7
	C - A1094 East	1	15	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.94	93.25	8.6	F	295	443
C-AB	0.09	7.80	0.1	A	38	57
C-A					96	144
A-B					287	431
A-C					132	199

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	242	61	409	0.592	237	0.0	1.4	20.341	C
C-AB	29	7	513	0.057	29	0.0	0.1	7.439	A
C-A	80	20			80				
A-B	236	59			236				
A-C	109	27			109				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	289	72	395	0.731	285	1.4	2.4	31.342	D
C-AB	37	9	512	0.071	36	0.1	0.1	7.591	A
C-A	95	24			95				
A-B	281	70			281				
A-C	130	32			130				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	354	88	377	0.938	336	2.4	6.9	68.116	F
C-AB	47	12	510	0.093	47	0.1	0.1	7.797	A
C-A	113	28			113				
A-B	345	86			345				
A-C	159	40			159				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	354	88	377	0.939	347	6.9	8.6	93.255	F
C-AB	48	12	511	0.093	48	0.1	0.1	7.779	A
C-A	113	28			113				
A-B	345	86			345				
A-C	159	40			159				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	289	72	395	0.731	311	8.6	3.1	49.309	E
C-AB	37	9	512	0.072	37	0.1	0.1	7.555	A
C-A	94	24			94				
A-B	281	70			281				
A-C	130	32			130				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	242	61	408	0.593	248	3.1	1.5	23.256	C
C-AB	29	7	513	0.057	30	0.1	0.1	7.429	A
C-A	80	20			80				
A-B	236	59			236				
A-C	109	27			109				

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		11.14	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	506	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	244	100.000
C - A1094 East		ONE HOUR	✓	154	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	285	221
	B - B1069 Snape Road (North)	230	0	15
	C - A1094 East	133	21	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	6	5
	B - B1069 Snape Road (North)	9	0	6
	C - A1094 East	5	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.75	39.42	2.8	E	224	336
C-AB	0.06	7.31	0.1	A	26	38
C-A					116	174
A-B					262	392
A-C					203	304

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	184	46	393	0.468	181	0.0	0.9	16.693	C
C-AB	20	5	526	0.037	19	0.0	0.1	7.101	A
C-A	96	24			96				
A-B	215	54			215				
A-C	166	42			166				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	220	55	378	0.581	218	0.9	1.3	22.156	C
C-AB	25	6	526	0.047	25	0.1	0.1	7.195	A
C-A	114	28			114				
A-B	256	64			256				
A-C	198	50			198				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	269	67	358	0.752	264	1.3	2.6	36.243	E
C-AB	32	8	525	0.062	32	0.1	0.1	7.315	A
C-A	137	34			137				
A-B	314	78			314				
A-C	243	61			243				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	269	67	358	0.752	268	2.6	2.8	39.422	E
C-AB	32	8	526	0.062	32	0.1	0.1	7.306	A
C-A	137	34			137				
A-B	314	78			314				
A-C	243	61			243				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	220	55	378	0.581	225	2.8	1.5	24.226	C
C-AB	25	6	526	0.047	25	0.1	0.1	7.176	A
C-A	114	28			114				
A-B	256	64			256				
A-C	198	50			198				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	184	46	393	0.468	186	1.5	0.9	17.591	C
C-AB	20	5	526	0.037	20	0.1	0.1	7.096	A
C-A	96	24			96				
A-B	215	54			215				
A-C	166	42			166				

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		31.11	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	452	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	301	100.000
C - A1094 East		ONE HOUR	✓	292	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	220	232
	B - B1069 Snape Road (North)	289	0	13
	C - A1094 East	285	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	6	2
	B - B1069 Snape Road (North)	8	0	7
	C - A1094 East	1	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.95	104.50	9.0	F	276	415
C-AB	0.03	6.31	0.0	A	12	19
C-A					256	383
A-B					202	303
A-C					212	319

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	57	388	0.584	221	0.0	1.3	20.963	C
C-AB	9	2	579	0.016	9	0.0	0.0	6.311	A
C-A	211	53			211				
A-B	166	41			166				
A-C	174	44			174				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	68	372	0.728	267	1.3	2.4	32.815	D
C-AB	12	3	600	0.020	12	0.0	0.0	6.147	A
C-A	251	63			251				
A-B	198	49			198				
A-C	208	52			208				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	332	83	349	0.949	313	2.4	7.1	74.428	F
C-AB	17	4	630	0.026	16	0.0	0.0	5.901	A
C-A	305	76			305				
A-B	242	61			242				
A-C	255	64			255				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	332	83	349	0.949	324	7.1	9.0	104.496	F
C-AB	17	4	631	0.026	17	0.0	0.0	5.865	A
C-A	305	76			305				
A-B	242	61			242				
A-C	255	64			255				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	68	372	0.728	295	9.0	3.1	54.574	F
C-AB	12	3	601	0.020	12	0.0	0.0	6.062	A
C-A	251	63			251				
A-B	198	49			198				
A-C	208	52			208				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	57	388	0.584	233	3.1	1.5	24.029	C
C-AB	9	2	580	0.016	9	0.0	0.0	6.265	A
C-A	211	53			211				
A-B	166	41			166				
A-C	174	44			174				

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		80.06	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	463	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	381	100.000
C - A1094 East		ONE HOUR	✓	222	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	266	197
B - B1069 Snape Road (North)	350	0	30
C - A1094 East	214	8	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	7	0
B - B1069 Snape Road (North)	4	0	0
C - A1094 East	2	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.09	224.39	26.8	F	349	524
C-AB	0.02	6.31	0.0	A	11	16
C-A					193	289
A-B					244	366
A-C					181	272

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	287	72	419	0.684	279	0.0	2.0	24.444	C
C-AB	8	2	579	0.014	8	0.0	0.0	6.308	A
C-A	159	40			159				
A-B	200	50			200				
A-C	149	37			149				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	342	86	404	0.847	333	2.0	4.2	45.608	E
C-AB	10	3	589	0.018	10	0.0	0.0	6.235	A
C-A	189	47			189				
A-B	239	60			239				
A-C	177	44			177				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	419	105	383	1.093	370	4.2	16.6	125.038	F
C-AB	14	4	604	0.023	14	0.0	0.0	6.120	A
C-A	230	58			230				
A-B	293	73			293				
A-C	217	54			217				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	419	105	383	1.093	379	16.6	26.8	224.392	F
C-AB	14	4	604	0.023	14	0.0	0.0	6.105	A
C-A	230	58			230				
A-B	293	73			293				
A-C	217	54			217				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	342	86	404	0.847	390	26.8	14.9	198.121	F
C-AB	10	3	589	0.018	10	0.0	0.0	6.198	A
C-A	189	47			189				
A-B	239	60			239				
A-C	177	44			177				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	287	72	419	0.684	337	14.9	2.4	59.553	F
C-AB	8	2	579	0.014	8	0.0	0.0	6.290	A
C-A	159	40			159				
A-B	200	50			200				
A-C	149	37			149				

2034 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		4.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	332	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	171	100.000
C - A1094 East		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	281	51
	B - B1069 Snape Road (North)	166	0	5
	C - A1094 East	46	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	17
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	6	91	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.43	14.26	0.7	B	157	235
C-AB	0.01	11.77	0.0	B	4	5
C-A					42	63
A-B					258	386
A-C					47	71

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	457	0.282	127	0.0	0.4	10.861	B
C-AB	3	1	313	0.009	3	0.0	0.0	11.617	B
C-A	34	9			34				
A-B	211	53			211				
A-C	39	10			39				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	38	450	0.341	153	0.4	0.5	12.101	B
C-AB	3	1	312	0.011	3	0.0	0.0	11.706	B
C-A	41	10			41				
A-B	252	63			252				
A-C	46	12			46				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	441	0.427	187	0.5	0.7	14.166	B
C-AB	4	1	312	0.014	4	0.0	0.0	11.773	B
C-A	50	12			50				
A-B	309	77			309				
A-C	56	14			56				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	441	0.427	188	0.7	0.7	14.261	B
C-AB	4	1	312	0.014	4	0.0	0.0	11.696	B
C-A	50	12			50				
A-B	309	77			309				
A-C	56	14			56				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	38	450	0.341	155	0.7	0.5	12.213	B
C-AB	3	1	313	0.011	3	0.0	0.0	11.553	B
C-A	41	10			41				
A-B	252	63			252				
A-C	46	12			46				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	457	0.282	129	0.5	0.4	10.996	B
C-AB	3	1	313	0.009	3	0.0	0.0	11.544	B
C-A	34	9			34				
A-B	211	53			211				
A-C	39	10			39				

2034 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		19.81	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	425	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	307	100.000
C - A1094 East		ONE HOUR	✓	136	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	270	155
	B - B1069 Snape Road (North)	298	0	10
	C - A1094 East	118	18	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	10
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	1	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.85	56.03	4.9	F	282	423
C-AB	0.05	7.34	0.1	A	21	31
C-A					104	156
A-B					248	372
A-C					143	214

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	231	58	427	0.543	227	0.0	1.1	17.665	C
C-AB	16	4	515	0.031	16	0.0	0.0	7.205	A
C-A	86	22			86				
A-B	203	51			203				
A-C	117	29			117				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	69	414	0.668	274	1.1	1.9	25.098	D
C-AB	20	5	516	0.039	20	0.0	0.1	7.271	A
C-A	102	26			102				
A-B	243	61			243				
A-C	140	35			140				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	339	85	396	0.854	329	1.9	4.4	47.103	E
C-AB	26	6	517	0.050	26	0.1	0.1	7.345	A
C-A	124	31			124				
A-B	297	74			297				
A-C	171	43			171				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	339	85	396	0.854	336	4.4	4.9	56.026	F
C-AB	26	6	517	0.050	26	0.1	0.1	7.328	A
C-A	124	31			124				
A-B	297	74			297				
A-C	171	43			171				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	69	414	0.668	287	4.9	2.2	30.448	D
C-AB	20	5	516	0.039	20	0.1	0.1	7.232	A
C-A	102	26			102				
A-B	243	61			243				
A-C	140	35			140				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	231	58	426	0.543	235	2.2	1.2	19.175	C
C-AB	16	4	516	0.031	16	0.1	0.0	7.189	A
C-A	86	22			86				
A-B	203	51			203				
A-C	117	29			117				

2034 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		8.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	454	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	233	100.000
C - A1094 East		ONE HOUR	✓	145	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	209	245
B - B1069 Snape Road (North)	219	0	15
C - A1094 East	137	8	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	3	4
B - B1069 Snape Road (North)	5	0	6
C - A1094 East	6	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.68	29.49	2.0	D	214	321
C-AB	0.03	7.76	0.0	A	10	15
C-A					123	184
A-B					192	288
A-C					225	337

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	176	44	412	0.426	173	0.0	0.7	14.872	B
C-AB	8	2	471	0.017	8	0.0	0.0	7.765	A
C-A	101	25			101				
A-B	157	39			157				
A-C	184	46			184				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	52	398	0.528	208	0.7	1.1	18.863	C
C-AB	10	2	476	0.021	10	0.0	0.0	7.759	A
C-A	121	30			121				
A-B	188	47			188				
A-C	220	55			220				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	257	64	378	0.680	254	1.1	1.9	28.138	D
C-AB	13	3	482	0.027	13	0.0	0.0	7.717	A
C-A	147	37			147				
A-B	230	58			230				
A-C	269	67			269				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	257	64	378	0.680	257	1.9	2.0	29.493	D
C-AB	13	3	482	0.027	13	0.0	0.0	7.679	A
C-A	147	37			147				
A-B	230	58			230				
A-C	269	67			269				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	52	398	0.528	213	2.0	1.2	19.862	C
C-AB	10	2	476	0.021	10	0.0	0.0	7.675	A
C-A	121	30			121				
A-B	188	47			188				
A-C	220	55			220				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	176	44	412	0.426	177	1.2	0.8	15.433	C
C-AB	8	2	472	0.017	8	0.0	0.0	7.727	A
C-A	101	25			101				
A-B	157	39			157				
A-C	184	46			184				

2034 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		18.12	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	484	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	277	100.000
C - A1094 East		ONE HOUR	✓	314	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	231	253
	B - B1069 Snape Road (North)	271	0	7
	C - A1094 East	307	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	2
	B - B1069 Snape Road (North)	4	0	0
	C - A1094 East	1	12	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.87	68.77	5.4	F	254	382
C-AB	0.02	5.78	0.0	A	12	19
C-A					276	414
A-B					212	318
A-C					232	348

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	209	52	393	0.532	204	0.0	1.1	18.727	C
C-AB	9	2	632	0.014	9	0.0	0.0	5.780	A
C-A	227	57			227				
A-B	174	44			174				
A-C	190	48			190				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	249	62	375	0.665	246	1.1	1.8	27.382	D
C-AB	12	3	652	0.018	12	0.0	0.0	5.634	A
C-A	271	68			271				
A-B	208	52			208				
A-C	227	57			227				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	305	76	350	0.873	294	1.8	4.7	55.516	F
C-AB	16	4	682	0.024	16	0.0	0.0	5.426	A
C-A	329	82			329				
A-B	254	64			254				
A-C	278	70			278				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	305	76	350	0.873	302	4.7	5.4	68.768	F
C-AB	16	4	682	0.024	16	0.0	0.0	5.409	A
C-A	329	82			329				
A-B	254	64			254				
A-C	278	70			278				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	249	62	375	0.665	262	5.4	2.2	34.870	D
C-AB	12	3	652	0.018	12	0.0	0.0	5.594	A
C-A	271	68			271				
A-B	208	52			208				
A-C	227	57			227				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	209	52	393	0.532	213	2.2	1.2	20.409	C
C-AB	9	2	632	0.014	9	0.0	0.0	5.762	A
C-A	227	57			227				
A-B	174	44			174				
A-C	190	48			190				

2034 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		6.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	471	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	227	100.000
C - A1094 East		ONE HOUR	✓	243	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	265	206
B - B1069 Snape Road (North)	220	0	6
C - A1094 East	236	7	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	3	0
B - B1069 Snape Road (North)	1	0	0
C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.65	27.03	1.8	D	208	312
C-AB	0.02	5.65	0.0	A	9	14
C-A					213	320
A-B					243	365
A-C					189	284

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	171	43	420	0.407	168	0.0	0.7	14.158	B
C-AB	7	2	645	0.011	7	0.0	0.0	5.644	A
C-A	176	44			176				
A-B	199	50			199				
A-C	155	39			155				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	204	51	404	0.505	203	0.7	1.0	17.765	C
C-AB	9	2	655	0.014	9	0.0	0.0	5.572	A
C-A	209	52			209				
A-B	238	60			238				
A-C	186	46			186				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	250	62	382	0.654	247	1.0	1.8	25.997	D
C-AB	12	3	670	0.018	12	0.0	0.0	5.472	A
C-A	255	64			255				
A-B	292	73			292				
A-C	227	57			227				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	250	62	382	0.654	249	1.8	1.8	27.029	D
C-AB	12	3	670	0.018	12	0.0	0.0	5.475	A
C-A	255	64			255				
A-B	292	73			292				
A-C	227	57			227				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	204	51	404	0.505	207	1.8	1.1	18.541	C
C-AB	9	2	655	0.014	9	0.0	0.0	5.580	A
C-A	209	52			209				
A-B	238	60			238				
A-C	186	46			186				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	171	43	420	0.407	172	1.1	0.7	14.621	B
C-AB	7	2	645	0.011	7	0.0	0.0	5.649	A
C-A	176	44			176				
A-B	199	50			199				
A-C	155	39			155				

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		4.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	328	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	171	100.000
C - A1094 East		ONE HOUR	✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	279	49
	B - B1069 Snape Road (North)	166	0	5
	C - A1094 East	44	3	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	1	18
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	4	91	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.43	14.20	0.7	B	157	235
C-AB	0.01	11.82	0.0	B	3	5
C-A					40	60
A-B					256	384
A-C					45	68

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	458	0.281	127	0.0	0.4	10.835	B
C-AB	3	1	312	0.009	3	0.0	0.0	11.646	B
C-A	33	8			33				
A-B	210	52			210				
A-C	37	9			37				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	38	451	0.341	153	0.4	0.5	12.062	B
C-AB	3	1	311	0.011	3	0.0	0.0	11.741	B
C-A	39	10			39				
A-B	251	63			251				
A-C	44	11			44				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	442	0.426	187	0.5	0.7	14.104	B
C-AB	4	1	311	0.014	4	0.0	0.0	11.816	B
C-A	48	12			48				
A-B	307	77			307				
A-C	54	14			54				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	442	0.426	188	0.7	0.7	14.196	B
C-AB	4	1	311	0.014	4	0.0	0.0	11.740	B
C-A	48	12			48				
A-B	307	77			307				
A-C	54	14			54				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	38	451	0.341	155	0.7	0.5	12.173	B
C-AB	3	1	312	0.011	3	0.0	0.0	11.591	B
C-A	39	10			39				
A-B	251	63			251				
A-C	44	11			44				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	458	0.281	129	0.5	0.4	10.971	B
C-AB	3	1	312	0.009	3	0.0	0.0	11.575	B
C-A	33	8			33				
A-B	210	52			210				
A-C	37	9			37				

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		19.51	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	512	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	304	100.000
C - A1094 East		ONE HOUR	✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	358	154
	B - B1069 Snape Road (North)	295	0	10
	C - A1094 East	117	20	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	2	10
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	1	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.87	60.90	5.3	F	279	419
C-AB	0.06	7.87	0.1	A	23	35
C-A					102	154
A-B					328	493
A-C					142	213

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	229	57	420	0.546	225	0.0	1.1	18.027	C
C-AB	18	4	491	0.037	18	0.0	0.0	7.610	A
C-A	85	21			85				
A-B	269	67			269				
A-C	116	29			116				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	68	406	0.674	271	1.1	1.9	25.951	D
C-AB	22	6	490	0.046	22	0.0	0.1	7.729	A
C-A	101	25			101				
A-B	322	80			322				
A-C	139	35			139				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	335	84	387	0.866	324	1.9	4.6	50.205	F
C-AB	29	7	488	0.060	29	0.1	0.1	7.872	A
C-A	121	30			121				
A-B	394	99			394				
A-C	170	42			170				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	335	84	387	0.866	333	4.6	5.3	60.901	F
C-AB	29	7	489	0.060	29	0.1	0.1	7.845	A
C-A	121	30			121				
A-B	394	99			394				
A-C	170	42			170				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	68	406	0.674	286	5.3	2.2	32.286	D
C-AB	22	6	490	0.046	23	0.1	0.1	7.670	A
C-A	101	25			101				
A-B	322	80			322				
A-C	139	35			139				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	229	57	420	0.546	233	2.2	1.3	19.653	C
C-AB	18	4	491	0.037	18	0.1	0.1	7.588	A
C-A	85	21			85				
A-B	269	67			269				
A-C	116	29			116				

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		9.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	514	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	246	100.000
C - A1094 East		ONE HOUR	✓	155	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	270	244
	B - B1069 Snape Road (North)	231	0	16
	C - A1094 East	135	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	4
	B - B1069 Snape Road (North)	5	0	6
	C - A1094 East	5	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.73	35.92	2.6	E	226	339
C-AB	0.06	7.30	0.1	A	25	37
C-A					118	177
A-B					248	372
A-C					224	335

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	186	46	407	0.456	182	0.0	0.8	15.805	C
C-AB	19	5	525	0.036	19	0.0	0.0	7.104	A
C-A	98	25			98				
A-B	203	51			203				
A-C	183	46			183				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	222	55	391	0.566	220	0.8	1.2	20.769	C
C-AB	24	6	525	0.045	24	0.0	0.1	7.191	A
C-A	116	29			116				
A-B	243	61			243				
A-C	219	55			219				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	68	370	0.734	267	1.2	2.4	33.400	D
C-AB	31	8	525	0.059	31	0.1	0.1	7.299	A
C-A	140	35			140				
A-B	297	74			297				
A-C	268	67			268				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	68	370	0.734	271	2.4	2.6	35.916	E
C-AB	31	8	525	0.059	31	0.1	0.1	7.286	A
C-A	140	35			140				
A-B	297	74			297				
A-C	268	67			268				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	222	55	391	0.566	226	2.6	1.4	22.422	C
C-AB	24	6	525	0.045	24	0.1	0.1	7.167	A
C-A	116	29			116				
A-B	243	61			243				
A-C	219	55			219				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	186	46	407	0.456	188	1.4	0.9	16.560	C
C-AB	19	5	525	0.036	19	0.1	0.0	7.100	A
C-A	98	25			98				
A-B	203	51			203				
A-C	183	46			183				

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		18.80	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	479	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	280	100.000
C - A1094 East		ONE HOUR	✓	310	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	230	249
B - B1069 Snape Road (North)	274	0	7
C - A1094 East	303	8	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	3	2
B - B1069 Snape Road (North)	4	0	0
C - A1094 East	1	12	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.88	70.23	5.6	F	257	386
C-AB	0.02	5.79	0.0	A	12	18
C-A					272	408
A-B					211	317
A-C					228	342

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	211	53	394	0.536	207	0.0	1.1	18.805	C
C-AB	9	2	630	0.014	9	0.0	0.0	5.794	A
C-A	225	56			225				
A-B	173	43			173				
A-C	187	47			187				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	252	63	376	0.670	249	1.1	1.9	27.601	D
C-AB	12	3	650	0.018	12	0.0	0.0	5.650	A
C-A	267	67			267				
A-B	207	52			207				
A-C	223	56			223				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	309	77	351	0.878	297	1.9	4.8	56.312	F
C-AB	16	4	679	0.024	16	0.0	0.0	5.445	A
C-A	325	81			325				
A-B	253	63			253				
A-C	274	68			274				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	309	77	351	0.878	306	4.8	5.6	70.233	F
C-AB	16	4	680	0.024	16	0.0	0.0	5.427	A
C-A	325	81			325				
A-B	253	63			253				
A-C	274	68			274				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	252	63	376	0.670	265	5.6	2.2	35.526	E
C-AB	12	3	650	0.018	12	0.0	0.0	5.610	A
C-A	267	67			267				
A-B	207	52			207				
A-C	223	56			223				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	211	53	394	0.536	215	2.2	1.2	20.546	C
C-AB	9	2	630	0.014	9	0.0	0.0	5.776	A
C-A	225	56			225				
A-B	173	43			173				
A-C	187	47			187				

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		6.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	464	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	228	100.000
C - A1094 East		ONE HOUR	✓	233	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	263	201
	B - B1069 Snape Road (North)	221	0	6
	C - A1094 East	225	8	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
	A - A1094 West	0	3	0
	B - B1069 Snape Road (North)	1	0	0
	C - A1094 East	2	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.65	26.76	1.8	D	209	314
C-AB	0.02	6.23	0.0	A	11	17
C-A					202	304
A-B					241	362
A-C					185	277

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	171	43	422	0.407	169	0.0	0.7	14.105	B
C-AB	8	2	586	0.014	8	0.0	0.0	6.227	A
C-A	167	42			167				
A-B	198	49			198				
A-C	152	38			152				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	205	51	406	0.504	204	0.7	1.0	17.667	C
C-AB	11	3	598	0.018	11	0.0	0.0	6.141	A
C-A	199	50			199				
A-B	236	59			236				
A-C	181	45			181				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	251	63	384	0.652	248	1.0	1.7	25.754	D
C-AB	14	4	615	0.023	14	0.0	0.0	6.009	A
C-A	242	60			242				
A-B	290	72			290				
A-C	222	55			222				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	251	63	384	0.652	251	1.7	1.8	26.758	D
C-AB	14	4	615	0.023	14	0.0	0.0	5.992	A
C-A	242	60			242				
A-B	290	72			290				
A-C	222	55			222				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	205	51	406	0.504	208	1.8	1.1	18.429	C
C-AB	11	3	598	0.018	11	0.0	0.0	6.104	A
C-A	199	50			199				
A-B	236	59			236				
A-C	181	45			181				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	171	43	421	0.407	173	1.1	0.7	14.562	B
C-AB	8	2	586	0.014	8	0.0	0.0	6.210	A
C-A	167	42			167				
A-B	198	49			198				
A-C	152	38			152				

Junctions 9
PICADY 9 - Priority Intersection Module
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Summary of junction performance

	6-7 AM				7-8 AM				8-9 AM				3-4 PM				5-6 PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2023 Reference Case																				
Stream B-AC	0.7	13.16	0.40	B	4.4	50.76	0.84	F	2.1	30.02	0.68	D	3.1	43.43	0.77	E	5.9	64.85	0.88	F
Stream C-AB	0.0	12.01	0.02	B	0.1	7.73	0.05	A	0.1	7.30	0.06	A	0.0	6.32	0.03	A	0.0	5.78	0.02	A
2023 Early Years																				
Stream B-AC	0.7	14.05	0.43	B	6.0	66.48	0.89	F	2.4	33.35	0.72	D	3.9	51.88	0.82	F	20.5	176.03	1.05	F
Stream C-AB	0.0	11.40	0.02	B	0.1	7.76	0.06	A	0.1	7.28	0.06	A	0.0	6.32	0.03	A	0.0	5.80	0.02	A
2028 Reference Case																				
Stream B-AC	0.8	14.98	0.45	B	4.8	54.70	0.85	F	1.9	27.34	0.66	D	2.9	40.07	0.76	E	5.8	63.05	0.88	F
Stream C-AB	0.0	11.99	0.02	B	0.1	7.66	0.05	A	0.1	7.32	0.06	A	0.0	6.30	0.03	A	0.0	5.74	0.02	A
2028 Peak Construction																				
Stream B-AC	0.8	14.43	0.44	B	7.2	79.23	0.91	F	2.6	35.81	0.73	E	7.6	88.90	0.92	F	22.6	191.21	1.06	F
Stream C-AB	0.1	8.48	0.05	A	0.1	7.80	0.09	A	0.1	7.31	0.06	A	0.0	6.31	0.03	A	0.0	6.31	0.02	A
2034 Reference Case																				
Stream B-AC	0.7	13.62	0.42	B	4.3	48.91	0.83	E	1.9	27.27	0.66	D	4.7	59.83	0.85	F	1.7	25.10	0.64	D
Stream C-AB	0.0	11.77	0.01	B	0.1	7.35	0.05	A	0.0	7.76	0.03	A	0.0	5.78	0.02	A	0.0	5.65	0.02	A
2034 Operational Led																				
Stream B-AC	0.7	13.56	0.41	B	4.6	52.94	0.84	F	2.4	32.78	0.71	D	4.8	60.98	0.85	F	1.7	24.85	0.64	C
Stream C-AB	0.0	11.82	0.01	B	0.1	7.87	0.06	A	0.1	7.30	0.06	A	0.0	5.79	0.02	A	0.0	6.23	0.02	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

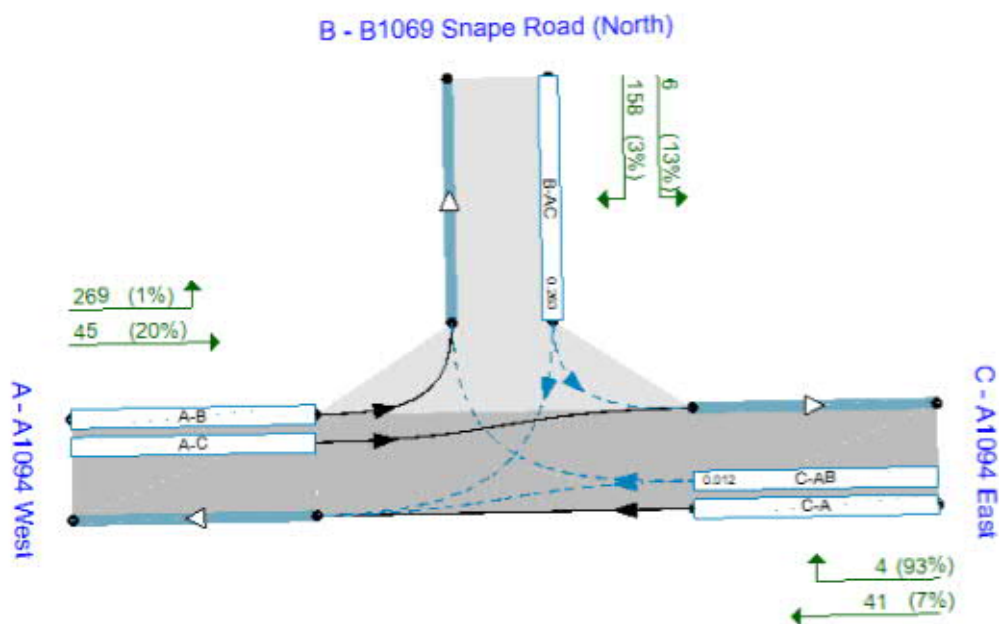
File summary

File Description

Title	B1069 / A1094 (Snape Road, East)
Location	52.178882°, 1.537732°
Site number	5
Date	12/10/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKWSPGROUP\ukjgm001
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



Flow shows original traffic demand (left) and the development (right)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

D5	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2023 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		4.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A1094 West		Major
B	B1069 Snape Road (North)		Minor
C	A1094 East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A1094 East	6.07			51.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - B1069 Snape Road (North)	One lane	3.00	45	51

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	517	0.094	0.237	0.149	0.339
B-C	656	0.100	0.253	-	-
C-B	603	0.233	0.233	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	314	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	164	100.000
C - A1094 East		ONE HOUR	✓	45	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	269	45
B - B1069 Snape Road (North)	158	0	6
C - A1094 East	41	4	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
A - A1094 West	0	1	20
B - B1069 Snape Road (North)	3	0	13
C - A1094 East	7	93	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.40	13.16	0.7	B	150	226
C-AB	0.02	12.01	0.0	B	4	7
C-A					37	56
A-B					247	370
A-C					42	62

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	123	31	470	0.263	122	0.0	0.4	10.303	B
C-AB	4	1	308	0.012	4	0.0	0.0	11.816	B
C-A	31	8			31				
A-B	202	51			202				
A-C	34	9			34				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	147	37	463	0.318	147	0.4	0.5	11.363	B
C-AB	4	1	308	0.014	4	0.0	0.0	11.920	B
C-A	36	9			36				
A-B	242	60			242				
A-C	41	10			41				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	181	45	454	0.398	180	0.5	0.6	13.091	B
C-AB	6	1	307	0.018	6	0.0	0.0	12.011	B
C-A	44	11			44				
A-B	296	74			296				
A-C	50	12			50				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	181	45	454	0.398	181	0.6	0.7	13.158	B
C-AB	6	1	307	0.018	6	0.0	0.0	11.940	B
C-A	44	11			44				
A-B	296	74			296				
A-C	50	12			50				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	181	45	454	0.398	180	0.5	0.6	13.091	B
C-AB	6	1	307	0.018	6	0.0	0.0	12.011	B
C-A	44	11			44				
A-B	296	74			296				
A-C	50	12			50				

B-AC	147	37	463	0.318	148	0.7	0.5	11.449	B
C-AB	4	1	308	0.014	4	0.0	0.0	11.780	B
C-A	36	9			36				
A-B	242	60			242				
A-C	41	10			41				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	123	31	470	0.263	124	0.5	0.4	10.415	B
C-AB	4	1	308	0.012	4	0.0	0.0	11.752	B
C-A	31	8			31				
A-B	202	51			202				
A-C	34	9			34				

2023 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		19.70	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	367	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	306	100.000
C - A1094 East		ONE HOUR	✓	122	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	232	135
	B - B1069 Snape Road (North)	296	0	11
	C - A1094 East	106	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	8	11
	B - B1069 Snape Road (North)	7	0	8
	C - A1094 East	1	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.84	50.76	4.4	F	281	422
C-AB	0.05	7.73	0.1	A	18	27
C-A					94	141
A-B					213	319
A-C					124	186

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	231	58	430	0.537	226	0.0	1.1	17.351	C
C-AB	14	3	486	0.029	14	0.0	0.0	7.626	A
C-A	78	19			78				
A-B	175	44			175				
A-C	102	25			102				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	69	418	0.658	273	1.1	1.8	24.224	C
C-AB	17	4	487	0.036	17	0.0	0.0	7.681	A
C-A	92	23			92				
A-B	208	52			208				
A-C	122	30			122				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	337	84	403	0.837	329	1.8	4.0	43.700	E
C-AB	23	6	490	0.046	22	0.0	0.1	7.732	A
C-A	112	28			112				
A-B	255	64			255				
A-C	149	37			149				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	337	84	403	0.837	336	4.0	4.4	50.760	F
C-AB	23	6	490	0.046	23	0.1	0.1	7.703	A
C-A	112	28			112				
A-B	255	64			255				
A-C	149	37			149				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	69	418	0.658	285	4.4	2.1	28.576	D
C-AB	17	4	488	0.036	17	0.1	0.0	7.622	A
C-A	92	23			92				
A-B	208	52			208				
A-C	122	30			122				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	231	58	430	0.537	234	2.1	1.2	18.733	C
C-AB	14	4	486	0.029	14	0.0	0.0	7.601	A
C-A	78	19			78				
A-B	175	44			175				
A-C	102	25			102				

2023 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		8.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	467	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	233	100.000
C - A1094 East		ONE HOUR	✓	145	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	261	206
	B - B1069 Snape Road (North)	219	0	15
	C - A1094 East	126	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	6	5
	B - B1069 Snape Road (North)	9	0	6
	C - A1094 East	5	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.68	30.02	2.1	D	214	321
C-AB	0.06	7.30	0.1	A	23	34
C-A					110	166
A-B					240	359
A-C					189	283

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	176	44	409	0.430	173	0.0	0.7	15.053	C
C-AB	18	4	523	0.034	17	0.0	0.0	7.117	A
C-A	92	23			92				
A-B	197	49			197				
A-C	155	39			155				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	52	395	0.531	208	0.7	1.1	19.125	C
C-AB	22	6	523	0.042	22	0.0	0.1	7.195	A
C-A	109	27			109				
A-B	235	59			235				
A-C	185	46			185				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	257	64	376	0.684	253	1.1	2.0	28.594	D
C-AB	29	7	523	0.055	29	0.1	0.1	7.296	A
C-A	131	33			131				
A-B	287	72			287				
A-C	226	57			226				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	257	64	376	0.684	257	2.0	2.1	30.019	D
C-AB	29	7	523	0.055	29	0.1	0.1	7.286	A
C-A	131	33			131				
A-B	287	72			287				
A-C	226	57			226				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	52	395	0.531	213	2.1	1.2	20.174	C
C-AB	22	6	523	0.042	22	0.1	0.1	7.174	A
C-A	109	27			109				
A-B	235	59			235				
A-C	185	46			185				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	176	44	409	0.430	177	1.2	0.8	15.642	C
C-AB	18	4	523	0.034	18	0.1	0.0	7.111	A
C-A	92	23			92				
A-B	197	49			197				
A-C	155	39			155				

2023 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		11.67	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	438	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	249	100.000
C - A1094 East		ONE HOUR	✓	287	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	211	227
	B - B1069 Snape Road (North)	244	0	6
	C - A1094 East	280	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	7	2
	B - B1069 Snape Road (North)	9	0	17
	C - A1094 East	1	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.77	43.43	3.1	E	229	343
C-AB	0.03	6.32	0.0	A	12	18
C-A					251	377
A-B					194	291
A-C					208	312

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	393	0.477	184	0.0	0.9	16.962	C
C-AB	9	2	578	0.015	9	0.0	0.0	6.323	A
C-A	207	52			207				
A-B	159	40			159				
A-C	171	43			171				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	224	56	377	0.595	222	0.9	1.4	22.941	C
C-AB	12	3	599	0.020	12	0.0	0.0	6.161	A
C-A	246	62			246				
A-B	190	47			190				
A-C	204	51			204				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	354	0.774	268	1.4	2.9	39.236	E
C-AB	16	4	628	0.026	16	0.0	0.0	5.917	A
C-A	300	75			300				
A-B	232	58			232				
A-C	249	62			249				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	354	0.774	274	2.9	3.1	43.433	E
C-AB	16	4	629	0.026	16	0.0	0.0	5.881	A
C-A	300	75			300				
A-B	232	58			232				
A-C	249	62			249				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	224	56	377	0.595	230	3.1	1.6	25.508	D
C-AB	12	3	599	0.020	12	0.0	0.0	6.074	A
C-A	246	62			246				
A-B	190	47			190				
A-C	204	51			204				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	393	0.477	190	1.6	0.9	17.943	C
C-AB	9	2	579	0.015	9	0.0	0.0	6.278	A
C-A	207	52			207				
A-B	159	40			159				
A-C	171	43			171				

2023 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		21.68	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	432	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	319	100.000
C - A1094 East		ONE HOUR	✓	206	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	250	182
	B - B1069 Snape Road (North)	298	0	20
	C - A1094 East	199	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	8	0
	B - B1069 Snape Road (North)	4	0	0
	C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.88	64.85	5.9	F	293	439
C-AB	0.02	5.78	0.0	A	9	13
C-A					180	270
A-B					229	344
A-C					167	251

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	240	60	432	0.556	235	0.0	1.2	17.922	C
C-AB	7	2	629	0.011	7	0.0	0.0	5.779	A
C-A	148	37			148				
A-B	188	47			188				
A-C	137	34			137				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	287	72	417	0.686	283	1.2	2.0	26.164	D
C-AB	8	2	636	0.013	8	0.0	0.0	5.733	A
C-A	176	44			176				
A-B	225	56			225				
A-C	164	41			164				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	351	88	398	0.882	339	2.0	5.1	52.247	F
C-AB	11	3	646	0.017	11	0.0	0.0	5.668	A
C-A	215	54			215				
A-B	275	69			275				
A-C	201	50			201				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	351	88	398	0.882	348	5.1	5.9	64.845	F
C-AB	11	3	646	0.017	11	0.0	0.0	5.671	A
C-A	215	54			215				
A-B	275	69			275				
A-C	201	50			201				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	287	72	417	0.686	300	5.9	2.4	33.584	D
C-AB	8	2	636	0.013	8	0.0	0.0	5.739	A
C-A	176	44			176				
A-B	225	56			225				
A-C	164	41			164				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	240	60	432	0.556	244	2.4	1.3	19.629	C
C-AB	7	2	629	0.011	7	0.0	0.0	5.783	A
C-A	148	37			148				
A-B	188	47			188				
A-C	137	34			137				

2023 Early Years , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		4.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	384	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	174	100.000
C - A1094 East		ONE HOUR	✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	339	45
	B - B1069 Snape Road (North)	167	0	7
	C - A1094 East	42	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	20
	B - B1069 Snape Road (North)	3	0	11
	C - A1094 East	7	76	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.43	14.05	0.7	B	160	239
C-AB	0.02	11.40	0.0	B	6	8
C-A					38	57
A-B					311	466
A-C					42	62

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	466	0.281	129	0.0	0.4	10.644	B
C-AB	4	1	330	0.013	4	0.0	0.0	11.058	B
C-A	31	8			31				
A-B	255	64			255				
A-C	34	9			34				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	39	458	0.341	156	0.4	0.5	11.880	B
C-AB	5	1	328	0.016	5	0.0	0.0	11.216	B
C-A	37	9			37				
A-B	304	76			304				
A-C	41	10			41				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	192	48	448	0.428	191	0.5	0.7	13.956	B
C-AB	7	2	324	0.021	7	0.0	0.0	11.396	B
C-A	45	11			45				
A-B	373	93			373				
A-C	50	12			50				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	192	48	448	0.428	192	0.7	0.7	14.050	B
C-AB	7	2	324	0.021	7	0.0	0.0	11.339	B
C-A	45	11			45				
A-B	373	93			373				
A-C	50	12			50				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	39	458	0.341	157	0.7	0.5	11.990	B
C-AB	5	1	328	0.016	5	0.0	0.0	11.103	B
C-A	37	9			37				
A-B	304	76			304				
A-C	41	10			41				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	466	0.281	132	0.5	0.4	10.776	B
C-AB	4	1	330	0.013	4	0.0	0.0	11.006	B
C-A	31	8			31				
A-B	255	64			255				
A-C	34	9			34				

2023 Early Years , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		23.65	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	451	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	316	100.000
C - A1094 East		ONE HOUR	✓	133	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	316	135
	B - B1069 Snape Road (North)	305	0	12
	C - A1094 East	114	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	6	11
	B - B1069 Snape Road (North)	7	0	7
	C - A1094 East	1	21	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.89	66.48	6.0	F	290	436
C-AB	0.06	7.76	0.1	A	22	33
C-A					100	150
A-B					290	435
A-C					124	186

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	60	424	0.562	233	0.0	1.2	18.481	C
C-AB	17	4	493	0.034	17	0.0	0.0	7.563	A
C-A	83	21			83				
A-B	238	59			238				
A-C	102	25			102				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	285	71	411	0.692	281	1.2	2.1	26.990	D
C-AB	21	5	493	0.043	21	0.0	0.1	7.657	A
C-A	98	25			98				
A-B	284	71			284				
A-C	122	30			122				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	348	87	394	0.885	336	2.1	5.2	53.388	F
C-AB	27	7	493	0.056	27	0.1	0.1	7.762	A
C-A	119	30			119				
A-B	348	87			348				
A-C	149	37			149				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	348	87	394	0.885	345	5.2	6.0	66.483	F
C-AB	27	7	493	0.056	27	0.1	0.1	7.736	A
C-A	119	30			119				
A-B	348	87			348				
A-C	149	37			149				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	285	71	411	0.692	299	6.0	2.5	35.018	E
C-AB	21	5	493	0.043	21	0.1	0.1	7.599	A
C-A	98	25			98				
A-B	284	71			284				
A-C	122	30			122				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	60	424	0.563	243	2.5	1.3	20.364	C
C-AB	17	4	493	0.034	17	0.1	0.0	7.544	A
C-A	83	21			83				
A-B	238	59			238				
A-C	102	25			102				

2023 Early Years , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		9.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	468	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	245	100.000
C - A1094 East		ONE HOUR	✓	147	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	262	206
	B - B1069 Snape Road (North)	231	0	15
	C - A1094 East	128	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	6	5
	B - B1069 Snape Road (North)	9	0	6
	C - A1094 East	5	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.72	33.35	2.4	D	225	338
C-AB	0.06	7.28	0.1	A	23	34
C-A					112	168
A-B					240	361
A-C					189	283

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	185	46	410	0.450	182	0.0	0.8	15.539	C
C-AB	18	4	524	0.034	17	0.0	0.0	7.104	A
C-A	93	23			93				
A-B	197	49			197				
A-C	155	39			155				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	221	55	396	0.557	219	0.8	1.2	20.132	C
C-AB	22	6	524	0.042	22	0.0	0.1	7.182	A
C-A	110	28			110				
A-B	236	59			236				
A-C	185	46			185				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	270	68	377	0.718	266	1.2	2.3	31.327	D
C-AB	29	7	525	0.055	29	0.1	0.1	7.276	A
C-A	133	33			133				
A-B	289	72			289				
A-C	226	57			226				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	270	68	377	0.718	270	2.3	2.4	33.350	D
C-AB	29	7	525	0.055	29	0.1	0.1	7.263	A
C-A	133	33			133				
A-B	289	72			289				
A-C	226	57			226				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	221	55	396	0.557	225	2.4	1.3	21.529	C
C-AB	22	6	524	0.042	22	0.1	0.1	7.160	A
C-A	110	28			110				
A-B	236	59			236				
A-C	185	46			185				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	185	46	410	0.450	187	1.3	0.8	16.239	C
C-AB	18	4	524	0.034	18	0.1	0.0	7.098	A
C-A	93	23			93				
A-B	197	49			197				
A-C	155	39			155				

2023 Early Years , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		14.46	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	439	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	264	100.000
C - A1094 East		ONE HOUR	✓	287	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	212	227
	B - B1069 Snape Road (North)	259	0	6
	C - A1094 East	280	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	7	2
	B - B1069 Snape Road (North)	8	0	17
	C - A1094 East	1	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.82	51.88	3.9	F	242	364
C-AB	0.03	6.32	0.0	A	12	18
C-A					251	377
A-B					195	292
A-C					208	312

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	199	50	395	0.504	195	0.0	1.0	17.704	C
C-AB	9	2	578	0.015	9	0.0	0.0	6.324	A
C-A	207	52			207				
A-B	160	40			160				
A-C	171	43			171				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	59	378	0.628	235	1.0	1.6	24.692	C
C-AB	12	3	599	0.020	12	0.0	0.0	6.163	A
C-A	246	62			246				
A-B	191	48			191				
A-C	204	51			204				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	291	73	356	0.818	283	1.6	3.6	45.068	E
C-AB	16	4	628	0.026	16	0.0	0.0	5.919	A
C-A	300	75			300				
A-B	234	58			234				
A-C	249	62			249				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	291	73	356	0.818	290	3.6	3.9	51.881	F
C-AB	16	4	628	0.026	16	0.0	0.0	5.883	A
C-A	300	75			300				
A-B	234	58			234				
A-C	249	62			249				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	59	378	0.628	246	3.9	1.8	28.659	D
C-AB	12	3	599	0.020	12	0.0	0.0	6.078	A
C-A	246	62			246				
A-B	191	48			191				
A-C	204	51			204				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	199	50	395	0.504	202	1.8	1.1	18.952	C
C-AB	9	2	578	0.015	9	0.0	0.0	6.282	A
C-A	207	52			207				
A-B	160	40			160				
A-C	171	43			171				

2023 Early Years , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		64.53	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	446	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	379	100.000
C - A1094 East		ONE HOUR	✓	207	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	257	189
	B - B1069 Snape Road (North)	356	0	22
	C - A1094 East	200	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	7	0
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.05	176.03	20.5	F	348	521
C-AB	0.02	5.80	0.0	A	9	13
C-A					181	271
A-B					236	354
A-C					174	261

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	285	71	432	0.660	278	0.0	1.8	22.457	C
C-AB	7	2	628	0.011	7	0.0	0.0	5.795	A
C-A	149	37			149				
A-B	193	48			193				
A-C	143	36			143				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	341	85	417	0.816	333	1.8	3.6	39.558	E
C-AB	8	2	634	0.013	8	0.0	0.0	5.751	A
C-A	177	44			177				
A-B	231	58			231				
A-C	170	43			170				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	417	104	397	1.050	378	3.6	13.5	103.980	F
C-AB	11	3	644	0.018	11	0.0	0.0	5.689	A
C-A	216	54			216				
A-B	283	71			283				
A-C	209	52			209				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	417	104	397	1.050	389	13.5	20.5	176.030	F
C-AB	11	3	644	0.018	11	0.0	0.0	5.692	A
C-A	216	54			216				
A-B	283	71			283				
A-C	209	52			209				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	341	85	417	0.816	396	20.5	6.6	132.331	F
C-AB	9	2	634	0.013	9	0.0	0.0	5.758	A
C-A	177	44			177				
A-B	231	58			231				
A-C	170	43			170				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	285	71	432	0.660	303	6.6	2.1	31.038	D
C-AB	7	2	628	0.011	7	0.0	0.0	5.801	A
C-A	149	37			149				
A-B	193	48			193				
A-C	143	36			143				

2028 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		5.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	322	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	176	100.000
C - A1094 East		ONE HOUR	✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	275	47
	B - B1069 Snape Road (North)	170	0	6
	C - A1094 East	43	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	19
	B - B1069 Snape Road (North)	7	0	13
	C - A1094 East	7	93	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.45	14.98	0.8	B	161	242
C-AB	0.02	11.99	0.0	B	5	7
C-A					39	58
A-B					252	378
A-C					43	65

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	132	33	450	0.295	131	0.0	0.4	11.231	B
C-AB	4	1	309	0.012	4	0.0	0.0	11.799	B
C-A	32	8			32				
A-B	207	52			207				
A-C	36	9			36				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	158	40	443	0.357	158	0.4	0.5	12.587	B
C-AB	4	1	308	0.014	4	0.0	0.0	11.901	B
C-A	38	10			38				
A-B	247	62			247				
A-C	43	11			43				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	48	434	0.447	193	0.5	0.8	14.870	B
C-AB	6	1	308	0.018	6	0.0	0.0	11.988	B
C-A	47	12			47				
A-B	302	76			302				
A-C	52	13			52				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	48	434	0.447	194	0.8	0.8	14.981	B
C-AB	6	1	308	0.018	6	0.0	0.0	11.913	B
C-A	47	12			47				
A-B	302	76			302				
A-C	52	13			52				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	158	40	443	0.357	159	0.8	0.6	12.719	B
C-AB	4	1	309	0.014	4	0.0	0.0	11.754	B
C-A	38	10			38				
A-B	247	62			247				
A-C	43	11			43				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	132	33	450	0.295	133	0.6	0.4	11.389	B
C-AB	4	1	309	0.012	4	0.0	0.0	11.729	B
C-A	32	8			32				
A-B	207	52			207				
A-C	36	9			36				

2028 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		20.70	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	392	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	310	100.000
C - A1094 East		ONE HOUR	✓	129	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	248	144
	B - B1069 Snape Road (North)	300	0	11
	C - A1094 East	112	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	4	10
	B - B1069 Snape Road (North)	6	0	8
	C - A1094 East	1	24	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.85	54.70	4.8	F	285	427
C-AB	0.05	7.66	0.1	A	19	29
C-A					99	148
A-B					227	341
A-C					132	199

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	234	58	430	0.544	229	0.0	1.1	17.596	C
C-AB	15	4	492	0.031	15	0.0	0.0	7.545	A
C-A	82	20			82				
A-B	187	47			187				
A-C	109	27			109				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	279	70	418	0.668	276	1.1	1.9	24.891	C
C-AB	19	5	494	0.038	19	0.0	0.1	7.602	A
C-A	97	24			97				
A-B	223	56			223				
A-C	130	32			130				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	342	85	401	0.852	332	1.9	4.3	46.221	E
C-AB	24	6	496	0.049	24	0.1	0.1	7.656	A
C-A	118	29			118				
A-B	273	68			273				
A-C	159	40			159				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	342	85	401	0.852	340	4.3	4.8	54.703	F
C-AB	24	6	496	0.049	24	0.1	0.1	7.630	A
C-A	118	29			118				
A-B	273	68			273				
A-C	159	40			159				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	279	70	418	0.668	290	4.8	2.2	30.036	D
C-AB	19	5	494	0.038	19	0.1	0.1	7.545	A
C-A	97	24			97				
A-B	223	56			223				
A-C	130	32			130				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	234	58	430	0.544	237	2.2	1.2	19.085	C
C-AB	15	4	492	0.031	15	0.1	0.0	7.524	A
C-A	82	20			82				
A-B	187	47			187				
A-C	109	27			109				

2028 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		7.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	494	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	229	100.000
C - A1094 East		ONE HOUR	✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	273	221
	B - B1069 Snape Road (North)	215	0	15
	C - A1094 East	129	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	5
	B - B1069 Snape Road (North)	6	0	6
	C - A1094 East	5	14	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.66	27.34	1.9	D	211	316
C-AB	0.06	7.32	0.1	A	23	35
C-A					113	170
A-B					251	376
A-C					203	304

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	173	43	419	0.412	170	0.0	0.7	14.289	B
C-AB	18	4	522	0.034	18	0.0	0.0	7.134	A
C-A	94	23			94				
A-B	206	51			206				
A-C	166	42			166				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	206	52	404	0.510	205	0.7	1.0	17.938	C
C-AB	22	6	522	0.043	22	0.0	0.1	7.218	A
C-A	111	28			111				
A-B	245	61			245				
A-C	198	50			198				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	383	0.659	250	1.0	1.8	26.264	D
C-AB	29	7	522	0.056	29	0.1	0.1	7.321	A
C-A	134	34			134				
A-B	301	75			301				
A-C	243	61			243				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	253	63	383	0.659	252	1.8	1.9	27.341	D
C-AB	29	7	522	0.056	29	0.1	0.1	7.311	A
C-A	134	34			134				
A-B	301	75			301				
A-C	243	61			243				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	206	52	404	0.510	209	1.9	1.1	18.759	C
C-AB	22	6	522	0.043	22	0.1	0.1	7.193	A
C-A	111	28			111				
A-B	245	61			245				
A-C	198	50			198				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	173	43	419	0.412	174	1.1	0.7	14.775	B
C-AB	18	4	522	0.034	18	0.1	0.0	7.127	A
C-A	94	23			94				
A-B	206	51			206				
A-C	166	42			166				

2028 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		10.45	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	446	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	249	100.000
C - A1094 East		ONE HOUR	✓	292	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	215	231
	B - B1069 Snape Road (North)	244	0	6
	C - A1094 East	285	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	6	2
	B - B1069 Snape Road (North)	6	0	17
	C - A1094 East	1	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.76	40.07	2.9	E	229	343
C-AB	0.03	6.30	0.0	A	12	19
C-A					256	383
A-B					197	296
A-C					212	317

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	402	0.467	184	0.0	0.8	16.286	C
C-AB	9	2	580	0.015	9	0.0	0.0	6.301	A
C-A	211	53			211				
A-B	162	40			162				
A-C	174	43			174				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	224	56	385	0.582	222	0.8	1.3	21.814	C
C-AB	12	3	601	0.020	12	0.0	0.0	6.137	A
C-A	251	63			251				
A-B	193	48			193				
A-C	207	52			207				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	362	0.759	269	1.3	2.7	36.646	E
C-AB	16	4	632	0.026	16	0.0	0.0	5.889	A
C-A	305	76			305				
A-B	237	59			237				
A-C	254	63			254				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	69	362	0.759	274	2.7	2.9	40.074	E
C-AB	16	4	632	0.026	16	0.0	0.0	5.853	A
C-A	305	76			305				
A-B	237	59			237				
A-C	254	63			254				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	224	56	385	0.582	230	2.9	1.5	23.929	C
C-AB	12	3	602	0.020	12	0.0	0.0	6.051	A
C-A	251	63			251				
A-B	193	48			193				
A-C	207	52			207				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	402	0.467	190	1.5	0.9	17.140	C
C-AB	9	2	581	0.016	9	0.0	0.0	6.256	A
C-A	211	53			211				
A-B	162	40			162				
A-C	174	43			174				

2028 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		20.54	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	443	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	323	100.000
C - A1094 East		ONE HOUR	✓	218	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	253	190
	B - B1069 Snape Road (North)	302	0	20
	C - A1094 East	211	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	5	0
	B - B1069 Snape Road (North)	1	0	0
	C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.88	63.05	5.8	F	296	444
C-AB	0.02	5.74	0.0	A	9	13
C-A					191	286
A-B					232	348
A-C					175	262

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	243	61	440	0.552	238	0.0	1.2	17.473	C
C-AB	7	2	635	0.011	7	0.0	0.0	5.730	A
C-A	157	39			157				
A-B	190	48			190				
A-C	143	36			143				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	290	73	425	0.683	287	1.2	2.0	25.472	D
C-AB	9	2	643	0.013	9	0.0	0.0	5.675	A
C-A	187	47			187				
A-B	227	57			227				
A-C	171	43			171				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	355	89	404	0.880	343	2.0	5.0	51.013	F
C-AB	12	3	654	0.018	12	0.0	0.0	5.597	A
C-A	228	57			228				
A-B	278	70			278				
A-C	210	52			210				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	355	89	404	0.880	352	5.0	5.8	63.045	F
C-AB	12	3	654	0.018	12	0.0	0.0	5.602	A
C-A	228	57			228				
A-B	278	70			278				
A-C	210	52			210				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	290	73	425	0.683	304	5.8	2.3	32.387	D
C-AB	9	2	643	0.013	9	0.0	0.0	5.683	A
C-A	187	47			187				
A-B	227	57			227				
A-C	171	43			171				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	243	61	440	0.552	247	2.3	1.3	19.063	C
C-AB	7	2	635	0.011	7	0.0	0.0	5.736	A
C-A	157	39			157				
A-B	190	48			190				
A-C	143	36			143				

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		4.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	383	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	176	100.000
C - A1094 East		ONE HOUR	✓	60	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	336	47
	B - B1069 Snape Road (North)	169	0	7
	C - A1094 East	42	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	19
	B - B1069 Snape Road (North)	3	0	11
	C - A1094 East	5	22	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.44	14.43	0.8	B	161	242
C-AB	0.05	8.48	0.1	A	18	28
C-A					37	55
A-B					308	462
A-C					43	65

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	132	33	463	0.286	131	0.0	0.4	10.788	B
C-AB	15	4	462	0.032	15	0.0	0.0	8.045	A
C-A	31	8			31				
A-B	253	63			253				
A-C	36	9			36				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	158	40	455	0.348	158	0.4	0.5	12.099	B
C-AB	18	4	456	0.039	18	0.0	0.0	8.228	A
C-A	36	9			36				
A-B	302	75			302				
A-C	43	11			43				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	48	443	0.437	193	0.5	0.8	14.327	B
C-AB	22	6	447	0.050	22	0.0	0.1	8.482	A
C-A	44	11			44				
A-B	370	92			370				
A-C	52	13			52				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	48	443	0.437	194	0.8	0.8	14.430	B
C-AB	22	6	447	0.050	22	0.1	0.1	8.471	A
C-A	44	11			44				
A-B	370	92			370				
A-C	52	13			52				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	158	40	455	0.348	159	0.8	0.5	12.219	B
C-AB	18	4	456	0.039	18	0.1	0.0	8.208	A
C-A	36	9			36				
A-B	302	75			302				
A-C	43	11			43				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	132	33	463	0.286	133	0.5	0.4	10.926	B
C-AB	15	4	462	0.032	15	0.0	0.0	8.040	A
C-A	31	8			31				
A-B	253	63			253				
A-C	36	9			36				

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		27.97	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	457	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	321	100.000
C - A1094 East		ONE HOUR	✓	146	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	313	144
	B - B1069 Snape Road (North)	309	0	13
	C - A1094 East	113	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	6	10
	B - B1069 Snape Road (North)	7	0	7
	C - A1094 East	1	15	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.91	79.23	7.2	F	295	443
C-AB	0.09	7.80	0.1	A	38	57
C-A					96	144
A-B					287	431
A-C					132	199

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	242	61	420	0.577	237	0.0	1.3	19.201	C
C-AB	29	7	513	0.057	29	0.0	0.1	7.439	A
C-A	80	20			80				
A-B	236	59			236				
A-C	109	27			109				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	289	72	406	0.712	285	1.3	2.2	28.867	D
C-AB	37	9	512	0.071	36	0.1	0.1	7.591	A
C-A	95	24			95				
A-B	281	70			281				
A-C	130	32			130				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	354	88	387	0.914	339	2.2	6.0	60.468	F
C-AB	47	12	510	0.093	47	0.1	0.1	7.797	A
C-A	113	28			113				
A-B	345	86			345				
A-C	159	40			159				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	354	88	387	0.914	349	6.0	7.2	79.234	F
C-AB	48	12	511	0.093	48	0.1	0.1	7.779	A
C-A	113	28			113				
A-B	345	86			345				
A-C	159	40			159				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	289	72	406	0.712	307	7.2	2.7	40.879	E
C-AB	37	9	512	0.072	37	0.1	0.1	7.555	A
C-A	94	24			94				
A-B	281	70			281				
A-C	130	32			130				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	242	61	419	0.577	247	2.7	1.4	21.494	C
C-AB	29	7	513	0.057	30	0.1	0.1	7.432	A
C-A	80	20			80				
A-B	236	59			236				
A-C	109	27			109				

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		10.14	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	506	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	244	100.000
C - A1094 East		ONE HOUR	✓	154	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	285	221
	B - B1069 Snape Road (North)	230	0	15
	C - A1094 East	133	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	6	5
	B - B1069 Snape Road (North)	9	0	6
	C - A1094 East	5	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.73	35.81	2.6	E	224	336
C-AB	0.06	7.31	0.1	A	26	38
C-A					116	174
A-B					262	392
A-C					203	304

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	184	46	404	0.456	181	0.0	0.8	15.933	C
C-AB	20	5	526	0.037	19	0.0	0.1	7.101	A
C-A	96	24			96				
A-B	215	54			215				
A-C	166	42			166				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	220	55	389	0.566	218	0.8	1.2	20.883	C
C-AB	25	6	526	0.047	25	0.1	0.1	7.195	A
C-A	114	28			114				
A-B	256	64			256				
A-C	198	50			198				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	269	67	368	0.732	264	1.2	2.4	33.344	D
C-AB	32	8	525	0.062	32	0.1	0.1	7.315	A
C-A	137	34			137				
A-B	314	78			314				
A-C	243	61			243				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	269	67	368	0.732	269	2.4	2.6	35.808	E
C-AB	32	8	526	0.062	32	0.1	0.1	7.306	A
C-A	137	34			137				
A-B	314	78			314				
A-C	243	61			243				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	220	55	389	0.566	225	2.6	1.4	22.526	C
C-AB	25	6	526	0.047	25	0.1	0.1	7.176	A
C-A	114	28			114				
A-B	256	64			256				
A-C	198	50			198				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	184	46	404	0.456	186	1.4	0.9	16.696	C
C-AB	20	5	526	0.037	20	0.1	0.1	7.099	A
C-A	96	24			96				
A-B	215	54			215				
A-C	166	42			166				

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		26.48	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	452	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	301	100.000
C - A1094 East		ONE HOUR	✓	292	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	220	232
	B - B1069 Snape Road (North)	289	0	13
	C - A1094 East	285	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	6	2
	B - B1069 Snape Road (North)	8	0	7
	C - A1094 East	1	26	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.92	88.90	7.6	F	276	415
C-AB	0.03	6.31	0.0	A	12	19
C-A					256	383
A-B					202	303
A-C					212	319

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	57	399	0.569	222	0.0	1.3	19.813	C
C-AB	9	2	579	0.016	9	0.0	0.0	6.311	A
C-A	211	53			211				
A-B	166	41			166				
A-C	174	44			174				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	68	382	0.709	267	1.3	2.2	30.267	D
C-AB	12	3	600	0.020	12	0.0	0.0	6.147	A
C-A	251	63			251				
A-B	198	49			198				
A-C	208	52			208				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	332	83	359	0.924	316	2.2	6.2	66.256	F
C-AB	17	4	630	0.026	16	0.0	0.0	5.901	A
C-A	305	76			305				
A-B	242	61			242				
A-C	255	64			255				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	332	83	359	0.924	326	6.2	7.6	88.902	F
C-AB	17	4	631	0.026	17	0.0	0.0	5.862	A
C-A	305	76			305				
A-B	242	61			242				
A-C	255	64			255				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	68	382	0.709	290	7.6	2.7	44.821	E
C-AB	12	3	601	0.020	12	0.0	0.0	6.059	A
C-A	251	63			251				
A-B	198	49			198				
A-C	208	52			208				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	57	399	0.569	232	2.7	1.4	22.223	C
C-AB	9	2	580	0.016	9	0.0	0.0	6.268	A
C-A	211	53			211				
A-B	166	41			166				
A-C	174	44			174				

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		68.23	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	463	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	381	100.000
C - A1094 East		ONE HOUR	✓	222	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	266	197
	B - B1069 Snape Road (North)	350	0	30
	C - A1094 East	214	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	7	0
	B - B1069 Snape Road (North)	4	0	0
	C - A1094 East	2	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.06	191.21	22.6	F	349	524
C-AB	0.02	6.31	0.0	A	11	16
C-A					193	289
A-B					244	366
A-C					181	272

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	287	72	430	0.666	279	0.0	1.8	22.846	C
C-AB	8	2	579	0.014	8	0.0	0.0	6.308	A
C-A	159	40			159				
A-B	200	50			200				
A-C	149	37			149				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	342	86	415	0.825	335	1.8	3.8	41.035	E
C-AB	10	3	589	0.018	10	0.0	0.0	6.235	A
C-A	189	47			189				
A-B	239	60			239				
A-C	177	44			177				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	419	105	394	1.065	376	3.8	14.5	110.381	F
C-AB	14	4	604	0.023	14	0.0	0.0	6.120	A
C-A	230	58			230				
A-B	293	73			293				
A-C	217	54			217				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	419	105	394	1.065	387	14.5	22.6	191.210	F
C-AB	14	4	604	0.023	14	0.0	0.0	6.103	A
C-A	230	58			230				
A-B	293	73			293				
A-C	217	54			217				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	342	86	415	0.825	400	22.6	8.2	151.567	F
C-AB	10	3	589	0.018	10	0.0	0.0	6.201	A
C-A	189	47			189				
A-B	239	60			239				
A-C	177	44			177				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	287	72	430	0.666	311	8.2	2.2	34.831	D
C-AB	8	2	579	0.014	8	0.0	0.0	6.292	A
C-A	159	40			159				
A-B	200	50			200				
A-C	149	37			149				

2034 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		4.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	332	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	171	100.000
C - A1094 East		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	281	51
	B - B1069 Snape Road (North)	166	0	5
	C - A1094 East	46	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	17
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	6	91	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.42	13.62	0.7	B	157	235
C-AB	0.01	11.77	0.0	B	4	5
C-A					42	63
A-B					258	386
A-C					47	71

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	470	0.274	127	0.0	0.4	10.472	B
C-AB	3	1	313	0.009	3	0.0	0.0	11.617	B
C-A	34	9			34				
A-B	211	53			211				
A-C	39	10			39				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	38	462	0.332	153	0.4	0.5	11.624	B
C-AB	3	1	312	0.011	3	0.0	0.0	11.706	B
C-A	41	10			41				
A-B	252	63			252				
A-C	46	12			46				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	453	0.416	187	0.5	0.7	13.536	B
C-AB	4	1	312	0.014	4	0.0	0.0	11.773	B
C-A	50	12			50				
A-B	309	77			309				
A-C	56	14			56				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	453	0.416	188	0.7	0.7	13.616	B
C-AB	4	1	312	0.014	4	0.0	0.0	11.696	B
C-A	50	12			50				
A-B	309	77			309				
A-C	56	14			56				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	38	462	0.332	154	0.7	0.5	11.723	B
C-AB	3	1	313	0.011	3	0.0	0.0	11.553	B
C-A	41	10			41				
A-B	252	63			252				
A-C	46	12			46				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	470	0.274	129	0.5	0.4	10.594	B
C-AB	3	1	313	0.009	3	0.0	0.0	11.547	B
C-A	34	9			34				
A-B	211	53			211				
A-C	39	10			39				

2034 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		17.32	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	425	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	307	100.000
C - A1094 East		ONE HOUR	✓	136	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	270	155
	B - B1069 Snape Road (North)	298	0	10
	C - A1094 East	118	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	10
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	1	17	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.83	48.91	4.3	E	282	423
C-AB	0.05	7.35	0.1	A	21	31
C-A					104	156
A-B					248	372
A-C					143	214

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	231	58	438	0.528	227	0.0	1.1	16.751	C
C-AB	16	4	515	0.031	16	0.0	0.0	7.205	A
C-A	86	22			86				
A-B	203	51			203				
A-C	117	29			117				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	69	425	0.650	274	1.1	1.7	23.356	C
C-AB	20	5	516	0.039	20	0.0	0.1	7.271	A
C-A	102	26			102				
A-B	243	61			243				
A-C	140	35			140				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	339	85	407	0.831	330	1.7	3.9	42.345	E
C-AB	26	6	517	0.050	26	0.1	0.1	7.348	A
C-A	124	31			124				
A-B	297	74			297				
A-C	171	43			171				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	339	85	407	0.832	337	3.9	4.3	48.910	E
C-AB	26	6	517	0.050	26	0.1	0.1	7.328	A
C-A	124	31			124				
A-B	297	74			297				
A-C	171	43			171				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	276	69	425	0.650	286	4.3	2.0	27.273	D
C-AB	20	5	516	0.039	20	0.1	0.1	7.232	A
C-A	102	26			102				
A-B	243	61			243				
A-C	140	35			140				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	231	58	438	0.528	235	2.0	1.2	17.988	C
C-AB	16	4	516	0.031	16	0.1	0.0	7.189	A
C-A	86	22			86				
A-B	203	51			203				
A-C	117	29			117				

2034 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		7.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	454	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	233	100.000
C - A1094 East		ONE HOUR	✓	145	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	209	245
	B - B1069 Snape Road (North)	219	0	15
	C - A1094 East	137	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	4
	B - B1069 Snape Road (North)	5	0	6
	C - A1094 East	6	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.66	27.27	1.9	D	214	321
C-AB	0.03	7.76	0.0	A	10	15
C-A					123	184
A-B					192	288
A-C					225	337

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	176	44	423	0.415	173	0.0	0.7	14.232	B
C-AB	8	2	471	0.017	8	0.0	0.0	7.765	A
C-A	101	25			101				
A-B	157	39			157				
A-C	184	46			184				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	52	409	0.514	209	0.7	1.0	17.880	C
C-AB	10	2	476	0.021	10	0.0	0.0	7.759	A
C-A	121	30			121				
A-B	188	47			188				
A-C	220	55			220				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	257	64	388	0.662	254	1.0	1.8	26.184	D
C-AB	13	3	482	0.027	13	0.0	0.0	7.717	A
C-A	147	37			147				
A-B	230	58			230				
A-C	269	67			269				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	257	64	388	0.662	257	1.8	1.9	27.265	D
C-AB	13	3	482	0.027	13	0.0	0.0	7.679	A
C-A	147	37			147				
A-B	230	58			230				
A-C	269	67			269				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	210	52	409	0.514	213	1.9	1.1	18.698	C
C-AB	10	2	476	0.021	10	0.0	0.0	7.675	A
C-A	121	30			121				
A-B	188	47			188				
A-C	220	55			220				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	176	44	423	0.415	177	1.1	0.7	14.718	B
C-AB	8	2	472	0.017	8	0.0	0.0	7.727	A
C-A	101	25			101				
A-B	157	39			157				
A-C	184	46			184				

2034 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		15.78	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	484	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	277	100.000
C - A1094 East		ONE HOUR	✓	314	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	231	253
	B - B1069 Snape Road (North)	271	0	7
	C - A1094 East	307	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	2
	B - B1069 Snape Road (North)	4	0	0
	C - A1094 East	1	12	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.85	59.83	4.7	F	254	382
C-AB	0.02	5.78	0.0	A	12	19
C-A					276	414
A-B					212	318
A-C					232	348

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	209	52	403	0.517	205	0.0	1.0	17.774	C
C-AB	9	2	632	0.014	9	0.0	0.0	5.780	A
C-A	227	57			227				
A-B	174	44			174				
A-C	190	48			190				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	249	62	385	0.648	246	1.0	1.7	25.509	D
C-AB	12	3	652	0.018	12	0.0	0.0	5.634	A
C-A	271	68			271				
A-B	208	52			208				
A-C	227	57			227				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	305	76	359	0.850	295	1.7	4.2	49.951	E
C-AB	16	4	682	0.024	16	0.0	0.0	5.426	A
C-A	329	82			329				
A-B	254	64			254				
A-C	278	70			278				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	305	76	359	0.850	303	4.2	4.7	59.828	F
C-AB	16	4	682	0.024	16	0.0	0.0	5.409	A
C-A	329	82			329				
A-B	254	64			254				
A-C	278	70			278				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	249	62	385	0.648	260	4.7	2.0	30.944	D
C-AB	12	3	652	0.018	12	0.0	0.0	5.596	A
C-A	271	68			271				
A-B	208	52			208				
A-C	227	57			227				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	209	52	403	0.518	212	2.0	1.1	19.158	C
C-AB	9	2	632	0.014	9	0.0	0.0	5.760	A
C-A	227	57			227				
A-B	174	44			174				
A-C	190	48			190				

2034 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		6.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	471	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	227	100.000
C - A1094 East		ONE HOUR	✓	243	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	265	206
	B - B1069 Snape Road (North)	220	0	6
	C - A1094 East	236	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	0
	B - B1069 Snape Road (North)	1	0	0
	C - A1094 East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.64	25.10	1.7	D	208	312
C-AB	0.02	5.65	0.0	A	9	14
C-A					213	320
A-B					243	365
A-C					189	284

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	171	43	431	0.396	168	0.0	0.6	13.561	B
C-AB	7	2	645	0.011	7	0.0	0.0	5.644	A
C-A	176	44			176				
A-B	199	50			199				
A-C	155	39			155				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	204	51	415	0.491	203	0.6	0.9	16.866	C
C-AB	9	2	655	0.014	9	0.0	0.0	5.572	A
C-A	209	52			209				
A-B	238	60			238				
A-C	186	46			186				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	250	62	392	0.636	247	0.9	1.6	24.272	C
C-AB	12	3	670	0.018	12	0.0	0.0	5.472	A
C-A	255	64			255				
A-B	292	73			292				
A-C	227	57			227				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	250	62	392	0.636	249	1.6	1.7	25.101	D
C-AB	12	3	670	0.018	12	0.0	0.0	5.475	A
C-A	255	64			255				
A-B	292	73			292				
A-C	227	57			227				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	204	51	415	0.491	207	1.7	1.0	17.508	C
C-AB	9	2	655	0.014	9	0.0	0.0	5.578	A
C-A	209	52			209				
A-B	238	60			238				
A-C	186	46			186				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	171	43	431	0.396	172	1.0	0.7	13.964	B
C-AB	7	2	645	0.011	7	0.0	0.0	5.649	A
C-A	176	44			176				
A-B	199	50			199				
A-C	155	39			155				

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		4.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	328	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	171	100.000
C - A1094 East		ONE HOUR	✓	47	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	279	49
	B - B1069 Snape Road (North)	166	0	5
	C - A1094 East	44	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	1	18
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	4	91	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.41	13.56	0.7	B	157	235
C-AB	0.01	11.82	0.0	B	3	5
C-A					40	60
A-B					256	384
A-C					45	68

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	470	0.274	127	0.0	0.4	10.447	B
C-AB	3	1	312	0.009	3	0.0	0.0	11.646	B
C-A	33	8			33				
A-B	210	52			210				
A-C	37	9			37				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	38	463	0.332	153	0.4	0.5	11.607	B
C-AB	3	1	311	0.011	3	0.0	0.0	11.741	B
C-A	39	10			39				
A-B	251	63			251				
A-C	44	11			44				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	454	0.415	187	0.5	0.7	13.475	B
C-AB	4	1	311	0.014	4	0.0	0.0	11.816	B
C-A	48	12			48				
A-B	307	77			307				
A-C	54	14			54				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	188	47	454	0.415	188	0.7	0.7	13.555	B
C-AB	4	1	311	0.014	4	0.0	0.0	11.740	B
C-A	48	12			48				
A-B	307	77			307				
A-C	54	14			54				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	38	463	0.332	154	0.7	0.5	11.686	B
C-AB	3	1	312	0.011	3	0.0	0.0	11.591	B
C-A	39	10			39				
A-B	251	63			251				
A-C	44	11			44				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	470	0.274	129	0.5	0.4	10.569	B
C-AB	3	1	312	0.009	3	0.0	0.0	11.577	B
C-A	33	8			33				
A-B	210	52			210				
A-C	37	9			37				

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		16.99	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	512	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	304	100.000
C - A1094 East		ONE HOUR	✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	358	154
	B - B1069 Snape Road (North)	295	0	10
	C - A1094 East	117	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	2	10
	B - B1069 Snape Road (North)	3	0	0
	C - A1094 East	1	20	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.84	52.94	4.6	F	279	419
C-AB	0.06	7.87	0.1	A	23	35
C-A					102	154
A-B					328	493
A-C					142	213

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	229	57	432	0.531	225	0.0	1.1	17.090	C
C-AB	18	4	491	0.037	18	0.0	0.0	7.610	A
C-A	85	21			85				
A-B	269	67			269				
A-C	116	29			116				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	68	417	0.656	271	1.1	1.8	24.133	C
C-AB	22	6	490	0.046	22	0.0	0.1	7.729	A
C-A	101	25			101				
A-B	322	80			322				
A-C	139	35			139				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	335	84	398	0.843	326	1.8	4.1	45.064	E
C-AB	29	7	488	0.060	29	0.1	0.1	7.872	A
C-A	121	30			121				
A-B	394	99			394				
A-C	170	42			170				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	335	84	398	0.843	333	4.1	4.6	52.941	F
C-AB	29	7	489	0.060	29	0.1	0.1	7.843	A
C-A	121	30			121				
A-B	394	99			394				
A-C	170	42			170				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	274	68	417	0.656	284	4.6	2.1	28.721	D
C-AB	22	6	490	0.046	23	0.1	0.1	7.673	A
C-A	101	25			101				
A-B	322	80			322				
A-C	139	35			139				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	229	57	431	0.531	233	2.1	1.2	18.421	C
C-AB	18	4	491	0.037	18	0.1	0.1	7.591	A
C-A	85	21			85				
A-B	269	67			269				
A-C	116	29			116				

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		9.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	514	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	246	100.000
C - A1094 East		ONE HOUR	✓	155	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	270	244
	B - B1069 Snape Road (North)	231	0	16
	C - A1094 East	135	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	4
	B - B1069 Snape Road (North)	5	0	6
	C - A1094 East	5	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.71	32.78	2.4	D	226	339
C-AB	0.06	7.30	0.1	A	25	37
C-A					118	177
A-B					248	372
A-C					224	335

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	186	46	418	0.444	182	0.0	0.8	15.099	C
C-AB	19	5	525	0.036	19	0.0	0.0	7.104	A
C-A	98	25			98				
A-B	203	51			203				
A-C	183	46			183				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	222	55	402	0.551	220	0.8	1.2	19.610	C
C-AB	24	6	525	0.045	24	0.0	0.1	7.191	A
C-A	116	29			116				
A-B	243	61			243				
A-C	219	55			219				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	68	380	0.715	267	1.2	2.3	30.815	D
C-AB	31	8	525	0.059	31	0.1	0.1	7.299	A
C-A	140	35			140				
A-B	297	74			297				
A-C	268	67			268				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	271	68	380	0.715	271	2.3	2.4	32.780	D
C-AB	31	8	525	0.059	31	0.1	0.1	7.286	A
C-A	140	35			140				
A-B	297	74			297				
A-C	268	67			268				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	222	55	402	0.551	226	2.4	1.3	20.933	C
C-AB	24	6	525	0.045	24	0.1	0.1	7.167	A
C-A	116	29			116				
A-B	243	61			243				
A-C	219	55			219				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	186	46	418	0.444	187	1.3	0.8	15.745	C
C-AB	19	5	525	0.036	19	0.1	0.0	7.100	A
C-A	98	25			98				
A-B	203	51			203				
A-C	183	46			183				

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		16.34	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	479	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	280	100.000
C - A1094 East		ONE HOUR	✓	310	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	230	249
	B - B1069 Snape Road (North)	274	0	7
	C - A1094 East	303	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	2
	B - B1069 Snape Road (North)	4	0	0
	C - A1094 East	1	12	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.85	60.98	4.8	F	257	386
C-AB	0.02	5.79	0.0	A	12	18
C-A					272	408
A-B					211	317
A-C					228	342

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	211	53	405	0.521	207	0.0	1.0	17.845	C
C-AB	9	2	630	0.014	9	0.0	0.0	5.794	A
C-A	225	56			225				
A-B	173	43			173				
A-C	187	47			187				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	252	63	386	0.652	249	1.0	1.7	25.694	D
C-AB	12	3	650	0.018	12	0.0	0.0	5.650	A
C-A	267	67			267				
A-B	207	52			207				
A-C	223	56			223				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	309	77	361	0.855	298	1.7	4.3	50.617	F
C-AB	16	4	679	0.024	16	0.0	0.0	5.445	A
C-A	325	81			325				
A-B	253	63			253				
A-C	274	68			274				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	309	77	361	0.855	306	4.3	4.8	60.981	F
C-AB	16	4	680	0.024	16	0.0	0.0	5.429	A
C-A	325	81			325				
A-B	253	63			253				
A-C	274	68			274				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	252	63	386	0.652	263	4.8	2.0	31.417	D
C-AB	12	3	650	0.018	12	0.0	0.0	5.613	A
C-A	267	67			267				
A-B	207	52			207				
A-C	223	56			223				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	211	53	405	0.521	215	2.0	1.1	19.272	C
C-AB	9	2	630	0.014	9	0.0	0.0	5.776	A
C-A	225	56			225				
A-B	173	43			173				
A-C	187	47			187				

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J5	B1069 / A1094 (Snape Road, East)	T-Junction	Two-way		6.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 West		ONE HOUR	✓	464	100.000
B - B1069 Snape Road (North)		ONE HOUR	✓	228	100.000
C - A1094 East		ONE HOUR	✓	233	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	263	201
	B - B1069 Snape Road (North)	221	0	6
	C - A1094 East	225	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1094 West	B - B1069 Snape Road (North)	C - A1094 East
From	A - A1094 West	0	3	0
	B - B1069 Snape Road (North)	1	0	0
	C - A1094 East	2	13	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.64	24.85	1.7	C	209	314
C-AB	0.02	6.23	0.0	A	11	17
C-A					202	304
A-B					241	362
A-C					185	277

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	171	43	433	0.396	169	0.0	0.6	13.468	B
C-AB	8	2	586	0.014	8	0.0	0.0	6.227	A
C-A	167	42			167				
A-B	198	49			198				
A-C	152	38			152				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	205	51	417	0.491	204	0.6	0.9	16.775	C
C-AB	11	3	598	0.018	11	0.0	0.0	6.141	A
C-A	199	50			199				
A-B	236	59			236				
A-C	181	45			181				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	251	63	395	0.635	248	0.9	1.6	24.047	C
C-AB	14	4	615	0.023	14	0.0	0.0	6.009	A
C-A	242	60			242				
A-B	290	72			290				
A-C	222	55			222				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	251	63	395	0.635	251	1.6	1.7	24.853	C
C-AB	14	4	615	0.023	14	0.0	0.0	5.992	A
C-A	242	60			242				
A-B	290	72			290				
A-C	222	55			222				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	205	51	417	0.491	207	1.7	1.0	17.402	C
C-AB	11	3	598	0.018	11	0.0	0.0	6.104	A
C-A	199	50			199				
A-B	236	59			236				
A-C	181	45			181				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	171	43	433	0.396	173	1.0	0.7	13.908	B
C-AB	8	2	586	0.014	8	0.0	0.0	6.208	A
C-A	167	42			167				
A-B	198	49			198				
A-C	152	38			152				

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: 2019.08.22_J6_Model_Miti_Adjusted_EY_v11.j9

Path: \\ser01cam1uk.uk.wspgroup.com\projects\50400326 - Sizewell C transport planning\ID Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\For Issue\Scoped In\v11 Mitigation Models\J6\Model
Report generation date: 16/03/2020 11:11:15

- »2023 Early Years , 6-7 AM
- »2023 Early Years , 7-8 AM
- »2023 Early Years , 8-9 AM
- »2023 Early Years , 3-4 PM
- »2023 Early Years , 5-6 PM

Summary of junction performance

	6-7 AM				7-8 AM				8-9 AM				3-4 PM				5-6 PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2023 Early Years																				
A - A12 North	0.5	5.13	0.33	A	3.0	15.49	0.76	C	4.1	19.60	0.81	C	4.6	20.96	0.83	C	3.1	14.88	0.76	B
B - A1094	0.2	4.17	0.15	A	0.8	7.44	0.44	A	0.7	7.72	0.42	A	1.3	10.29	0.56	B	1.9	12.76	0.67	B
C - A12 South	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A
D - Old A12 (Farnham)	0.7	4.73	0.41	A	4.9	17.55	0.84	C	4.6	17.22	0.83	C	4.3	15.32	0.82	C	4.3	15.36	0.82	C

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

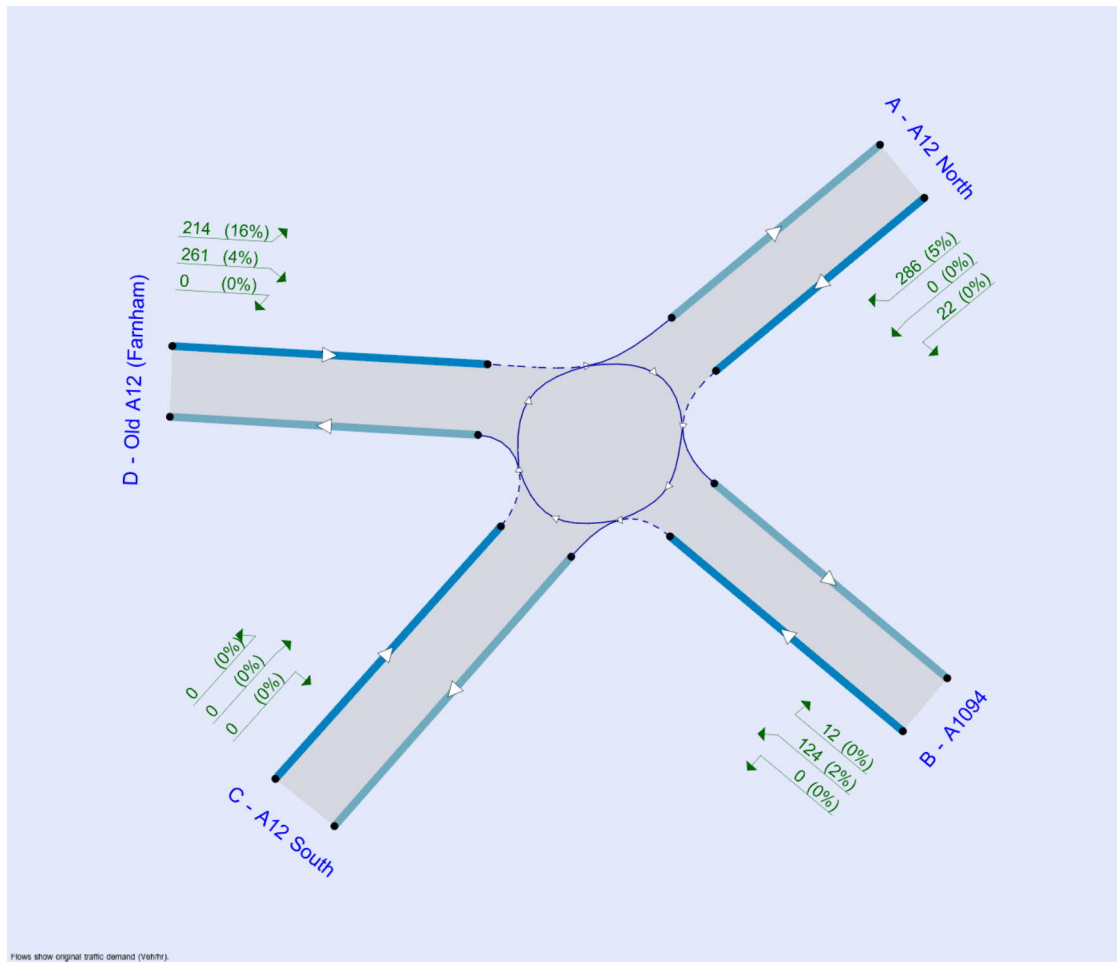
File summary

File Description

Title	A12 / A1094
Location	52.191814°, 1.468510°
Site number	6
Date	22/08/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INJV01568
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (veh/hr).
The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2023 Early Years , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	4.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	A1094	
C	A12 South	
D	Old A12 (Farnham)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	3.65	4.00	10.0	30.1	70.0	31.0	
B - A1094	3.70	4.00	10.0	22.3	70.0	39.0	
C - A12 South	3.70	7.20	14.1	32.6	70.0	31.0	
D - Old A12 (Farnham)	3.60	5.40	10.0	23.1	70.0	37.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.433	1217
B - A1094	0.416	1173
C - A12 South	0.515	1738
D - Old A12 (Farnham)	0.456	1411

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	308	100.000
B - A1094		ONE HOUR	✓	136	100.000
C - A12 South		ONE HOUR	✓	0	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	475	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	22	0	286
	B - A1094	12	0	0	124

C - A12 South	0	0	0	0
D - Old A12 (Farnham)	214	261	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	0	0	5
	B - A1094	0	0	0	2
	C - A12 South	0	0	0	0
	D - Old A12 (Farnham)	16	4	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.33	5.13	0.5	A	283	424
B - A1094	0.15	4.17	0.2	A	125	187
C - A12 South	0.00	0.00	0.0	A	0	0
D - Old A12 (Farnham)	0.41	4.73	0.7	A	436	654

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	232	58	196	1080	0.215	231	169	0.0	0.3	4.235	A
B - A1094	102	26	214	1056	0.097	102	212	0.0	0.1	3.772	A
C - A12 South	0	0	316	1569	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	358	89	9	1286	0.278	356	307	0.0	0.4	3.867	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	277	69	234	1063	0.260	277	203	0.3	0.3	4.574	A
B - A1094	122	31	257	1037	0.118	122	254	0.1	0.1	3.933	A
C - A12 South	0	0	379	1535	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	427	107	11	1285	0.332	427	368	0.4	0.5	4.193	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	339	85	287	1041	0.326	339	248	0.3	0.5	5.125	A
B - A1094	150	37	314	1013	0.148	150	311	0.1	0.2	4.170	A
C - A12 South	0	0	464	1490	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	523	131	13	1284	0.407	522	451	0.5	0.7	4.722	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	339	85	287	1040	0.326	339	249	0.5	0.5	5.132	A
B - A1094	150	37	315	1013	0.148	150	312	0.2	0.2	4.171	A
C - A12 South	0	0	465	1489	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	523	131	13	1284	0.407	523	451	0.7	0.7	4.731	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	277	69	235	1063	0.260	277	204	0.5	0.4	4.585	A
B - A1094	122	31	258	1037	0.118	122	255	0.2	0.1	3.937	A
C - A12 South	0	0	380	1535	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	427	107	11	1285	0.332	428	369	0.7	0.5	4.205	A

07:00 - 07:15

Arm	Total Demand	Junction Arrivals	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of
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	(Veh/hr)	(Veh)					(Veh/hr)	(Veh)	(Veh)		service
A - A12 North	232	58	197	1079	0.215	232	170	0.4	0.3	4.250	A
B - A1094	102	26	216	1055	0.097	102	213	0.1	0.1	3.781	A
C - A12 South	0	0	318	1568	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	358	89	9	1285	0.278	358	309	0.5	0.4	3.884	A

2023 Early Years , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	15.15	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	658	100.000
B - A1094		ONE HOUR	✓	340	100.000
C - A12 South		ONE HOUR	✓	0	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	951	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	103	0	555
	B - A1094	72	0	0	268
	C - A12 South	0	0	0	0
	D - Old A12 (Farnham)	569	382	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	8	0	7
	B - A1094	4	0	0	5
	C - A12 South	0	0	0	0
	D - Old A12 (Farnham)	11	8	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	15.49	3.0	C	604	906
B - A1094	0.44	7.44	0.8	A	312	468
C - A12 South	0.00	0.00	0.0	A	0	0
D - Old A12 (Farnham)	0.84	17.55	4.9	C	873	1309

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	495	124	286	1014	0.488	492	479	0.0	0.9	6.839	A
B - A1094	256	64	415	941	0.272	254	362	0.0	0.4	5.232	A
C - A12 South	0	0	669	1373	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	716	179	54	1260	0.568	711	615	0.0	1.3	6.495	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	592	148	342	990	0.598	589	574	0.9	1.5	8.953	A
B - A1094	306	76	497	906	0.337	305	434	0.4	0.5	5.982	A
C - A12 South	0	0	802	1300	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	855	214	65	1255	0.681	852	738	1.3	2.1	8.852	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	724	181	416	957	0.757	719	699	1.5	2.9	14.733	B
B - A1094	374	94	606	860	0.435	373	529	0.5	0.8	7.378	A
C - A12 South	0	0	979	1203	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	1047	262	79	1249	0.838	1037	900	2.1	4.7	16.190	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	724	181	420	955	0.758	724	705	2.9	3.0	15.488	C
B - A1094	374	94	611	858	0.436	374	534	0.8	0.8	7.437	A
C - A12 South	0	0	985	1200	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	1047	262	79	1249	0.838	1046	906	4.7	4.9	17.545	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	592	148	348	987	0.599	598	583	3.0	1.5	9.379	A
B - A1094	306	76	504	903	0.338	307	441	0.8	0.5	6.041	A
C - A12 South	0	0	811	1295	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	855	214	65	1255	0.681	866	746	4.9	2.2	9.486	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	495	124	289	1013	0.489	498	485	1.5	1.0	7.017	A
B - A1094	256	64	420	939	0.273	257	367	0.5	0.4	5.279	A
C - A12 South	0	0	676	1369	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	716	179	54	1260	0.568	719	622	2.2	1.3	6.706	A

2023 Early Years , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	16.58	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	707	100.000
B - A1094		ONE HOUR	✓	311	100.000
C - A12 South		ONE HOUR	✓	0	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	916	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	91	0	616
	B - A1094	75	0	0	236
	C - A12 South	0	0	0	0
	D - Old A12 (Farnham)	551	365	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	11	0	7
	B - A1094	11	0	0	7
	C - A12 South	0	0	0	0
	D - Old A12 (Farnham)	16	8	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	19.60	4.1	C	649	973
B - A1094	0.42	7.72	0.7	A	285	428
C - A12 South	0.00	0.00	0.0	A	0	0
D - Old A12 (Farnham)	0.83	17.22	4.6	C	841	1261

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	532	133	273	1015	0.524	528	468	0.0	1.1	7.326	A
B - A1094	234	59	460	899	0.261	233	341	0.0	0.3	5.396	A
C - A12 South	0	0	693	1356	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	690	172	56	1226	0.562	685	637	0.0	1.3	6.584	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	636	159	327	992	0.641	633	561	1.1	1.7	9.964	A
B - A1094	280	70	552	861	0.325	279	408	0.3	0.5	6.183	A
C - A12 South	0	0	831	1280	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	823	206	67	1221	0.674	820	763	1.3	2.0	8.909	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	778	195	398	961	0.810	770	683	1.7	3.9	18.082	C
B - A1094	342	86	671	812	0.422	341	497	0.5	0.7	7.642	A
C - A12 South	0	0	1012	1180	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	1009	252	82	1215	0.830	999	930	2.0	4.4	15.985	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	778	195	402	959	0.812	778	689	3.9	4.1	19.603	C
B - A1094	342	86	678	809	0.423	342	502	0.7	0.7	7.718	A
C - A12 South	0	0	1020	1175	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	1009	252	83	1215	0.830	1008	937	4.4	4.6	17.224	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	636	159	332	989	0.642	644	569	4.1	1.9	10.693	B
B - A1094	280	70	562	857	0.326	281	415	0.7	0.5	6.258	A
C - A12 South	0	0	842	1274	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	823	206	68	1221	0.674	834	774	4.6	2.1	9.513	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	532	133	276	1014	0.525	535	473	1.9	1.1	7.570	A
B - A1094	234	59	466	896	0.261	235	345	0.5	0.4	5.449	A
C - A12 South	0	0	701	1351	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	690	172	57	1226	0.562	693	644	2.1	1.3	6.793	A

2023 Early Years , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	16.40	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	745	100.000
B - A1094		ONE HOUR	✓	407	100.000
C - A12 South		ONE HOUR	✓	0	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	943	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	90	0	655
	B - A1094	117	0	0	290
	C - A12 South	0	0	0	0
	D - Old A12 (Farnham)	667	275	0	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	6	0	10
	B - A1094	2	0	0	7
	C - A12 South	0	0	0	0
	D - Old A12 (Farnham)	7	5	0	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	20.96	4.6	C	684	1025
B - A1094	0.56	10.29	1.3	B	373	560
C - A12 South	0.00	0.00	0.0	A	0	0
D - Old A12 (Farnham)	0.82	15.32	4.3	C	865	1298

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	561	140	206	1029	0.545	556	586	0.0	1.2	7.539	A
B - A1094	306	77	490	898	0.341	304	273	0.0	0.5	6.044	A
C - A12 South	0	0	794	1296	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	710	177	87	1289	0.551	705	707	0.0	1.2	6.118	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	670	167	247	1012	0.662	667	703	1.2	1.9	10.342	B
B - A1094	366	91	587	856	0.428	365	327	0.5	0.7	7.321	A
C - A12 South	0	0	952	1208	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	848	212	105	1281	0.662	845	847	1.2	1.9	8.197	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	820	205	301	990	0.829	811	856	1.9	4.3	19.128	C
B - A1094	448	112	714	801	0.559	446	398	0.7	1.2	10.083	B
C - A12 South	0	0	1160	1092	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	1038	260	128	1271	0.817	1029	1032	1.9	4.1	14.396	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	820	205	304	989	0.830	819	863	4.3	4.6	20.961	C
B - A1094	448	112	721	798	0.562	448	402	1.2	1.3	10.288	B
C - A12 South	0	0	1169	1086	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	1038	260	129	1271	0.817	1038	1041	4.1	4.3	15.324	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	670	167	251	1011	0.663	680	712	4.6	2.0	11.200	B
B - A1094	366	91	599	851	0.430	368	332	1.3	0.8	7.483	A
C - A12 South	0	0	967	1200	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	848	212	106	1281	0.662	857	861	4.3	2.0	8.663	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	561	140	209	1028	0.546	564	593	2.0	1.2	7.810	A
B - A1094	306	77	497	895	0.342	307	276	0.8	0.5	6.138	A
C - A12 South	0	0	804	1290	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	710	177	88	1288	0.551	713	716	2.0	1.2	6.288	A

2023 Early Years , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	14.60	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	691	100.000
B - A1094		ONE HOUR	✓	508	100.000
C - A12 South		ONE HOUR	✓	0	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	954	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	2	75	0	614
	B - A1094	137	0	0	371
	C - A12 South	0	0	0	0
	D - Old A12 (Farnham)	676	278	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	4	0	8
	B - A1094	2	0	0	4
	C - A12 South	0	0	0	0
	D - Old A12 (Farnham)	4	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	14.88	3.1	B	634	951
B - A1094	0.67	12.76	1.9	B	466	699
C - A12 South	0.00	0.00	0.0	A	0	0
D - Old A12 (Farnham)	0.82	15.36	4.3	C	875	1313

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	520	130	208	1042	0.499	516	609	0.0	1.0	6.792	A
B - A1094	382	96	460	936	0.409	380	264	0.0	0.7	6.443	A
C - A12 South	0	0	840	1280	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	718	180	104	1304	0.551	713	736	0.0	1.2	6.046	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	621	155	249	1025	0.606	619	730	1.0	1.5	8.819	A
B - A1094	457	114	552	896	0.510	455	316	0.7	1.0	8.147	A
C - A12 South	0	0	1007	1189	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	858	214	125	1295	0.662	855	883	1.2	1.9	8.124	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	761	190	303	1002	0.759	755	890	1.5	3.0	14.222	B
B - A1094	559	140	673	843	0.664	556	385	1.0	1.9	12.385	B
C - A12 South	0	0	1229	1068	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	1050	263	152	1283	0.819	1041	1077	1.9	4.2	14.394	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	761	190	306	1001	0.760	760	897	3.0	3.1	14.884	B
B - A1094	559	140	678	841	0.665	559	388	1.9	1.9	12.756	B
C - A12 South	0	0	1237	1064	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	1050	263	153	1282	0.819	1050	1084	4.2	4.3	15.357	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	621	155	253	1024	0.607	627	740	3.1	1.6	9.207	A
B - A1094	457	114	559	893	0.512	460	321	1.9	1.1	8.390	A
C - A12 South	0	0	1019	1182	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	858	214	126	1294	0.663	867	893	4.3	2.0	8.594	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	520	130	210	1042	0.499	522	616	1.6	1.0	6.968	A
B - A1094	382	96	466	933	0.410	384	267	1.1	0.7	6.570	A
C - A12 South	0	0	850	1275	0.000	0	0	0.0	0.0	0.000	A
D - Old A12 (Farnham)	718	180	105	1304	0.551	721	745	2.0	1.2	6.215	A

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: 2019.09.04_J6_Model_Miti_Adjusted_PC & OP_v11.j9

Path: \\ser01cam1uk.uk.wspgroup.com\projects\50400326 - Sizewell C transport planning\ID Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\For Issue\Scoped In\11 Mitigation Models\J6\Model
Report generation date: 16/03/2020 10:56:12

- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM				7-8 AM				8-9 AM				3-4 PM				5-6 PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2028 Peak Construction																				
A - A12 North	0.2	1.99	0.16	A	0.5	2.54	0.32	A	0.6	2.85	0.39	A	0.7	3.00	0.42	A	0.5	2.65	0.35	A
B - A1094	0.2	4.25	0.15	A	0.8	7.47	0.43	A	0.8	8.17	0.44	A	1.4	11.54	0.59	B	1.7	11.59	0.63	B
C - A12 South	0.4	3.41	0.29	A	1.5	6.17	0.61	A	2.3	7.92	0.70	A	2.7	8.80	0.73	A	2.3	7.71	0.70	A
D - Old A12 (Farnham)	0.0	3.02	0.01	A	0.0	3.67	0.02	A	0.0	3.98	0.03	A	0.0	4.29	0.01	A	0.0	4.35	0.01	A
2034 Operational Led																				
A - A12 North	0.2	1.87	0.15	A	0.5	2.40	0.31	A	0.6	2.64	0.38	A	0.6	2.67	0.39	A	0.5	2.31	0.32	A
B - A1094	0.2	4.22	0.15	A	0.6	6.52	0.38	A	0.7	7.40	0.41	A	1.4	10.54	0.59	B	1.1	8.49	0.52	A
C - A12 South	0.3	3.04	0.26	A	1.3	5.03	0.56	A	1.9	6.49	0.65	A	2.2	7.24	0.69	A	2.2	7.05	0.69	A
D - Old A12 (Farnham)	0.0	2.98	0.01	A	0.0	3.53	0.02	A	0.0	3.83	0.03	A	0.0	4.14	0.01	A	0.0	4.31	0.01	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

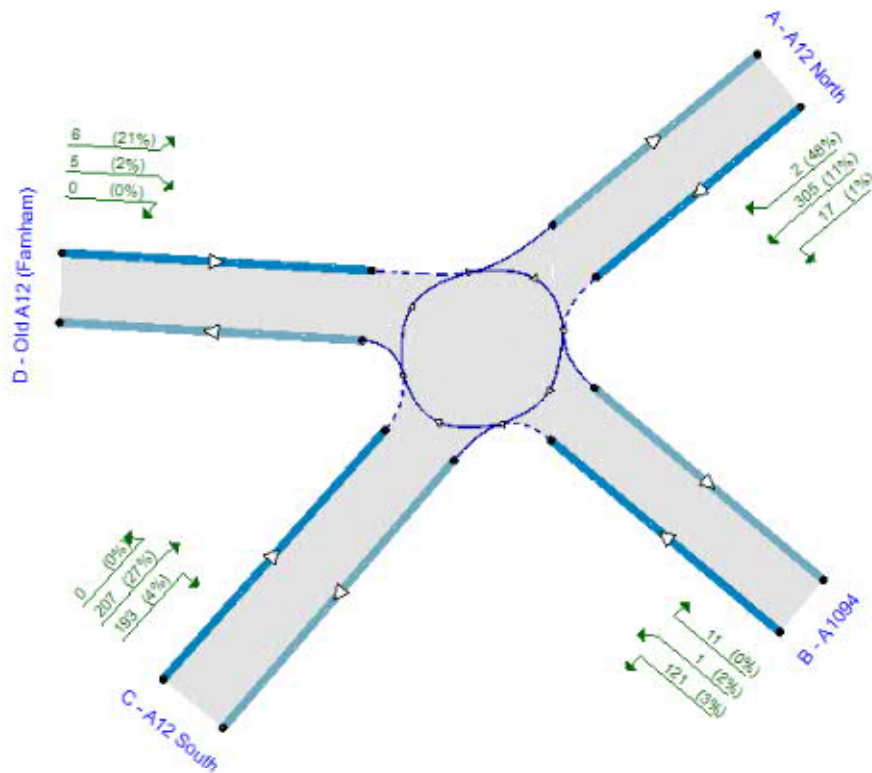
File summary

File Description

Title	A12 / A1094
Location	52.191814°, 1.468510°
Site number	6
Date	22/08/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\INJV01568
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



Flow shows original traffic demand (with)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	3.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	A1094	
C	A12 South	
D	Old A12 (Farnham)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.30	8.40	25.1	30.1	70.0	31.0	
B - A1094	3.70	4.00	10.0	22.3	70.0	39.0	
C - A12 South	3.70	7.20	14.1	32.6	70.0	31.0	
D - Old A12 (Farnham)	3.60	7.20	11.3	23.1	70.0	37.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.640	2537
B - A1094	0.416	1173
C - A12 South	0.515	1738
D - Old A12 (Farnham)	0.486	1602

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	324	100.000
B - A1094		ONE HOUR	✓	133	100.000
C - A12 South		ONE HOUR	✓	400	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	17	305	2
	B - A1094	11	0	121	1

C - A12 South	207	193	0	0
D - Old A12 (Farnham)	6	5	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	1	11	48
	B - A1094	0	0	3	2
	C - A12 South	27	4	0	0
	D - Old A12 (Farnham)	21	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.16	1.99	0.2	A	297	446
B - A1094	0.15	4.25	0.2	A	122	183
C - A12 South	0.29	3.41	0.4	A	367	551
D - Old A12 (Farnham)	0.01	3.02	0.0	A	10	15

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	244	61	149	2210	0.110	243	167	0.0	0.1	1.830	A
B - A1094	100	25	231	1041	0.096	100	161	0.0	0.1	3.820	A
C - A12 South	301	75	11	1497	0.201	300	320	0.0	0.3	3.005	A
D - Old A12 (Farnham)	8	2	308	1276	0.006	8	3	0.0	0.0	2.838	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	291	73	178	2192	0.133	291	200	0.1	0.2	1.893	A
B - A1094	120	30	276	1021	0.117	119	193	0.1	0.1	3.992	A
C - A12 South	360	90	13	1496	0.240	359	383	0.3	0.3	3.167	A
D - Old A12 (Farnham)	10	2	369	1246	0.008	10	3	0.0	0.0	2.911	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	357	89	218	2168	0.164	356	245	0.2	0.2	1.987	A
B - A1094	146	37	338	993	0.147	146	236	0.1	0.2	4.251	A
C - A12 South	440	110	16	1494	0.295	440	469	0.3	0.4	3.414	A
D - Old A12 (Farnham)	12	3	452	1204	0.010	12	4	0.0	0.0	3.018	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	357	89	219	2168	0.165	357	245	0.2	0.2	1.987	A
B - A1094	146	37	338	993	0.147	146	237	0.2	0.2	4.251	A
C - A12 South	440	110	16	1494	0.295	440	469	0.4	0.4	3.414	A
D - Old A12 (Farnham)	12	3	452	1204	0.010	12	4	0.0	0.0	3.018	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	291	73	179	2192	0.133	291	201	0.2	0.2	1.896	A
B - A1094	120	30	276	1021	0.117	120	193	0.2	0.1	3.994	A
C - A12 South	360	90	13	1496	0.240	360	383	0.4	0.3	3.172	A
D - Old A12 (Farnham)	10	2	370	1245	0.008	10	3	0.0	0.0	2.912	A

07:00 - 07:15

Arm	Total Demand	Junction Arrivals	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of
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	(Veh/hr)	(Veh)					(Veh/hr)	(Veh)	(Veh)		service
A - A12 North	244	61	150	2209	0.110	244	168	0.2	0.1	1.830	A
B - A1094	100	25	231	1041	0.096	100	162	0.1	0.1	3.828	A
C - A12 South	301	75	11	1497	0.201	301	321	0.3	0.3	3.013	A
D - Old A12 (Farnham)	8	2	309	1276	0.006	8	3	0.0	0.0	2.839	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	5.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	616	100.000
B - A1094		ONE HOUR	✓	332	100.000
C - A12 South		ONE HOUR	✓	818	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	20	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	72	541	3
	B - A1094	56	0	274	2
	C - A12 South	514	304	0	0
	D - Old A12 (Farnham)	11	10	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	9	10	37
	B - A1094	5	0	6	2
	C - A12 South	17	10	0	0
	D - Old A12 (Farnham)	11	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.32	2.54	0.5	A	565	847
B - A1094	0.43	7.47	0.8	A	305	458
C - A12 South	0.61	6.17	1.5	A	751	1126
D - Old A12 (Farnham)	0.02	3.67	0.0	A	19	28

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	463	116	235	2163	0.214	462	436	0.0	0.3	2.115	A
B - A1094	250	63	409	930	0.269	249	289	0.0	0.4	5.277	A
C - A12 South	616	154	47	1495	0.412	613	611	0.0	0.7	4.060	A
D - Old A12 (Farnham)	15	4	656	1162	0.013	15	4	0.0	0.0	3.139	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	553	138	282	2134	0.259	553	522	0.3	0.3	2.277	A
B - A1094	299	75	489	895	0.334	298	346	0.4	0.5	6.027	A
C - A12 South	736	184	56	1490	0.494	735	731	0.7	1.0	4.758	A
D - Old A12 (Farnham)	18	5	785	1094	0.017	18	5	0.0	0.0	3.344	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	678	169	344	2093	0.324	677	639	0.3	0.5	2.542	A
B - A1094	366	92	599	848	0.432	365	423	0.5	0.7	7.442	A
C - A12 South	901	225	68	1484	0.607	899	895	1.0	1.5	6.128	A
D - Old A12 (Farnham)	22	6	961	1003	0.022	22	6	0.0	0.0	3.669	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	678	169	345	2093	0.324	678	640	0.5	0.5	2.543	A
B - A1094	366	92	599	848	0.432	366	424	0.7	0.8	7.474	A
C - A12 South	901	225	68	1484	0.607	901	897	1.5	1.5	6.174	A
D - Old A12 (Farnham)	22	6	963	1002	0.022	22	6	0.0	0.0	3.674	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	553	138	283	2133	0.259	554	524	0.5	0.4	2.280	A
B - A1094	299	75	490	895	0.334	300	347	0.8	0.5	6.062	A
C - A12 South	736	184	56	1490	0.494	738	733	1.5	1.0	4.800	A
D - Old A12 (Farnham)	18	5	789	1093	0.017	18	5	0.0	0.0	3.350	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	463	116	237	2162	0.214	464	439	0.4	0.3	2.119	A
B - A1094	250	63	410	929	0.269	251	290	0.5	0.4	5.312	A
C - A12 South	616	154	47	1494	0.412	617	614	1.0	0.7	4.109	A
D - Old A12 (Farnham)	15	4	660	1160	0.013	15	4	0.0	0.0	3.148	A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	6.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	739	100.000
B - A1094		ONE HOUR	✓	312	100.000
C - A12 South		ONE HOUR	✓	946	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	21	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	87	648	5
	B - A1094	74	0	236	2
	C - A12 South	577	369	0	0
	D - Old A12 (Farnham)	13	9	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	10	8	26
	B - A1094	10	0	8	5
	C - A12 South	17	7	0	0
	D - Old A12 (Farnham)	10	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.39	2.85	0.6	A	678	1018
B - A1094	0.44	8.17	0.8	A	286	429
C - A12 South	0.70	7.92	2.3	A	868	1302
D - Old A12 (Farnham)	0.03	3.98	0.0	A	20	30

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	557	139	283	2162	0.257	555	497	0.0	0.3	2.238	A
B - A1094	235	59	490	879	0.267	233	348	0.0	0.4	5.564	A
C - A12 South	712	178	60	1510	0.472	708	663	0.0	0.9	4.473	A
D - Old A12 (Farnham)	16	4	764	1114	0.015	16	5	0.0	0.0	3.279	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	665	166	339	2127	0.313	664	595	0.3	0.5	2.461	A
B - A1094	280	70	586	839	0.334	280	417	0.4	0.5	6.433	A
C - A12 South	850	213	72	1504	0.565	848	794	0.9	1.3	5.482	A
D - Old A12 (Farnham)	19	5	915	1036	0.019	19	6	0.0	0.0	3.540	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	814	203	414	2079	0.391	813	728	0.5	0.6	2.842	A
B - A1094	343	86	718	784	0.438	342	510	0.5	0.8	8.128	A
C - A12 South	1041	260	89	1495	0.696	1037	972	1.3	2.2	7.794	A
D - Old A12 (Farnham)	24	6	1119	931	0.025	24	7	0.0	0.0	3.968	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	814	203	416	2078	0.392	814	730	0.6	0.6	2.846	A
B - A1094	343	86	719	784	0.438	343	511	0.8	0.8	8.172	A
C - A12 South	1041	260	89	1495	0.696	1041	973	2.2	2.3	7.919	A
D - Old A12 (Farnham)	24	6	1123	929	0.025	24	7	0.0	0.0	3.976	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	665	166	341	2125	0.313	665	599	0.6	0.5	2.468	A
B - A1094	280	70	587	838	0.334	282	419	0.8	0.5	6.475	A
C - A12 South	850	213	73	1503	0.565	854	796	2.3	1.3	5.573	A
D - Old A12 (Farnham)	19	5	921	1033	0.019	19	6	0.0	0.0	3.554	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	557	139	285	2161	0.258	557	501	0.5	0.3	2.246	A
B - A1094	235	59	492	878	0.267	235	350	0.5	0.4	5.606	A
C - A12 South	712	178	61	1509	0.472	714	666	1.3	0.9	4.534	A
D - Old A12 (Farnham)	16	4	770	1111	0.015	16	5	0.0	0.0	3.291	A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	7.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	800	100.000
B - A1094		ONE HOUR	✓	412	100.000
C - A12 South		ONE HOUR	✓	1002	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	91	696	13
	B - A1094	116	0	288	7
	C - A12 South	716	285	1	0
	D - Old A12 (Farnham)	7	3	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	5	12	10
	B - A1094	1	0	7	1
	C - A12 South	11	6	100	0
	D - Old A12 (Farnham)	16	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	3.00	0.7	A	734	1101
B - A1094	0.59	11.54	1.4	B	378	566
C - A12 South	0.73	8.80	2.7	A	920	1380
D - Old A12 (Farnham)	0.01	4.29	0.0	A	10	14

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	602	151	217	2144	0.281	600	629	0.0	0.4	2.330	A
B - A1094	310	77	533	875	0.354	308	284	0.0	0.5	6.322	A
C - A12 South	755	189	102	1535	0.492	751	739	0.0	1.0	4.569	A
D - Old A12 (Farnham)	8	2	838	1038	0.008	8	15	0.0	0.0	3.493	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	719	180	259	2118	0.339	718	754	0.4	0.5	2.572	A
B - A1094	370	92	638	829	0.447	369	340	0.5	0.8	7.817	A
C - A12 South	901	225	122	1525	0.591	899	885	1.0	1.4	5.732	A
D - Old A12 (Farnham)	9	2	1004	959	0.010	9	17	0.0	0.0	3.788	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	880	220	317	2083	0.423	880	921	0.5	0.7	2.991	A
B - A1094	453	113	781	765	0.592	451	416	0.8	1.4	11.362	B
C - A12 South	1104	276	149	1512	0.730	1099	1083	1.4	2.6	8.607	A
D - Old A12 (Farnham)	11	3	1226	854	0.013	11	21	0.0	0.0	4.273	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	880	220	318	2082	0.423	880	925	0.7	0.7	2.995	A
B - A1094	453	113	782	765	0.593	453	417	1.4	1.4	11.544	B
C - A12 South	1104	276	149	1512	0.730	1103	1085	2.6	2.7	8.800	A
D - Old A12 (Farnham)	11	3	1232	851	0.013	11	21	0.0	0.0	4.285	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	719	180	261	2117	0.340	720	759	0.7	0.5	2.579	A
B - A1094	370	92	639	828	0.447	372	342	1.4	0.8	7.943	A
C - A12 South	901	225	123	1525	0.591	906	889	2.7	1.5	5.861	A
D - Old A12 (Farnham)	9	2	1011	956	0.010	9	17	0.0	0.0	3.802	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	602	151	218	2143	0.281	603	634	0.5	0.4	2.337	A
B - A1094	310	77	535	874	0.354	311	286	0.8	0.6	6.405	A
C - A12 South	755	189	103	1535	0.492	757	743	1.5	1.0	4.638	A
D - Old A12 (Farnham)	8	2	845	1035	0.008	8	15	0.0	0.0	3.504	A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	6.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	669	100.000
B - A1094		ONE HOUR	✓	475	100.000
C - A12 South		ONE HOUR	✓	1005	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	7	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	2	58	600	8
	B - A1094	119	0	350	6
	C - A12 South	721	284	0	0
	D - Old A12 (Farnham)	4	2	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	2	12	13
	B - A1094	2	0	4	0
	C - A12 South	6	5	0	0
	D - Old A12 (Farnham)	24	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.35	2.65	0.5	A	614	921
B - A1094	0.63	11.59	1.7	B	436	654
C - A12 South	0.70	7.71	2.3	A	922	1384
D - Old A12 (Farnham)	0.01	4.35	0.0	A	6	9

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	504	126	215	2156	0.234	503	634	0.0	0.3	2.176	A
B - A1094	358	89	459	930	0.385	355	259	0.0	0.6	6.239	A
C - A12 South	757	189	101	1597	0.474	753	713	0.0	0.9	4.246	A
D - Old A12 (Farnham)	5	1	844	1009	0.005	5	11	0.0	0.0	3.586	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	602	150	257	2131	0.282	601	759	0.3	0.4	2.354	A
B - A1094	427	107	549	889	0.480	426	310	0.6	0.9	7.751	A
C - A12 South	904	226	121	1587	0.569	902	853	0.9	1.3	5.240	A
D - Old A12 (Farnham)	6	1	1010	935	0.006	6	13	0.0	0.0	3.873	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	737	184	314	2096	0.352	736	928	0.4	0.5	2.646	A
B - A1094	523	131	672	834	0.628	520	379	0.9	1.6	11.381	B
C - A12 South	1107	277	148	1574	0.703	1103	1044	1.3	2.3	7.577	A
D - Old A12 (Farnham)	7	2	1235	836	0.009	7	16	0.0	0.0	4.341	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	737	184	316	2095	0.352	737	931	0.5	0.5	2.649	A
B - A1094	523	131	672	833	0.628	523	380	1.6	1.7	11.591	B
C - A12 South	1107	277	149	1574	0.703	1107	1046	2.3	2.3	7.705	A
D - Old A12 (Farnham)	7	2	1240	834	0.009	7	16	0.0	0.0	4.352	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	602	150	259	2130	0.283	602	764	0.5	0.4	2.359	A
B - A1094	427	107	550	889	0.481	430	311	1.7	0.9	7.896	A
C - A12 South	904	226	122	1587	0.570	908	857	2.3	1.3	5.330	A
D - Old A12 (Farnham)	6	1	1017	932	0.006	6	13	0.0	0.0	3.887	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	504	126	216	2155	0.234	504	639	0.4	0.3	2.182	A
B - A1094	358	89	460	929	0.385	359	260	0.9	0.6	6.325	A
C - A12 South	757	189	102	1597	0.474	759	717	1.3	0.9	4.303	A
D - Old A12 (Farnham)	5	1	850	1006	0.005	5	11	0.0	0.0	3.598	A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	2.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	319	100.000
B - A1094		ONE HOUR	✓	137	100.000
C - A12 South		ONE HOUR	✓	372	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	18	299	2
	B - A1094	12	0	124	1
	C - A12 South	174	198	0	0
	D - Old A12 (Farnham)	5	5	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	1	5	49
	B - A1094	0	0	3	2
	C - A12 South	13	4	0	0
	D - Old A12 (Farnham)	26	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.15	1.87	0.2	A	292	439
B - A1094	0.15	4.22	0.2	A	126	189
C - A12 South	0.26	3.04	0.3	A	342	512
D - Old A12 (Farnham)	0.01	2.98	0.0	A	9	14

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	240	60	153	2318	0.104	239	143	0.0	0.1	1.731	A
B - A1094	103	26	226	1049	0.099	103	166	0.0	0.1	3.804	A
C - A12 South	280	70	12	1598	0.175	279	318	0.0	0.2	2.729	A
D - Old A12 (Farnham)	7	2	288	1282	0.006	7	3	0.0	0.0	2.824	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	286	72	183	2299	0.125	286	171	0.1	0.1	1.788	A
B - A1094	123	31	271	1030	0.120	123	199	0.1	0.1	3.971	A
C - A12 South	335	84	14	1597	0.210	334	380	0.2	0.3	2.851	A
D - Old A12 (Farnham)	9	2	345	1256	0.007	9	3	0.0	0.0	2.887	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	351	88	224	2273	0.154	351	209	0.1	0.2	1.872	A
B - A1094	151	38	331	1004	0.151	151	243	0.1	0.2	4.222	A
C - A12 South	410	102	17	1595	0.257	410	465	0.3	0.3	3.036	A
D - Old A12 (Farnham)	11	3	422	1220	0.009	11	4	0.0	0.0	2.977	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	351	88	224	2273	0.154	351	210	0.2	0.2	1.872	A
B - A1094	151	38	331	1004	0.151	151	243	0.2	0.2	4.222	A
C - A12 South	410	102	17	1595	0.257	410	466	0.3	0.3	3.036	A
D - Old A12 (Farnham)	11	3	423	1219	0.009	11	4	0.0	0.0	2.978	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	286	72	183	2299	0.125	287	171	0.2	0.1	1.788	A
B - A1094	123	31	271	1030	0.120	124	199	0.2	0.1	3.973	A
C - A12 South	335	84	14	1597	0.210	335	381	0.3	0.3	2.855	A
D - Old A12 (Farnham)	9	2	345	1255	0.007	9	3	0.0	0.0	2.889	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	240	60	153	2317	0.104	240	143	0.1	0.1	1.734	A
B - A1094	103	26	227	1048	0.099	103	167	0.1	0.1	3.811	A
C - A12 South	280	70	12	1598	0.175	280	319	0.3	0.2	2.732	A
D - Old A12 (Farnham)	7	2	289	1281	0.006	7	3	0.0	0.0	2.825	A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	4.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	615	100.000
B - A1094		ONE HOUR	✓	311	100.000
C - A12 South		ONE HOUR	✓	828	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	20	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	77	535	3
	B - A1094	44	0	265	2
	C - A12 South	517	311	0	0
	D - Old A12 (Farnham)	10	10	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	7	5	39
	B - A1094	5	0	2	2
	C - A12 South	5	6	0	0
	D - Old A12 (Farnham)	12	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.31	2.40	0.5	A	565	847
B - A1094	0.38	6.52	0.6	A	285	428
C - A12 South	0.56	5.03	1.3	A	760	1140
D - Old A12 (Farnham)	0.02	3.53	0.0	A	18	27

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	463	116	241	2249	0.206	462	428	0.0	0.3	2.014	A
B - A1094	234	59	405	975	0.240	233	298	0.0	0.3	4.840	A
C - A12 South	624	156	37	1637	0.381	621	600	0.0	0.6	3.535	A
D - Old A12 (Farnham)	15	4	654	1187	0.013	15	4	0.0	0.0	3.069	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	553	138	288	2219	0.249	553	513	0.3	0.3	2.161	A
B - A1094	280	70	484	941	0.297	279	357	0.3	0.4	5.432	A
C - A12 South	745	186	45	1633	0.456	744	718	0.6	0.8	4.044	A
D - Old A12 (Farnham)	18	4	783	1126	0.016	18	5	0.0	0.0	3.248	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	678	169	353	2177	0.311	677	628	0.3	0.5	2.400	A
B - A1094	342	86	593	895	0.383	342	437	0.4	0.6	6.500	A
C - A12 South	912	228	55	1628	0.560	910	880	0.8	1.3	5.006	A
D - Old A12 (Farnham)	22	5	959	1042	0.021	22	6	0.0	0.0	3.528	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	678	169	353	2177	0.311	678	629	0.5	0.5	2.400	A
B - A1094	342	86	593	894	0.383	342	438	0.6	0.6	6.519	A
C - A12 South	912	228	55	1628	0.560	912	881	1.3	1.3	5.030	A
D - Old A12 (Farnham)	22	5	960	1041	0.021	22	6	0.0	0.0	3.531	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	553	138	289	2218	0.249	554	515	0.5	0.3	2.165	A
B - A1094	280	70	485	941	0.297	280	358	0.6	0.4	5.453	A
C - A12 South	745	186	45	1633	0.456	746	720	1.3	0.8	4.070	A
D - Old A12 (Farnham)	18	4	786	1124	0.016	18	5	0.0	0.0	3.252	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	463	116	242	2248	0.206	464	431	0.3	0.3	2.019	A
B - A1094	234	59	406	975	0.240	235	300	0.4	0.3	4.864	A
C - A12 South	624	156	37	1637	0.381	624	603	0.8	0.6	3.559	A
D - Old A12 (Farnham)	15	4	658	1186	0.013	15	4	0.0	0.0	3.074	A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	5.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	750	100.000
B - A1094		ONE HOUR	✓	310	100.000
C - A12 South		ONE HOUR	✓	949	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	98	647	5
	B - A1094	84	0	224	2
	C - A12 South	634	316	0	0
	D - Old A12 (Farnham)	16	10	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	9	4	25
	B - A1094	9	0	2	5
	C - A12 South	6	4	0	0
	D - Old A12 (Farnham)	8	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.38	2.64	0.6	A	688	1033
B - A1094	0.41	7.40	0.7	A	284	426
C - A12 South	0.65	6.49	1.9	A	871	1307
D - Old A12 (Farnham)	0.03	3.83	0.0	A	23	35

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	565	141	244	2259	0.250	563	549	0.0	0.3	2.123	A
B - A1094	233	58	490	923	0.253	232	317	0.0	0.3	5.200	A
C - A12 South	715	179	68	1617	0.442	712	654	0.0	0.8	3.963	A
D - Old A12 (Farnham)	19	5	774	1144	0.017	19	5	0.0	0.0	3.200	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	674	169	292	2229	0.303	674	658	0.3	0.4	2.315	A
B - A1094	278	70	586	883	0.315	278	380	0.3	0.5	5.947	A
C - A12 South	853	213	81	1610	0.530	852	783	0.8	1.1	4.743	A
D - Old A12 (Farnham)	23	6	927	1069	0.021	23	6	0.0	0.0	3.439	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	826	207	357	2188	0.378	825	805	0.4	0.6	2.641	A
B - A1094	341	85	718	828	0.412	340	465	0.5	0.7	7.371	A
C - A12 South	1045	261	100	1600	0.653	1042	958	1.1	1.8	6.425	A
D - Old A12 (Farnham)	28	7	1134	969	0.029	28	8	0.0	0.0	3.826	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	826	207	358	2187	0.378	826	807	0.6	0.6	2.644	A
B - A1094	341	85	718	827	0.412	341	466	0.7	0.7	7.401	A
C - A12 South	1045	261	100	1600	0.653	1045	959	1.8	1.9	6.490	A
D - Old A12 (Farnham)	28	7	1137	967	0.029	28	8	0.0	0.0	3.832	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	674	169	293	2228	0.303	675	661	0.6	0.4	2.319	A
B - A1094	278	70	587	882	0.316	279	382	0.7	0.5	5.979	A
C - A12 South	853	213	82	1609	0.530	856	785	1.9	1.1	4.800	A
D - Old A12 (Farnham)	23	6	932	1067	0.021	23	6	0.0	0.0	3.449	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	565	141	245	2258	0.250	565	553	0.4	0.3	2.128	A
B - A1094	233	58	491	922	0.253	234	319	0.5	0.3	5.231	A
C - A12 South	715	179	68	1617	0.442	716	657	1.1	0.8	4.003	A
D - Old A12 (Farnham)	19	5	779	1141	0.017	19	5	0.0	0.0	3.209	A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	6.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	785	100.000
B - A1094		ONE HOUR	✓	439	100.000
C - A12 South		ONE HOUR	✓	1008	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	99	673	13
	B - A1094	129	0	303	7
	C - A12 South	712	295	1	0
	D - Old A12 (Farnham)	8	3	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	2	5	9
	B - A1094	0	0	3	1
	C - A12 South	3	2	100	0
	D - Old A12 (Farnham)	15	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.39	2.67	0.6	A	721	1081
B - A1094	0.59	10.54	1.4	B	403	604
C - A12 South	0.69	7.24	2.2	A	925	1387
D - Old A12 (Farnham)	0.01	4.14	0.0	A	10	15

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	591	148	224	2278	0.260	590	636	0.0	0.3	2.130	A
B - A1094	330	83	516	928	0.356	328	298	0.0	0.5	5.979	A
C - A12 South	759	190	112	1633	0.465	755	733	0.0	0.9	4.087	A
D - Old A12 (Farnham)	8	2	852	1062	0.008	8	15	0.0	0.0	3.417	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	706	177	268	2250	0.314	706	762	0.3	0.5	2.330	A
B - A1094	395	99	618	885	0.446	394	356	0.5	0.8	7.318	A
C - A12 South	906	227	134	1622	0.559	905	877	0.9	1.3	5.008	A
D - Old A12 (Farnham)	10	3	1020	986	0.010	10	18	0.0	0.0	3.687	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	865	216	328	2213	0.391	864	932	0.5	0.6	2.667	A
B - A1094	483	121	756	825	0.586	481	436	0.8	1.4	10.398	B
C - A12 South	1110	277	164	1607	0.691	1106	1073	1.3	2.2	7.138	A
D - Old A12 (Farnham)	12	3	1247	884	0.014	12	23	0.0	0.0	4.130	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	865	216	329	2212	0.391	865	935	0.6	0.6	2.670	A
B - A1094	483	121	757	825	0.586	483	437	1.4	1.4	10.541	B
C - A12 South	1110	277	165	1606	0.691	1110	1076	2.2	2.2	7.242	A
D - Old A12 (Farnham)	12	3	1252	882	0.014	12	23	0.0	0.0	4.139	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	706	177	270	2249	0.314	707	767	0.6	0.5	2.334	A
B - A1094	395	99	619	884	0.446	397	358	1.4	0.8	7.423	A
C - A12 South	906	227	135	1621	0.559	910	880	2.2	1.3	5.087	A
D - Old A12 (Farnham)	10	3	1026	983	0.010	10	18	0.0	0.0	3.701	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	591	148	226	2277	0.260	592	641	0.5	0.4	2.136	A
B - A1094	330	83	518	927	0.356	331	299	0.8	0.6	6.052	A
C - A12 South	759	190	113	1632	0.465	760	737	1.3	0.9	4.137	A
D - Old A12 (Farnham)	8	2	858	1059	0.008	8	15	0.0	0.0	3.426	A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J6	A12 / A1094	Standard Roundabout		A, B, C, D	5.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	661	100.000
B - A1094		ONE HOUR	✓	424	100.000
C - A12 South		ONE HOUR	✓	1017	100.000
D - Old A12 (Farnham)		ONE HOUR	✓	7	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	2	67	584	8
	B - A1094	132	0	285	7
	C - A12 South	736	281	0	0
	D - Old A12 (Farnham)	4	2	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - A1094	C - A12 South	D - Old A12 (Farnham)
From	A - A12 North	0	0	2	13
	B - A1094	0	0	0	0
	C - A12 South	2	1	0	0
	D - Old A12 (Farnham)	24	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.32	2.31	0.5	A	607	910
B - A1094	0.52	8.49	1.1	A	389	584
C - A12 South	0.69	7.05	2.2	A	933	1400
D - Old A12 (Farnham)	0.01	4.31	0.0	A	6	9

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	498	124	212	2347	0.212	497	655	0.0	0.3	1.945	A
B - A1094	319	80	446	980	0.326	317	263	0.0	0.5	5.422	A
C - A12 South	766	191	111	1657	0.462	762	653	0.0	0.9	4.008	A
D - Old A12 (Farnham)	5	1	863	1015	0.005	5	11	0.0	0.0	3.564	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	595	149	254	2320	0.256	594	785	0.3	0.3	2.085	A
B - A1094	381	95	534	942	0.405	381	315	0.5	0.7	6.399	A
C - A12 South	914	229	133	1646	0.556	913	781	0.9	1.2	4.902	A
D - Old A12 (Farnham)	6	2	1033	942	0.006	6	13	0.0	0.0	3.844	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	728	182	311	2284	0.319	728	960	0.3	0.5	2.312	A
B - A1094	467	117	654	891	0.524	465	385	0.7	1.1	8.422	A
C - A12 South	1120	280	163	1630	0.687	1116	956	1.2	2.1	6.950	A
D - Old A12 (Farnham)	7	2	1264	845	0.009	7	16	0.0	0.0	4.298	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	728	182	312	2284	0.319	728	963	0.5	0.5	2.313	A
B - A1094	467	117	654	891	0.524	467	386	1.1	1.1	8.490	A
C - A12 South	1120	280	164	1630	0.687	1120	958	2.1	2.2	7.046	A
D - Old A12 (Farnham)	7	2	1268	843	0.009	7	16	0.0	0.0	4.307	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	595	149	256	2319	0.256	595	789	0.5	0.3	2.088	A
B - A1094	381	95	535	942	0.405	383	316	1.1	0.7	6.460	A
C - A12 South	914	229	134	1645	0.556	918	783	2.2	1.3	4.975	A
D - Old A12 (Farnham)	6	2	1039	940	0.006	6	13	0.0	0.0	3.856	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	498	124	214	2346	0.212	498	660	0.3	0.3	1.948	A
B - A1094	319	80	448	979	0.326	320	264	0.7	0.5	5.472	A
C - A12 South	766	191	112	1657	0.462	767	656	1.3	0.9	4.055	A
D - Old A12 (Farnham)	5	1	869	1012	0.005	5	11	0.0	0.0	3.576	A

Junctions 9
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Report generation date: 13/03/2020 12:56:27

- »Base Year, 6-7 AM
- »Base Year, 7-8 AM
- »Base Year, 8-9 AM
- »Base Year, 3-4 PM
- »Base Year, 5-6 PM
- »2023 Reference Case , 6-7 AM
- »2023 Reference Case , 7-8 AM
- »2023 Reference Case , 8-9 AM
- »2023 Reference Case , 3-4 PM
- »2023 Reference Case , 5-6 PM
- »2023 Early Years , 6-7 AM
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- »2023 Early Years , 5-6 PM
- »2028 Reference Case , 6-7 AM
- »2028 Reference Case , 7-8 AM
- »2028 Reference Case , 8-9 AM
- »2028 Reference Case , 3-4 PM
- »2028 Reference Case , 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case , 6-7 AM
- »2034 Reference Case , 7-8 AM
- »2034 Reference Case , 8-9 AM
- »2034 Reference Case , 3-4 PM
- »2034 Reference Case , 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM				7-8 AM				8-9 AM				3-4 PM				5-6 PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
Base Year																				
Stream B-C	0.1	5.80	0.09	A	0.2	7.24	0.18	A	0.4	8.78	0.27	A	0.1	7.40	0.13	A	0.1	6.87	0.09	A
Stream B-A	0.1	6.27	0.06	A	0.2	8.54	0.20	A	0.4	9.98	0.28	A	0.2	8.74	0.19	A	0.3	8.66	0.24	A
Stream C-AB	0.0	5.47	0.00	A	0.1	6.82	0.08	A	0.1	7.10	0.10	A	0.1	6.98	0.13	A	0.2	7.00	0.17	A
2023 Reference Case																				
Stream B-C	0.1	6.00	0.10	A	0.3	7.79	0.22	A	0.8	11.64	0.44	B	0.3	8.62	0.25	A	0.2	7.70	0.15	A
Stream B-A	0.1	6.40	0.09	A	0.3	9.49	0.24	A	0.5	12.31	0.35	B	0.3	11.10	0.25	B	0.5	10.80	0.33	B
Stream C-AB	0.0	5.52	0.01	A	0.1	6.97	0.11	A	0.2	7.68	0.16	A	0.2	7.71	0.18	A	0.3	7.72	0.23	A
2023 Early Years																				
Stream B-C	0.1	6.05	0.10	A	0.3	8.26	0.24	A	0.8	12.25	0.46	B	0.4	8.94	0.26	A	0.2	8.64	0.17	A
Stream B-A	0.1	6.53	0.09	A	0.4	10.87	0.28	B	0.6	13.71	0.38	B	0.4	11.63	0.26	B	0.7	12.97	0.41	B
Stream C-AB	0.0	5.55	0.01	A	0.1	7.13	0.11	A	0.2	7.67	0.15	A	0.2	7.94	0.18	A	0.2	7.73	0.18	A
2028 Reference Case																				

Stream B-C	0.1	6.05	0.10	A	0.3	7.99	0.25	A	1.1	13.38	0.52	B	0.3	8.35	0.23	A	0.2	8.10	0.20	A
Stream B-A	0.1	6.45	0.09	A	0.3	9.80	0.25	A	0.5	13.11	0.35	B	0.3	10.76	0.24	B	0.5	11.22	0.34	B
Stream C-AB	0.0	5.55	0.01	A	0.1	7.01	0.12	A	0.2	7.85	0.18	A	0.2	7.77	0.18	A	0.3	7.56	0.21	A
2028 Peak Construction																				
Stream B-C	0.1	6.19	0.10	A	0.3	8.27	0.25	A	1.1	14.25	0.53	B	0.3	8.70	0.24	A	0.3	8.58	0.21	A
Stream B-A	0.1	6.62	0.10	A	0.4	10.63	0.27	B	0.6	14.67	0.37	B	0.3	11.63	0.24	B	0.5	11.84	0.35	B
Stream C-AB	0.0	5.61	0.01	A	0.1	7.14	0.12	A	0.2	8.07	0.18	A	0.2	8.13	0.18	A	0.2	7.42	0.16	A
2034 Reference Case																				
Stream B-C	0.1	6.11	0.10	A	0.4	8.31	0.27	A	1.7	18.48	0.64	C	0.4	9.37	0.30	A	0.4	9.31	0.26	A
Stream B-A	0.1	6.53	0.09	A	0.4	10.38	0.27	B	0.8	16.91	0.44	C	0.4	12.12	0.28	B	0.7	13.58	0.42	B
Stream C-AB	0.0	5.60	0.01	A	0.2	7.19	0.15	A	0.3	8.44	0.23	A	0.3	8.25	0.21	A	0.3	8.04	0.24	A
2034 Operational Led																				
Stream B-C	0.1	6.04	0.10	A	0.4	8.21	0.27	A	1.8	19.13	0.65	C	0.4	9.27	0.30	A	0.3	9.08	0.26	A
Stream B-A	0.1	6.52	0.08	A	0.3	10.21	0.25	B	0.9	18.00	0.47	C	0.3	12.09	0.26	B	0.6	12.86	0.38	B
Stream C-AB	0.0	5.60	0.01	A	0.2	7.19	0.15	A	0.3	8.43	0.23	A	0.3	8.29	0.21	A	0.3	8.08	0.24	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

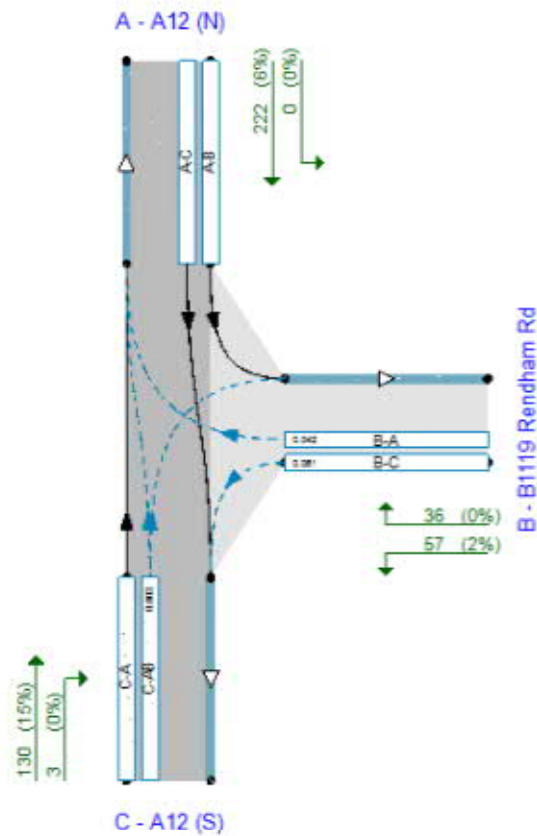
File summary

File Description

Title	A12 / B1119
Location	52.217006°, 1.476932°
Site number	7S a
Date	12/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKWSPGROUP\ukjgm001
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Flow shows original traffic demand (in left lane) and demand (in right lane) at RFC.

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		1.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 (N)		Major
B	B1119 Rendham Rd		Minor
C	A12 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 (S)	7.90	✓	9.45	✓	3.62	99.5	✓	11.10

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - B1119 Rendham Rd	One lane plus flare	10.00	10.00	8.90	6.30	5.00	✓	3.00	67	94

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	704	0.097	0.246	0.154	0.351
B-C	778	0.109	0.277	-	-
C-B	729	0.259	0.259	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	222	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	93	100.000
C - A12 (S)		ONE HOUR	✓	133	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	222
B - B1119 Rendham Rd	36	0	57
C - A12 (S)	130	3	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	6
B - B1119 Rendham Rd	0	0	2
C - A12 (S)	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.09	5.80	0.1	A	52	78
B-A	0.06	6.27	0.1	A	33	50
C-AB	0.00	5.47	0.0	A	3	4
C-A					119	179
A-B					0	0
A-C					204	306

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	43	11	709	0.061	43	0.0	0.1	5.403	A
B-A	27	7	642	0.042	27	0.0	0.0	5.849	A
C-AB	2	0.56	683	0.003	2	0.0	0.0	5.286	A
C-A	98	24			98				
A-B	0	0			0				
A-C	167	42			167				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	51	13	698	0.073	51	0.1	0.1	5.565	A
B-A	32	8	630	0.051	32	0.0	0.1	6.020	A
C-AB	3	0.67	674	0.004	3	0.0	0.0	5.360	A
C-A	117	29			117				
A-B	0	0			0				
A-C	200	50			200				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	63	16	683	0.092	63	0.1	0.1	5.804	A
B-A	40	10	614	0.065	40	0.1	0.1	6.271	A
C-AB	3	0.83	662	0.005	3	0.0	0.0	5.466	A
C-A	143	36			143				
A-B	0	0			0				
A-C	244	61			244				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	63	16	683	0.092	63	0.1	0.1	5.804	A

B-A	40	10	614	0.065	40	0.1	0.1	6.271	A
C-AB	3	0.83	662	0.005	3	0.0	0.0	5.466	A
C-A	143	36			143				
A-B	0	0			0				
A-C	244	61			244				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	51	13	698	0.073	51	0.1	0.1	5.567	A
B-A	32	8	630	0.051	32	0.1	0.1	6.022	A
C-AB	3	0.67	674	0.004	3	0.0	0.0	5.362	A
C-A	117	29			117				
A-B	0	0			0				
A-C	200	50			200				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	43	11	709	0.061	43	0.1	0.1	5.407	A
B-A	27	7	642	0.042	27	0.1	0.0	5.852	A
C-AB	2	0.56	683	0.003	2	0.0	0.0	5.288	A
C-A	98	24			98				
A-B	0	0			0				
A-C	167	42			167				

Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		1.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	383	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	190	100.000
C - A12 (S)		ONE HOUR	✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	383
B - B1119 Rendham Rd	93	0	97
C - A12 (S)	304	42	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	4
B - B1119 Rendham Rd	3	0	0
C - A12 (S)	8	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.18	7.24	0.2	A	89	134
B-A	0.20	8.54	0.2	A	85	128
C-AB	0.08	6.82	0.1	A	39	58
C-A					279	418
A-B					0	0
A-C					351	527

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	18	653	0.112	73	0.0	0.1	6.200	A
B-A	70	18	582	0.120	69	0.0	0.1	7.023	A
C-AB	32	8	608	0.052	31	0.0	0.1	6.243	A
C-A	229	57			229				
A-B	0	0			0				
A-C	288	72			288				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	22	632	0.138	87	0.1	0.2	6.599	A
B-A	84	21	557	0.150	83	0.1	0.2	7.594	A
C-AB	38	9	594	0.064	38	0.1	0.1	6.473	A
C-A	273	68			273				
A-B	0	0			0				
A-C	344	86			344				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	107	27	604	0.177	107	0.2	0.2	7.229	A
B-A	102	26	524	0.195	102	0.2	0.2	8.526	A
C-AB	46	12	574	0.081	46	0.1	0.1	6.816	A
C-A	335	84			335				
A-B	0	0			0				
A-C	422	105			422				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	107	27	604	0.177	107	0.2	0.2	7.236	A
B-A	102	26	524	0.195	102	0.2	0.2	8.536	A
C-AB	46	12	574	0.081	46	0.1	0.1	6.816	A
C-A	335	84			335				
A-B	0	0			0				
A-C	422	105			422				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	87	22	632	0.138	87	0.2	0.2	6.611	A
B-A	84	21	557	0.150	84	0.2	0.2	7.608	A
C-AB	38	9	594	0.064	38	0.1	0.1	6.477	A
C-A	273	68			273				
A-B	0	0			0				
A-C	344	86			344				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	73	18	652	0.112	73	0.2	0.1	6.215	A
B-A	70	18	581	0.120	70	0.2	0.1	7.045	A
C-AB	32	8	608	0.052	32	0.1	0.1	6.249	A
C-A	229	57			229				
A-B	0	0			0				
A-C	288	72			288				

Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	431	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	267	100.000
C - A12 (S)		ONE HOUR	✓	364	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	431
B - B1119 Rendham Rd	130	0	137
C - A12 (S)	313	51	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	8
B - B1119 Rendham Rd	2	0	2
C - A12 (S)	6	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.27	8.78	0.4	A	126	189
B-A	0.28	9.98	0.4	A	119	179
C-AB	0.10	7.10	0.1	A	47	70
C-A					287	431
A-B					0	0
A-C					395	593

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	26	620	0.166	102	0.0	0.2	6.947	A
B-A	98	24	569	0.172	97	0.0	0.2	7.614	A
C-AB	38	10	603	0.064	38	0.0	0.1	6.372	A
C-A	236	59			236				
A-B	0	0			0				
A-C	324	81			324				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	595	0.207	123	0.2	0.3	7.616	A
B-A	117	29	542	0.216	117	0.2	0.3	8.461	A
C-AB	46	11	586	0.078	46	0.1	0.1	6.662	A
C-A	281	70			281				
A-B	0	0			0				
A-C	387	97			387				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	151	38	561	0.269	150	0.3	0.4	8.758	A
B-A	143	36	504	0.284	143	0.3	0.4	9.952	A
C-AB	56	14	563	0.100	56	0.1	0.1	7.097	A
C-A	345	86			345				
A-B	0	0			0				
A-C	475	119			475				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	151	38	561	0.269	151	0.4	0.4	8.779	A
B-A	143	36	504	0.284	143	0.4	0.4	9.978	A
C-AB	56	14	563	0.100	56	0.1	0.1	7.100	A
C-A	345	86			345				
A-B	0	0			0				
A-C	475	119			475				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	595	0.207	124	0.4	0.3	7.642	A
B-A	117	29	542	0.216	117	0.4	0.3	8.491	A
C-AB	46	11	586	0.078	46	0.1	0.1	6.664	A
C-A	281	70			281				
A-B	0	0			0				
A-C	387	97			387				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	103	26	619	0.167	103	0.3	0.2	6.978	A
B-A	98	24	569	0.172	98	0.3	0.2	7.651	A
C-AB	38	10	603	0.064	38	0.1	0.1	6.379	A
C-A	236	59			236				
A-B	0	0			0				
A-C	324	81			324				

Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		1.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	388	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	152	100.000
C - A12 (S)		ONE HOUR	✓	435	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	388
B - B1119 Rendham Rd	87	0	65
C - A12 (S)	366	69	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	9
B - B1119 Rendham Rd	3	0	5
C - A12 (S)	8	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.13	7.40	0.1	A	60	89
B-A	0.19	8.74	0.2	A	80	120
C-AB	0.13	6.98	0.1	A	63	95
C-A					336	504
A-B					0	0
A-C					356	534

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	605	0.081	49	0.0	0.1	6.468	A
B-A	65	16	575	0.114	65	0.0	0.1	7.046	A
C-AB	52	13	628	0.083	52	0.0	0.1	6.236	A
C-A	276	69			276				
A-B	0	0			0				
A-C	292	73			292				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	58	15	585	0.100	58	0.1	0.1	6.833	A
B-A	78	20	547	0.143	78	0.1	0.2	7.677	A
C-AB	62	16	613	0.101	62	0.1	0.1	6.534	A
C-A	329	82			329				
A-B	0	0			0				
A-C	349	87			349				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	72	18	558	0.128	71	0.1	0.1	7.399	A
B-A	96	24	508	0.189	96	0.2	0.2	8.733	A
C-AB	76	19	591	0.128	76	0.1	0.1	6.981	A
C-A	403	101			403				
A-B	0	0			0				
A-C	427	107			427				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	72	18	558	0.128	72	0.1	0.1	7.403	A
B-A	96	24	507	0.189	96	0.2	0.2	8.744	A
C-AB	76	19	591	0.128	76	0.1	0.1	6.984	A
C-A	403	101			403				
A-B	0	0			0				
A-C	427	107			427				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	58	15	585	0.100	59	0.1	0.1	6.838	A
B-A	78	20	547	0.143	78	0.2	0.2	7.692	A
C-AB	62	16	613	0.101	62	0.1	0.1	6.540	A
C-A	329	82			329				
A-B	0	0			0				
A-C	349	87			349				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	49	12	605	0.081	49	0.1	0.1	6.482	A
B-A	65	16	575	0.114	66	0.2	0.1	7.069	A
C-AB	52	13	628	0.083	52	0.1	0.1	6.248	A
C-A	276	69			276				
A-B	0	0			0				
A-C	292	73			292				

Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	337	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	166	100.000
C - A12 (S)		ONE HOUR	✓	489	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	337
B - B1119 Rendham Rd	120	0	46
C - A12 (S)	391	98	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	5
B - B1119 Rendham Rd	0	0	0
C - A12 (S)	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.09	6.87	0.1	A	42	63
B-A	0.24	8.66	0.3	A	110	165
C-AB	0.17	7.00	0.2	A	90	135
C-A					359	538
A-B					0	0
A-C					309	464

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	35	9	620	0.056	34	0.0	0.1	6.144	A
B-A	90	23	618	0.146	90	0.0	0.2	6.805	A
C-AB	74	18	653	0.113	73	0.0	0.1	6.199	A
C-A	294	74			294				
A-B	0	0			0				
A-C	254	63			254				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	601	0.069	41	0.1	0.1	6.430	A
B-A	108	27	588	0.183	108	0.2	0.2	7.483	A
C-AB	88	22	640	0.138	88	0.1	0.2	6.517	A
C-A	352	88			352				
A-B	0	0			0				
A-C	303	76			303				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	51	13	575	0.088	51	0.1	0.1	6.868	A
B-A	132	33	548	0.241	132	0.2	0.3	8.645	A
C-AB	108	27	622	0.174	108	0.2	0.2	6.997	A
C-A	430	108			430				
A-B	0	0			0				
A-C	371	93			371				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	51	13	575	0.088	51	0.1	0.1	6.870	A
B-A	132	33	548	0.241	132	0.3	0.3	8.661	A
C-AB	108	27	622	0.174	108	0.2	0.2	7.003	A
C-A	430	108			430				
A-B	0	0			0				
A-C	371	93			371				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	601	0.069	41	0.1	0.1	6.434	A
B-A	108	27	588	0.183	108	0.3	0.2	7.502	A
C-AB	88	22	640	0.138	88	0.2	0.2	6.524	A
C-A	352	88			352				
A-B	0	0			0				
A-C	303	76			303				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	35	9	620	0.056	35	0.1	0.1	6.157	A
B-A	90	23	618	0.146	91	0.2	0.2	6.829	A
C-AB	74	18	653	0.113	74	0.2	0.1	6.214	A
C-A	294	74			294				
A-B	0	0			0				
A-C	254	63			254				

2023 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		1.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	240	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	107	100.000
C - A12 (S)		ONE HOUR	✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	240
B - B1119 Rendham Rd	48	0	59
C - A12 (S)	139	4	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	6
B - B1119 Rendham Rd	0	0	2
C - A12 (S)	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.10	6.00	0.1	A	54	81
B-A	0.09	6.40	0.1	A	44	67
C-AB	0.01	5.52	0.0	A	4	5
C-A					127	191
A-B					0	0
A-C					221	331

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	693	0.064	44	0.0	0.1	5.541	A
B-A	36	9	647	0.056	36	0.0	0.1	5.894	A
C-AB	3	0.73	679	0.004	3	0.0	0.0	5.321	A
C-A	105	26			105				
A-B	0	0			0				
A-C	181	45			181				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	681	0.078	53	0.1	0.1	5.728	A
B-A	43	11	634	0.069	43	0.1	0.1	6.097	A
C-AB	3	0.87	670	0.005	3	0.0	0.0	5.403	A
C-A	125	31			125				
A-B	0	0			0				
A-C	216	54			216				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	665	0.097	65	0.1	0.1	6.000	A
B-A	53	13	616	0.086	53	0.1	0.1	6.400	A
C-AB	4	1	656	0.007	4	0.0	0.0	5.520	A
C-A	153	38			153				
A-B	0	0			0				
A-C	265	66			265				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	665	0.097	65	0.1	0.1	6.001	A
B-A	53	13	616	0.086	53	0.1	0.1	6.400	A
C-AB	4	1	656	0.007	4	0.0	0.0	5.520	A
C-A	153	38			153				
A-B	0	0			0				
A-C	265	66			265				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	681	0.078	53	0.1	0.1	5.730	A
B-A	43	11	634	0.069	44	0.1	0.1	6.101	A
C-AB	3	0.87	670	0.005	3	0.0	0.0	5.403	A
C-A	125	31			125				
A-B	0	0			0				
A-C	216	54			216				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	693	0.064	44	0.1	0.1	5.548	A
B-A	36	9	647	0.056	36	0.1	0.1	5.898	A
C-AB	3	0.73	679	0.004	3	0.0	0.0	5.321	A
C-A	105	26			105				
A-B	0	0			0				
A-C	181	45			181				

2023 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	394	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	231	100.000
C - A12 (S)		ONE HOUR	✓	431	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	394
B - B1119 Rendham Rd	110	0	121
C - A12 (S)	370	60	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	6
B - B1119 Rendham Rd	3	0	0
C - A12 (S)	8	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.22	7.79	0.3	A	111	166
B-A	0.24	9.49	0.3	A	101	151
C-AB	0.11	6.97	0.1	A	56	83
C-A					340	509
A-B					0	0
A-C					362	543

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	648	0.140	90	0.0	0.2	6.443	A
B-A	83	21	565	0.146	82	0.0	0.2	7.438	A
C-AB	46	11	619	0.074	45	0.0	0.1	6.275	A
C-A	279	70			279				
A-B	0	0			0				
A-C	297	74			297				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	27	626	0.173	108	0.2	0.2	6.950	A
B-A	99	25	538	0.183	98	0.2	0.2	8.188	A
C-AB	54	14	604	0.090	54	0.1	0.1	6.553	A
C-A	333	83			333				
A-B	0	0			0				
A-C	355	89			355				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	595	0.223	133	0.2	0.3	7.780	A
B-A	121	30	500	0.242	120	0.2	0.3	9.474	A
C-AB	67	17	583	0.114	66	0.1	0.1	6.970	A
C-A	407	102			407				
A-B	0	0			0				
A-C	434	109			434				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	595	0.224	133	0.3	0.3	7.792	A
B-A	121	30	500	0.242	121	0.3	0.3	9.493	A
C-AB	67	17	583	0.114	67	0.1	0.1	6.973	A
C-A	407	102			407				
A-B	0	0			0				
A-C	434	109			434				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	27	626	0.173	109	0.3	0.2	6.964	A
B-A	99	25	538	0.183	99	0.3	0.2	8.210	A
C-AB	54	14	604	0.090	54	0.1	0.1	6.559	A
C-A	333	83			333				
A-B	0	0			0				
A-C	355	89			355				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	648	0.140	91	0.2	0.2	6.464	A
B-A	83	21	565	0.146	83	0.2	0.2	7.467	A
C-AB	46	11	619	0.074	46	0.1	0.1	6.284	A
C-A	279	70			279				
A-B	0	0			0				
A-C	297	74			297				

2023 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		3.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	490	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	364	100.000
C - A12 (S)		ONE HOUR	✓	454	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	490
B - B1119 Rendham Rd	141	0	223
C - A12 (S)	371	83	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	8
B - B1119 Rendham Rd	2	0	1
C - A12 (S)	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.44	11.64	0.8	B	205	307
B-A	0.35	12.31	0.5	B	129	193
C-AB	0.16	7.68	0.2	A	76	114
C-A					341	511
A-B					0	0
A-C					450	674

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	168	42	627	0.268	167	0.0	0.4	7.795	A
B-A	106	26	527	0.201	105	0.0	0.2	8.508	A
C-AB	62	16	606	0.103	62	0.0	0.1	6.610	A
C-A	279	70			279				
A-B	0	0			0				
A-C	369	92			369				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	201	50	598	0.336	200	0.4	0.5	9.045	A
B-A	126	32	494	0.256	126	0.2	0.3	9.761	A
C-AB	74	19	587	0.127	74	0.1	0.1	7.024	A
C-A	334	83			334				
A-B	0	0			0				
A-C	440	110			440				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	246	61	555	0.443	245	0.5	0.8	11.553	B
B-A	155	39	447	0.346	154	0.3	0.5	12.244	B
C-AB	91	23	560	0.163	91	0.1	0.2	7.675	A
C-A	409	102			409				
A-B	0	0			0				
A-C	539	135			539				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	246	61	555	0.443	246	0.8	0.8	11.644	B
B-A	155	39	447	0.346	155	0.5	0.5	12.310	B
C-AB	91	23	560	0.163	91	0.2	0.2	7.681	A
C-A	409	102			409				
A-B	0	0			0				
A-C	539	135			539				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	201	50	597	0.336	202	0.8	0.5	9.129	A
B-A	126	32	494	0.256	127	0.5	0.3	9.822	A
C-AB	74	19	587	0.127	75	0.2	0.1	7.035	A
C-A	334	83			334				
A-B	0	0			0				
A-C	440	110			440				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	168	42	627	0.268	169	0.5	0.4	7.871	A
B-A	106	26	527	0.201	106	0.3	0.3	8.566	A
C-AB	62	16	606	0.103	62	0.1	0.1	6.623	A
C-A	279	70			279				
A-B	0	0			0				
A-C	369	92			369				

2023 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	489	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	229	100.000
C - A12 (S)		ONE HOUR	✓	541	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	489
B - B1119 Rendham Rd	100	0	129
C - A12 (S)	451	90	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	8
B - B1119 Rendham Rd	3	0	2
C - A12 (S)	8	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	8.62	0.3	A	119	178
B-A	0.25	11.10	0.3	B	92	138
C-AB	0.18	7.71	0.2	A	83	124
C-A					413	620
A-B					0	0
A-C					449	673

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	97	24	625	0.156	97	0.0	0.2	6.804	A
B-A	75	19	516	0.146	75	0.0	0.2	8.140	A
C-AB	68	17	613	0.111	67	0.0	0.1	6.595	A
C-A	339	85			339				
A-B	0	0			0				
A-C	368	92			368				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	29	598	0.194	116	0.2	0.2	7.464	A
B-A	90	23	482	0.187	90	0.2	0.2	9.172	A
C-AB	81	20	593	0.137	81	0.1	0.2	7.027	A
C-A	405	101			405				
A-B	0	0			0				
A-C	440	110			440				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	142	36	560	0.254	142	0.2	0.3	8.599	A
B-A	110	28	435	0.254	110	0.2	0.3	11.070	B
C-AB	99	25	566	0.175	99	0.2	0.2	7.708	A
C-A	496	124			496				
A-B	0	0			0				
A-C	539	135			539				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	142	36	560	0.254	142	0.3	0.3	8.619	A
B-A	110	28	435	0.254	110	0.3	0.3	11.099	B
C-AB	99	25	566	0.175	99	0.2	0.2	7.714	A
C-A	496	124			496				
A-B	0	0			0				
A-C	539	135			539				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	29	598	0.194	117	0.3	0.2	7.490	A
B-A	90	23	482	0.187	91	0.3	0.2	9.205	A
C-AB	81	20	593	0.137	81	0.2	0.2	7.035	A
C-A	405	101			405				
A-B	0	0			0				
A-C	440	110			440				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	97	24	624	0.156	98	0.2	0.2	6.834	A
B-A	75	19	516	0.146	76	0.2	0.2	8.175	A
C-AB	68	17	613	0.111	68	0.2	0.1	6.612	A
C-A	339	85			339				
A-B	0	0			0				
A-C	368	92			368				

2023 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	391	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	225	100.000
C - A12 (S)		ONE HOUR	✓	581	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	391
B - B1119 Rendham Rd	150	0	75
C - A12 (S)	454	127	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	7
B - B1119 Rendham Rd	0	0	0
C - A12 (S)	4	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.15	7.70	0.2	A	69	103
B-A	0.33	10.80	0.5	B	138	206
C-AB	0.23	7.72	0.3	A	117	175
C-A					417	625
A-B					0	0
A-C					359	538

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	57	14	608	0.093	56	0.0	0.1	6.517	A
B-A	113	28	582	0.194	112	0.0	0.2	7.647	A
C-AB	96	24	644	0.149	95	0.0	0.2	6.553	A
C-A	342	86			342				
A-B	0	0			0				
A-C	294	74			294				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	585	0.115	67	0.1	0.1	6.957	A
B-A	135	34	547	0.247	134	0.2	0.3	8.726	A
C-AB	114	29	628	0.182	114	0.2	0.2	7.003	A
C-A	408	102			408				
A-B	0	0			0				
A-C	351	88			351				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	83	21	550	0.150	82	0.1	0.2	7.686	A
B-A	165	41	498	0.331	164	0.3	0.5	10.756	B
C-AB	140	35	606	0.231	140	0.2	0.3	7.708	A
C-A	500	125			500				
A-B	0	0			0				
A-C	430	108			430				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	83	21	550	0.150	83	0.2	0.2	7.699	A
B-A	165	41	498	0.331	165	0.5	0.5	10.798	B
C-AB	140	35	606	0.231	140	0.3	0.3	7.717	A
C-A	500	125			500				
A-B	0	0			0				
A-C	430	108			430				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	584	0.116	68	0.2	0.1	6.973	A
B-A	135	34	547	0.247	135	0.5	0.3	8.769	A
C-AB	114	29	628	0.182	115	0.3	0.2	7.017	A
C-A	408	102			408				
A-B	0	0			0				
A-C	351	88			351				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	57	14	608	0.093	57	0.1	0.1	6.535	A
B-A	113	28	581	0.194	113	0.3	0.2	7.694	A
C-AB	96	24	644	0.149	96	0.2	0.2	6.575	A
C-A	342	86			342				
A-B	0	0			0				
A-C	294	74			294				

2023 Early Years , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		1.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	252	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	108	100.000
C - A12 (S)		ONE HOUR	✓	177	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	252
B - B1119 Rendham Rd	49	0	59
C - A12 (S)	173	4	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	6
B - B1119 Rendham Rd	0	0	2
C - A12 (S)	19	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.10	6.05	0.1	A	54	81
B-A	0.09	6.53	0.1	A	45	68
C-AB	0.01	5.55	0.0	A	4	5
C-A					159	238
A-B					0	0
A-C					232	348

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	689	0.064	44	0.0	0.1	5.575	A
B-A	37	9	640	0.058	37	0.0	0.1	5.961	A
C-AB	3	0.73	677	0.004	3	0.0	0.0	5.339	A
C-A	130	33			130				
A-B	0	0			0				
A-C	190	48			190				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	677	0.078	53	0.1	0.1	5.769	A
B-A	44	11	626	0.071	44	0.1	0.1	6.190	A
C-AB	3	0.87	667	0.005	3	0.0	0.0	5.425	A
C-A	155	39			155				
A-B	0	0			0				
A-C	227	57			227				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	659	0.098	65	0.1	0.1	6.053	A
B-A	54	14	606	0.090	54	0.1	0.1	6.530	A
C-AB	4	1	653	0.007	4	0.0	0.0	5.549	A
C-A	190	48			190				
A-B	0	0			0				
A-C	278	69			278				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	659	0.098	65	0.1	0.1	6.054	A
B-A	54	14	606	0.090	54	0.1	0.1	6.530	A
C-AB	4	1	653	0.007	4	0.0	0.0	5.549	A
C-A	190	48			190				
A-B	0	0			0				
A-C	278	69			278				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	677	0.078	53	0.1	0.1	5.774	A
B-A	44	11	626	0.071	44	0.1	0.1	6.194	A
C-AB	3	0.87	667	0.005	3	0.0	0.0	5.425	A
C-A	155	39			155				
A-B	0	0			0				
A-C	227	57			227				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	689	0.064	44	0.1	0.1	5.584	A
B-A	37	9	641	0.058	37	0.1	0.1	5.966	A
C-AB	3	0.73	677	0.004	3	0.0	0.0	5.341	A
C-A	130	33			130				
A-B	0	0			0				
A-C	190	48			190				

2023 Early Years , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	444	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	240	100.000
C - A12 (S)		ONE HOUR	✓	565	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	444
B - B1119 Rendham Rd	116	0	124
C - A12 (S)	510	54	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	6
B - B1119 Rendham Rd	3	0	0
C - A12 (S)	13	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.24	8.26	0.3	A	114	170
B-A	0.28	10.87	0.4	B	106	159
C-AB	0.11	7.13	0.1	A	50	75
C-A					468	702
A-B					0	0
A-C					408	612

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	93	23	633	0.147	93	0.0	0.2	6.648	A
B-A	87	22	538	0.162	86	0.0	0.2	7.964	A
C-AB	41	10	605	0.068	41	0.0	0.1	6.375	A
C-A	384	96			384				
A-B	0	0			0				
A-C	335	84			335				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	111	28	608	0.183	111	0.2	0.2	7.240	A
B-A	104	26	504	0.206	104	0.2	0.3	8.981	A
C-AB	49	12	588	0.083	49	0.1	0.1	6.675	A
C-A	459	115			459				
A-B	0	0			0				
A-C	400	100			400				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	136	34	572	0.238	136	0.2	0.3	8.246	A
B-A	127	32	458	0.278	127	0.3	0.4	10.843	B
C-AB	60	15	565	0.106	60	0.1	0.1	7.128	A
C-A	562	140			562				
A-B	0	0			0				
A-C	489	122			489				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	136	34	572	0.238	136	0.3	0.3	8.263	A
B-A	127	32	458	0.278	127	0.4	0.4	10.875	B
C-AB	60	15	565	0.106	60	0.1	0.1	7.131	A
C-A	562	140			562				
A-B	0	0			0				
A-C	489	122			489				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	111	28	608	0.183	112	0.3	0.2	7.264	A
B-A	104	26	504	0.206	105	0.4	0.3	9.012	A
C-AB	49	12	588	0.083	49	0.1	0.1	6.678	A
C-A	459	115			459				
A-B	0	0			0				
A-C	400	100			400				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	93	23	633	0.147	93	0.2	0.2	6.677	A
B-A	87	22	538	0.162	87	0.3	0.2	8.001	A
C-AB	41	10	605	0.068	41	0.1	0.1	6.381	A
C-A	384	96			384				
A-B	0	0			0				
A-C	335	84			335				

2023 Early Years , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		3.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	505	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	370	100.000
C - A12 (S)		ONE HOUR	✓	520	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	505
B - B1119 Rendham Rd	146	0	224
C - A12 (S)	446	74	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	10
B - B1119 Rendham Rd	2	0	1
C - A12 (S)	17	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.46	12.25	0.8	B	206	309
B-A	0.38	13.71	0.6	B	134	200
C-AB	0.15	7.67	0.2	A	68	101
C-A					409	614
A-B					0	0
A-C					463	695

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	169	42	619	0.273	167	0.0	0.4	7.951	A
B-A	110	27	511	0.214	109	0.0	0.3	8.918	A
C-AB	55	14	599	0.093	55	0.0	0.1	6.620	A
C-A	336	84			336				
A-B	0	0			0				
A-C	380	95			380				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	202	50	587	0.343	201	0.4	0.5	9.308	A
B-A	131	33	475	0.275	130	0.3	0.4	10.434	B
C-AB	66	17	578	0.115	66	0.1	0.1	7.028	A
C-A	401	100			401				
A-B	0	0			0				
A-C	454	113			454				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	247	62	541	0.456	246	0.5	0.8	12.134	B
B-A	160	40	423	0.379	159	0.4	0.6	13.615	B
C-AB	81	20	550	0.148	81	0.1	0.2	7.672	A
C-A	491	123			491				
A-B	0	0			0				
A-C	556	139			556				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	247	62	541	0.457	247	0.8	0.8	12.247	B
B-A	160	40	423	0.379	160	0.6	0.6	13.711	B
C-AB	81	20	550	0.148	81	0.2	0.2	7.675	A
C-A	491	123			491				
A-B	0	0			0				
A-C	556	139			556				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	202	50	587	0.344	203	0.8	0.5	9.408	A
B-A	131	33	475	0.276	132	0.6	0.4	10.516	B
C-AB	66	17	578	0.115	66	0.2	0.1	7.038	A
C-A	401	100			401				
A-B	0	0			0				
A-C	454	113			454				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	169	42	618	0.273	169	0.5	0.4	8.036	A
B-A	110	27	511	0.215	110	0.4	0.3	8.991	A
C-AB	55	14	599	0.093	56	0.1	0.1	6.631	A
C-A	336	84			336				
A-B	0	0			0				
A-C	380	95			380				

2023 Early Years , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	508	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	230	100.000
C - A12 (S)		ONE HOUR	✓	531	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	508
B - B1119 Rendham Rd	101	0	129
C - A12 (S)	441	90	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	14
B - B1119 Rendham Rd	3	0	2
C - A12 (S)	12	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.26	8.94	0.4	A	119	178
B-A	0.26	11.63	0.4	B	93	139
C-AB	0.18	7.94	0.2	A	83	124
C-A					404	606
A-B					0	0
A-C					466	700

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	97	24	615	0.158	97	0.0	0.2	6.940	A
B-A	76	19	507	0.150	75	0.0	0.2	8.324	A
C-AB	68	17	604	0.112	67	0.0	0.1	6.706	A
C-A	332	83			332				
A-B	0	0			0				
A-C	383	96			383				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	29	586	0.198	116	0.2	0.2	7.660	A
B-A	91	23	471	0.193	91	0.2	0.2	9.459	A
C-AB	81	20	582	0.139	81	0.1	0.2	7.177	A
C-A	396	99			396				
A-B	0	0			0				
A-C	457	114			457				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	142	36	545	0.261	142	0.2	0.3	8.922	A
B-A	111	28	421	0.265	111	0.2	0.4	11.595	B
C-AB	99	25	553	0.180	99	0.2	0.2	7.930	A
C-A	485	121			485				
A-B	0	0			0				
A-C	560	140			560				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	142	36	545	0.261	142	0.3	0.4	8.944	A
B-A	111	28	421	0.265	111	0.4	0.4	11.630	B
C-AB	99	25	553	0.180	99	0.2	0.2	7.937	A
C-A	485	121			485				
A-B	0	0			0				
A-C	560	140			560				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	116	29	585	0.199	117	0.4	0.3	7.687	A
B-A	91	23	471	0.193	91	0.4	0.2	9.496	A
C-AB	81	20	582	0.139	81	0.2	0.2	7.186	A
C-A	396	99			396				
A-B	0	0			0				
A-C	457	114			457				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	97	24	614	0.159	98	0.3	0.2	6.975	A
B-A	76	19	507	0.150	76	0.2	0.2	8.362	A
C-AB	68	17	604	0.112	68	0.2	0.1	6.720	A
C-A	332	83			332				
A-B	0	0			0				
A-C	383	96			383				

2023 Early Years , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	494	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	247	100.000
C - A12 (S)		ONE HOUR	✓	589	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
From	A - A12 (N)	0	0	494
	B - B1119 Rendham Rd	172	0	75
	C - A12 (S)	497	92	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
From	A - A12 (N)	0	0	11
	B - B1119 Rendham Rd	0	0	0
	C - A12 (S)	7	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.17	8.64	0.2	A	69	103
B-A	0.41	12.97	0.7	B	158	237
C-AB	0.18	7.73	0.2	A	84	127
C-A					456	685
A-B					0	0
A-C					453	680

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	57	14	574	0.098	56	0.0	0.1	6.940	A
B-A	129	32	561	0.231	128	0.0	0.3	8.290	A
C-AB	69	17	616	0.112	69	0.0	0.1	6.570	A
C-A	374	94			374				
A-B	0	0			0				
A-C	372	93			372				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	544	0.124	67	0.1	0.1	7.543	A
B-A	155	39	522	0.296	154	0.3	0.4	9.784	A
C-AB	83	21	596	0.139	83	0.1	0.2	7.014	A
C-A	447	112			447				
A-B	0	0			0				
A-C	444	111			444				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	83	21	500	0.165	82	0.1	0.2	8.618	A
B-A	189	47	467	0.406	188	0.4	0.7	12.884	B
C-AB	101	25	567	0.179	101	0.2	0.2	7.721	A
C-A	548	137			548				
A-B	0	0			0				
A-C	544	136			544				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	83	21	499	0.165	83	0.2	0.2	8.636	A
B-A	189	47	467	0.406	189	0.7	0.7	12.975	B
C-AB	101	25	567	0.179	101	0.2	0.2	7.727	A
C-A	548	137			548				
A-B	0	0			0				
A-C	544	136			544				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	544	0.124	68	0.2	0.1	7.562	A
B-A	155	39	522	0.296	156	0.7	0.4	9.865	A
C-AB	83	21	596	0.139	83	0.2	0.2	7.023	A
C-A	447	112			447				
A-B	0	0			0				
A-C	444	111			444				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	57	14	574	0.098	57	0.1	0.1	6.962	A
B-A	129	32	561	0.231	130	0.4	0.3	8.359	A
C-AB	69	17	616	0.112	69	0.2	0.1	6.586	A
C-A	374	94			374				
A-B	0	0			0				
A-C	372	93			372				

2028 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		1.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	249	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	108	100.000
C - A12 (S)		ONE HOUR	✓	151	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	249
B - B1119 Rendham Rd	49	0	59
C - A12 (S)	146	5	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	6
B - B1119 Rendham Rd	0	0	2
C - A12 (S)	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.10	6.05	0.1	A	54	81
B-A	0.09	6.45	0.1	A	45	68
C-AB	0.01	5.55	0.0	A	4	7
C-A					134	201
A-B					0	0
A-C					229	343

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	690	0.064	44	0.0	0.1	5.571	A
B-A	37	9	645	0.058	37	0.0	0.1	5.915	A
C-AB	4	0.92	677	0.005	4	0.0	0.0	5.342	A
C-A	110	27			110				
A-B	0	0			0				
A-C	188	47			188				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	677	0.078	53	0.1	0.1	5.764	A
B-A	44	11	631	0.070	44	0.1	0.1	6.132	A
C-AB	4	1	667	0.007	4	0.0	0.0	5.429	A
C-A	131	33			131				
A-B	0	0			0				
A-C	224	56			224				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	660	0.098	65	0.1	0.1	6.046	A
B-A	54	14	612	0.089	54	0.1	0.1	6.451	A
C-AB	5	1	653	0.008	5	0.0	0.0	5.553	A
C-A	161	40			161				
A-B	0	0			0				
A-C	275	69			275				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	660	0.098	65	0.1	0.1	6.046	A
B-A	54	14	612	0.089	54	0.1	0.1	6.451	A
C-AB	5	1	653	0.008	5	0.0	0.0	5.553	A
C-A	161	40			161				
A-B	0	0			0				
A-C	275	69			275				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	677	0.078	53	0.1	0.1	5.766	A
B-A	44	11	631	0.070	44	0.1	0.1	6.134	A
C-AB	4	1	667	0.007	4	0.0	0.0	5.431	A
C-A	131	33			131				
A-B	0	0			0				
A-C	224	56			224				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	690	0.064	44	0.1	0.1	5.580	A
B-A	37	9	645	0.058	37	0.1	0.1	5.921	A
C-AB	4	0.92	677	0.005	4	0.0	0.0	5.344	A
C-A	110	27			110				
A-B	0	0			0				
A-C	188	47			188				

2028 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	397	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	246	100.000
C - A12 (S)		ONE HOUR	✓	463	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	397
B - B1119 Rendham Rd	112	0	134
C - A12 (S)	398	64	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	5
B - B1119 Rendham Rd	3	0	0
C - A12 (S)	7	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	7.99	0.3	A	123	184
B-A	0.25	9.80	0.3	A	103	154
C-AB	0.12	7.01	0.1	A	59	89
C-A					365	548
A-B					0	0
A-C					365	547

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	653	0.154	100	0.0	0.2	6.506	A
B-A	84	21	557	0.151	83	0.0	0.2	7.593	A
C-AB	49	12	620	0.078	48	0.0	0.1	6.289	A
C-A	300	75			300				
A-B	0	0			0				
A-C	299	75			299				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	120	30	630	0.191	120	0.2	0.2	7.056	A
B-A	100	25	529	0.190	100	0.2	0.2	8.394	A
C-AB	58	14	605	0.096	58	0.1	0.1	6.576	A
C-A	358	89			358				
A-B	0	0			0				
A-C	357	89			357				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	147	37	598	0.246	147	0.2	0.3	7.972	A
B-A	123	31	490	0.251	123	0.2	0.3	9.783	A
C-AB	71	18	584	0.122	71	0.1	0.1	7.008	A
C-A	438	110			438				
A-B	0	0			0				
A-C	438	109			438				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	147	37	598	0.246	147	0.3	0.3	7.987	A
B-A	123	31	490	0.251	123	0.3	0.3	9.805	A
C-AB	71	18	584	0.122	71	0.1	0.1	7.010	A
C-A	438	110			438				
A-B	0	0			0				
A-C	438	109			438				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	120	30	630	0.191	121	0.3	0.2	7.078	A
B-A	100	25	529	0.190	101	0.3	0.2	8.419	A
C-AB	58	14	605	0.096	58	0.1	0.1	6.582	A
C-A	358	89			358				
A-B	0	0			0				
A-C	357	89			357				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	652	0.154	101	0.2	0.2	6.532	A
B-A	84	21	557	0.151	84	0.2	0.2	7.625	A
C-AB	49	12	620	0.078	49	0.1	0.1	6.299	A
C-A	300	75			300				
A-B	0	0			0				
A-C	299	75			299				

2028 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		4.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	499	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	398	100.000
C - A12 (S)		ONE HOUR	✓	519	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	499
B - B1119 Rendham Rd	135	0	263
C - A12 (S)	427	92	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	8
B - B1119 Rendham Rd	2	0	1
C - A12 (S)	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.52	13.38	1.1	B	242	362
B-A	0.35	13.11	0.5	B	123	185
C-AB	0.18	7.85	0.2	A	84	126
C-A					392	588
A-B					0	0
A-C					458	687

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	198	50	633	0.313	196	0.0	0.4	8.212	A
B-A	101	25	511	0.198	100	0.0	0.2	8.737	A
C-AB	69	17	607	0.114	69	0.0	0.1	6.686	A
C-A	322	80			322				
A-B	0	0			0				
A-C	376	94			376				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	237	59	603	0.393	236	0.4	0.6	9.790	A
B-A	121	30	476	0.254	121	0.2	0.3	10.120	B
C-AB	82	21	587	0.140	82	0.1	0.2	7.133	A
C-A	384	96			384				
A-B	0	0			0				
A-C	449	112			449				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	290	72	559	0.519	288	0.6	1.0	13.212	B
B-A	148	37	423	0.350	147	0.3	0.5	13.019	B
C-AB	101	25	560	0.180	101	0.2	0.2	7.842	A
C-A	470	118			470				
A-B	0	0			0				
A-C	549	137			549				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	290	72	559	0.519	290	1.0	1.1	13.381	B
B-A	148	37	423	0.350	148	0.5	0.5	13.106	B
C-AB	101	25	560	0.180	101	0.2	0.2	7.850	A
C-A	470	118			470				
A-B	0	0			0				
A-C	549	137			549				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	237	59	602	0.393	238	1.1	0.7	9.930	A
B-A	121	30	476	0.254	122	0.5	0.3	10.193	B
C-AB	82	21	587	0.140	83	0.2	0.2	7.145	A
C-A	384	96			384				
A-B	0	0			0				
A-C	449	112			449				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	198	50	633	0.313	199	0.7	0.5	8.319	A
B-A	101	25	511	0.198	102	0.3	0.3	8.807	A
C-AB	69	17	607	0.114	69	0.2	0.1	6.700	A
C-A	322	80			322				
A-B	0	0			0				
A-C	376	94			376				

2028 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	479	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	214	100.000
C - A12 (S)		ONE HOUR	✓	533	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	479
B - B1119 Rendham Rd	96	0	118
C - A12 (S)	443	90	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	9
B - B1119 Rendham Rd	3	0	2
C - A12 (S)	7	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.23	8.35	0.3	A	109	163
B-A	0.24	10.76	0.3	B	88	132
C-AB	0.18	7.77	0.2	A	83	124
C-A					406	609
A-B					0	0
A-C					440	660

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	624	0.143	88	0.0	0.2	6.709	A
B-A	72	18	521	0.139	72	0.0	0.2	8.003	A
C-AB	68	17	608	0.112	67	0.0	0.1	6.653	A
C-A	333	83			333				
A-B	0	0			0				
A-C	361	90			361				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	27	598	0.178	106	0.2	0.2	7.310	A
B-A	86	22	487	0.178	86	0.2	0.2	8.975	A
C-AB	81	20	589	0.138	81	0.1	0.2	7.084	A
C-A	398	99			398				
A-B	0	0			0				
A-C	431	108			431				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	33	562	0.232	130	0.2	0.3	8.328	A
B-A	106	26	440	0.240	106	0.2	0.3	10.734	B
C-AB	99	25	563	0.176	99	0.2	0.2	7.763	A
C-A	487	122			487				
A-B	0	0			0				
A-C	528	132			528				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	33	562	0.232	130	0.3	0.3	8.345	A
B-A	106	26	440	0.241	106	0.3	0.3	10.761	B
C-AB	99	25	563	0.176	99	0.2	0.2	7.769	A
C-A	487	122			487				
A-B	0	0			0				
A-C	528	132			528				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	27	598	0.178	107	0.3	0.2	7.330	A
B-A	86	22	487	0.178	87	0.3	0.2	9.003	A
C-AB	81	20	589	0.138	81	0.2	0.2	7.095	A
C-A	398	99			398				
A-B	0	0			0				
A-C	431	108			431				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	624	0.143	89	0.2	0.2	6.735	A
B-A	72	18	521	0.139	73	0.2	0.2	8.035	A
C-AB	68	17	608	0.112	68	0.2	0.1	6.667	A
C-A	333	83			333				
A-B	0	0			0				
A-C	361	90			361				

2028 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	408	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	250	100.000
C - A12 (S)		ONE HOUR	✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	408
B - B1119 Rendham Rd	152	0	98
C - A12 (S)	491	115	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	5
B - B1119 Rendham Rd	0	0	0
C - A12 (S)	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.20	8.10	0.2	A	90	135
B-A	0.34	11.22	0.5	B	139	209
C-AB	0.21	7.56	0.3	A	106	158
C-A					451	676
A-B					0	0
A-C					374	561

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	74	18	613	0.120	73	0.0	0.1	6.665	A
B-A	114	29	572	0.200	113	0.0	0.2	7.834	A
C-AB	87	22	641	0.135	86	0.0	0.2	6.479	A
C-A	370	92			370				
A-B	0	0			0				
A-C	307	77			307				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	88	22	588	0.150	88	0.1	0.2	7.194	A
B-A	137	34	537	0.254	136	0.2	0.3	8.979	A
C-AB	103	26	625	0.165	103	0.2	0.2	6.898	A
C-A	442	110			442				
A-B	0	0			0				
A-C	367	92			367				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	108	27	553	0.195	108	0.2	0.2	8.086	A
B-A	167	42	488	0.343	167	0.3	0.5	11.167	B
C-AB	127	32	603	0.210	126	0.2	0.3	7.554	A
C-A	541	135			541				
A-B	0	0			0				
A-C	449	112			449				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	108	27	552	0.195	108	0.2	0.2	8.101	A
B-A	167	42	488	0.343	167	0.5	0.5	11.215	B
C-AB	127	32	603	0.210	127	0.3	0.3	7.560	A
C-A	541	135			541				
A-B	0	0			0				
A-C	449	112			449				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	88	22	588	0.150	88	0.2	0.2	7.210	A
B-A	137	34	537	0.255	137	0.5	0.3	9.028	A
C-AB	103	26	625	0.165	104	0.3	0.2	6.908	A
C-A	442	110			442				
A-B	0	0			0				
A-C	367	92			367				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	74	18	612	0.121	74	0.2	0.1	6.691	A
B-A	114	29	572	0.200	115	0.3	0.3	7.883	A
C-AB	87	22	641	0.135	87	0.2	0.2	6.498	A
C-A	370	92			370				
A-B	0	0			0				
A-C	307	77			307				

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		1.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	261	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	113	100.000
C - A12 (S)		ONE HOUR	✓	176	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	261
B - B1119 Rendham Rd	54	0	59
C - A12 (S)	171	5	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	9
B - B1119 Rendham Rd	0	0	2
C - A12 (S)	26	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.10	6.19	0.1	A	54	81
B-A	0.10	6.62	0.1	A	50	75
C-AB	0.01	5.61	0.0	A	4	7
C-A					157	235
A-B					0	0
A-C					240	360

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	679	0.065	44	0.0	0.1	5.669	A
B-A	41	10	641	0.064	41	0.0	0.1	5.990	A
C-AB	4	0.92	673	0.005	4	0.0	0.0	5.375	A
C-A	129	32			129				
A-B	0	0			0				
A-C	197	49			197				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	665	0.079	53	0.1	0.1	5.878	A
B-A	49	12	626	0.078	49	0.1	0.1	6.241	A
C-AB	4	1	662	0.007	4	0.0	0.0	5.469	A
C-A	154	38			154				
A-B	0	0			0				
A-C	235	59			235				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	647	0.100	65	0.1	0.1	6.185	A
B-A	60	15	604	0.099	60	0.1	0.1	6.618	A
C-AB	5	1	648	0.008	5	0.0	0.0	5.605	A
C-A	188	47			188				
A-B	0	0			0				
A-C	288	72			288				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	65	16	647	0.100	65	0.1	0.1	6.186	A
B-A	60	15	604	0.099	60	0.1	0.1	6.618	A
C-AB	5	1	648	0.008	5	0.0	0.0	5.605	A
C-A	188	47			188				
A-B	0	0			0				
A-C	288	72			288				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	53	13	665	0.079	53	0.1	0.1	5.883	A
B-A	49	12	626	0.078	49	0.1	0.1	6.246	A
C-AB	4	1	662	0.007	4	0.0	0.0	5.471	A
C-A	154	38			154				
A-B	0	0			0				
A-C	235	59			235				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	44	11	678	0.065	44	0.1	0.1	5.676	A
B-A	41	10	641	0.064	41	0.1	0.1	5.999	A
C-AB	4	0.92	673	0.005	4	0.0	0.0	5.377	A
C-A	129	32			129				
A-B	0	0			0				
A-C	197	49			197				

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	415	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	250	100.000
C - A12 (S)		ONE HOUR	✓	507	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	415
B - B1119 Rendham Rd	116	0	134
C - A12 (S)	442	64	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	9
B - B1119 Rendham Rd	3	0	0
C - A12 (S)	18	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	8.27	0.3	A	123	184
B-A	0.27	10.63	0.4	B	106	159
C-AB	0.12	7.14	0.1	A	59	89
C-A					406	608
A-B					0	0
A-C					381	572

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	642	0.157	100	0.0	0.2	6.633	A
B-A	87	22	541	0.161	86	0.0	0.2	7.900	A
C-AB	49	12	614	0.079	48	0.0	0.1	6.360	A
C-A	333	83			333				
A-B	0	0			0				
A-C	313	78			313				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	120	30	618	0.195	120	0.2	0.2	7.232	A
B-A	104	26	510	0.204	104	0.2	0.3	8.860	A
C-AB	58	14	597	0.097	58	0.1	0.1	6.671	A
C-A	397	99			397				
A-B	0	0			0				
A-C	373	93			373				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	147	37	583	0.253	147	0.2	0.3	8.251	A
B-A	127	32	466	0.273	127	0.3	0.4	10.596	B
C-AB	71	18	575	0.124	71	0.1	0.1	7.141	A
C-A	487	122			487				
A-B	0	0			0				
A-C	457	114			457				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	147	37	583	0.253	147	0.3	0.3	8.270	A
B-A	127	32	466	0.273	127	0.4	0.4	10.626	B
C-AB	71	18	575	0.124	71	0.1	0.1	7.143	A
C-A	487	122			487				
A-B	0	0			0				
A-C	457	114			457				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	120	30	617	0.195	121	0.3	0.2	7.254	A
B-A	104	26	510	0.204	104	0.4	0.3	8.892	A
C-AB	58	14	597	0.097	58	0.1	0.1	6.675	A
C-A	397	99			397				
A-B	0	0			0				
A-C	373	93			373				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	642	0.157	101	0.2	0.2	6.660	A
B-A	87	22	541	0.161	87	0.3	0.2	7.936	A
C-AB	49	12	614	0.079	49	0.1	0.1	6.369	A
C-A	333	83			333				
A-B	0	0			0				
A-C	313	78			313				

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		3.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	524	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	396	100.000
C - A12 (S)		ONE HOUR	✓	566	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	524
B - B1119 Rendham Rd	133	0	263
C - A12 (S)	474	92	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	11
B - B1119 Rendham Rd	2	0	1
C - A12 (S)	18	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.53	14.25	1.1	B	242	362
B-A	0.37	14.67	0.6	B	122	182
C-AB	0.18	8.07	0.2	A	84	126
C-A					435	653
A-B					0	0
A-C					481	721

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	198	50	623	0.318	196	0.0	0.5	8.394	A
B-A	100	25	490	0.204	99	0.0	0.3	9.182	A
C-AB	69	17	598	0.115	69	0.0	0.1	6.796	A
C-A	357	89			357				
A-B	0	0			0				
A-C	394	99			394				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	237	59	591	0.401	236	0.5	0.7	10.119	B
B-A	119	30	451	0.264	119	0.3	0.4	10.836	B
C-AB	82	21	576	0.143	82	0.1	0.2	7.284	A
C-A	426	107			426				
A-B	0	0			0				
A-C	471	118			471				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	290	72	543	0.534	288	0.7	1.1	14.032	B
B-A	146	36	392	0.373	145	0.4	0.6	14.542	B
C-AB	101	25	547	0.185	101	0.2	0.2	8.066	A
C-A	522	131			522				
A-B	0	0			0				
A-C	577	144			577				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	290	72	542	0.535	290	1.1	1.1	14.246	B
B-A	146	36	391	0.373	146	0.6	0.6	14.668	B
C-AB	101	25	547	0.185	101	0.2	0.2	8.074	A
C-A	522	131			522				
A-B	0	0			0				
A-C	577	144			577				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	237	59	590	0.401	238	1.1	0.7	10.285	B
B-A	119	30	450	0.265	120	0.6	0.4	10.930	B
C-AB	82	21	576	0.143	83	0.2	0.2	7.296	A
C-A	426	107			426				
A-B	0	0			0				
A-C	471	118			471				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	198	50	623	0.318	199	0.7	0.5	8.510	A
B-A	100	25	490	0.204	100	0.4	0.3	9.257	A
C-AB	69	17	598	0.115	69	0.2	0.1	6.813	A
C-A	357	89			357				
A-B	0	0			0				
A-C	394	99			394				

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	512	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	207	100.000
C - A12 (S)		ONE HOUR	✓	548	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	512
B - B1119 Rendham Rd	89	0	118
C - A12 (S)	458	90	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	16
B - B1119 Rendham Rd	3	0	2
C - A12 (S)	16	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.24	8.70	0.3	A	109	163
B-A	0.24	11.63	0.3	B	82	123
C-AB	0.18	8.13	0.2	A	83	124
C-A					420	630
A-B					0	0
A-C					470	705

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	614	0.145	88	0.0	0.2	6.840	A
B-A	67	17	497	0.135	67	0.0	0.2	8.353	A
C-AB	68	17	594	0.114	67	0.0	0.1	6.830	A
C-A	344	86			344				
A-B	0	0			0				
A-C	386	96			386				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	27	585	0.182	106	0.2	0.2	7.511	A
B-A	80	20	460	0.175	80	0.2	0.2	9.481	A
C-AB	81	20	572	0.142	81	0.1	0.2	7.324	A
C-A	411	103			411				
A-B	0	0			0				
A-C	461	115			461				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	33	544	0.239	130	0.2	0.3	8.676	A
B-A	98	25	408	0.241	98	0.2	0.3	11.594	B
C-AB	99	25	542	0.183	99	0.2	0.2	8.120	A
C-A	504	126			504				
A-B	0	0			0				
A-C	564	141			564				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	33	544	0.239	130	0.3	0.3	8.695	A
B-A	98	25	408	0.241	98	0.3	0.3	11.625	B
C-AB	99	25	542	0.183	99	0.2	0.2	8.128	A
C-A	504	126			504				
A-B	0	0			0				
A-C	564	141			564				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	27	585	0.182	107	0.3	0.2	7.535	A
B-A	80	20	459	0.175	81	0.3	0.2	9.511	A
C-AB	81	20	572	0.142	81	0.2	0.2	7.334	A
C-A	411	103			411				
A-B	0	0			0				
A-C	461	115			461				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	614	0.145	89	0.2	0.2	6.869	A
B-A	67	17	497	0.135	67	0.2	0.2	8.390	A
C-AB	68	17	594	0.114	68	0.2	0.1	6.844	A
C-A	344	86			344				
A-B	0	0			0				
A-C	386	96			386				

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	452	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	245	100.000
C - A12 (S)		ONE HOUR	✓	595	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	452
B - B1119 Rendham Rd	146	0	99
C - A12 (S)	514	81	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	15
B - B1119 Rendham Rd	0	0	0
C - A12 (S)	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	8.58	0.3	A	91	136
B-A	0.35	11.84	0.5	B	134	201
C-AB	0.16	7.42	0.2	A	74	112
C-A					472	708
A-B					0	0
A-C					415	622

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	19	597	0.125	74	0.0	0.1	6.873	A
B-A	110	27	555	0.198	109	0.0	0.2	8.048	A
C-AB	61	15	621	0.098	61	0.0	0.1	6.420	A
C-A	387	97			387				
A-B	0	0			0				
A-C	340	85			340				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	569	0.156	89	0.1	0.2	7.490	A
B-A	131	33	517	0.254	131	0.2	0.3	9.310	A
C-AB	73	18	601	0.121	73	0.1	0.1	6.807	A
C-A	462	116			462				
A-B	0	0			0				
A-C	406	102			406				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	27	529	0.206	109	0.2	0.3	8.559	A
B-A	161	40	465	0.346	160	0.3	0.5	11.788	B
C-AB	89	22	574	0.155	89	0.1	0.2	7.417	A
C-A	566	142			566				
A-B	0	0			0				
A-C	497	124			497				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	27	529	0.206	109	0.3	0.3	8.578	A
B-A	161	40	465	0.346	161	0.5	0.5	11.842	B
C-AB	89	22	574	0.155	89	0.2	0.2	7.419	A
C-A	566	142			566				
A-B	0	0			0				
A-C	497	124			497				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	569	0.157	89	0.3	0.2	7.509	A
B-A	131	33	517	0.254	132	0.5	0.3	9.362	A
C-AB	73	18	601	0.121	73	0.2	0.1	6.817	A
C-A	462	116			462				
A-B	0	0			0				
A-C	406	102			406				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	19	597	0.125	75	0.2	0.1	6.897	A
B-A	110	27	555	0.198	110	0.3	0.2	8.099	A
C-AB	61	15	621	0.098	61	0.1	0.1	6.433	A
C-A	387	97			387				
A-B	0	0			0				
A-C	340	85			340				

2034 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		1.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	259	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	112	100.000
C - A12 (S)		ONE HOUR	✓	161	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	259
B - B1119 Rendham Rd	51	0	61
C - A12 (S)	154	7	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	6
B - B1119 Rendham Rd	0	0	2
C - A12 (S)	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.10	6.11	0.1	A	56	84
B-A	0.09	6.53	0.1	A	47	71
C-AB	0.01	5.60	0.0	A	6	9
C-A					141	212
A-B					0	0
A-C					238	357

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	11	687	0.067	45	0.0	0.1	5.606	A
B-A	39	10	642	0.060	38	0.0	0.1	5.960	A
C-AB	5	1	675	0.008	5	0.0	0.0	5.370	A
C-A	116	29			116				
A-B	0	0			0				
A-C	195	49			195				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	55	14	674	0.081	55	0.1	0.1	5.808	A
B-A	46	12	628	0.074	46	0.1	0.1	6.189	A
C-AB	6	2	665	0.009	6	0.0	0.0	5.463	A
C-A	138	35			138				
A-B	0	0			0				
A-C	233	58			233				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	656	0.102	67	0.1	0.1	6.106	A
B-A	57	14	608	0.093	56	0.1	0.1	6.530	A
C-AB	8	2	651	0.012	8	0.0	0.0	5.597	A
C-A	169	42			169				
A-B	0	0			0				
A-C	286	71			286				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	656	0.102	67	0.1	0.1	6.106	A
B-A	57	14	608	0.093	57	0.1	0.1	6.530	A
C-AB	8	2	651	0.012	8	0.0	0.0	5.597	A
C-A	169	42			169				
A-B	0	0			0				
A-C	286	71			286				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	55	14	674	0.081	55	0.1	0.1	5.813	A
B-A	46	12	628	0.074	46	0.1	0.1	6.193	A
C-AB	6	2	665	0.009	6	0.0	0.0	5.463	A
C-A	138	35			138				
A-B	0	0			0				
A-C	233	58			233				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	11	687	0.067	46	0.1	0.1	5.613	A
B-A	39	10	642	0.060	39	0.1	0.1	5.965	A
C-AB	5	1	675	0.008	5	0.0	0.0	5.370	A
C-A	116	29			116				
A-B	0	0			0				
A-C	195	49			195				

2034 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	407	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	264	100.000
C - A12 (S)		ONE HOUR	✓	514	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	407
B - B1119 Rendham Rd	115	0	149
C - A12 (S)	436	77	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	4
B - B1119 Rendham Rd	3	0	0
C - A12 (S)	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.27	8.31	0.4	A	137	205
B-A	0.27	10.38	0.4	B	105	158
C-AB	0.15	7.19	0.2	A	71	107
C-A					400	600
A-B					0	0
A-C					374	561

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	654	0.171	111	0.0	0.2	6.620	A
B-A	86	22	544	0.159	86	0.0	0.2	7.843	A
C-AB	58	15	623	0.094	58	0.0	0.1	6.365	A
C-A	328	82			328				
A-B	0	0			0				
A-C	307	77			307				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	33	631	0.212	133	0.2	0.3	7.239	A
B-A	103	26	514	0.201	103	0.2	0.2	8.745	A
C-AB	70	17	608	0.115	70	0.1	0.1	6.688	A
C-A	392	98			392				
A-B	0	0			0				
A-C	366	92			366				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	164	41	597	0.274	163	0.3	0.4	8.290	A
B-A	126	32	473	0.267	126	0.2	0.4	10.350	B
C-AB	85	21	586	0.146	85	0.1	0.2	7.184	A
C-A	480	120			480				
A-B	0	0			0				
A-C	449	112			449				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	164	41	597	0.274	164	0.4	0.4	8.310	A
B-A	126	32	473	0.267	126	0.4	0.4	10.377	B
C-AB	85	21	586	0.146	85	0.2	0.2	7.187	A
C-A	480	120			480				
A-B	0	0			0				
A-C	449	112			449				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	33	630	0.212	134	0.4	0.3	7.264	A
B-A	103	26	514	0.201	104	0.4	0.3	8.774	A
C-AB	70	17	608	0.115	70	0.2	0.1	6.695	A
C-A	392	98			392				
A-B	0	0			0				
A-C	366	92			366				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	654	0.171	112	0.3	0.2	6.650	A
B-A	86	22	544	0.159	87	0.3	0.2	7.880	A
C-AB	58	15	623	0.094	58	0.1	0.1	6.377	A
C-A	328	82			328				
A-B	0	0			0				
A-C	307	77			307				

2034 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		5.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	532	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	462	100.000
C - A12 (S)		ONE HOUR	✓	611	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	532
B - B1119 Rendham Rd	150	0	312
C - A12 (S)	495	116	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	7
B - B1119 Rendham Rd	2	0	1
C - A12 (S)	4	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.64	18.48	1.7	C	287	430
B-A	0.44	16.91	0.8	C	137	206
C-AB	0.23	8.44	0.3	A	106	159
C-A					454	681
A-B					0	0
A-C					488	732

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	235	59	624	0.377	233	0.0	0.6	9.151	A
B-A	113	28	490	0.230	111	0.0	0.3	9.491	A
C-AB	87	22	604	0.144	86	0.0	0.2	6.948	A
C-A	373	93			373				
A-B	0	0			0				
A-C	401	100			401				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	281	70	590	0.476	280	0.6	0.9	11.550	B
B-A	134	34	448	0.300	134	0.3	0.4	11.448	B
C-AB	104	26	583	0.178	104	0.2	0.2	7.511	A
C-A	445	111			445				
A-B	0	0			0				
A-C	478	120			478				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	344	86	539	0.638	341	0.9	1.7	17.898	C
B-A	165	41	379	0.435	163	0.4	0.7	16.614	C
C-AB	127	32	554	0.230	127	0.2	0.3	8.432	A
C-A	545	136			545				
A-B	0	0			0				
A-C	586	146			586				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	344	86	538	0.639	344	1.7	1.7	18.481	C
B-A	165	41	377	0.436	165	0.7	0.8	16.909	C
C-AB	127	32	554	0.230	127	0.3	0.3	8.444	A
C-A	545	136			545				
A-B	0	0			0				
A-C	586	146			586				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	281	70	589	0.476	284	1.7	0.9	11.904	B
B-A	134	34	447	0.301	136	0.8	0.4	11.611	B
C-AB	104	26	583	0.178	104	0.3	0.2	7.527	A
C-A	445	111			445				
A-B	0	0			0				
A-C	478	120			478				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	235	59	623	0.377	236	0.9	0.6	9.335	A
B-A	113	28	489	0.230	113	0.4	0.3	9.589	A
C-AB	87	22	604	0.144	87	0.2	0.2	6.970	A
C-A	373	93			373				
A-B	0	0			0				
A-C	401	100			401				

2034 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	536	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	253	100.000
C - A12 (S)		ONE HOUR	✓	579	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	536
B - B1119 Rendham Rd	105	0	148
C - A12 (S)	476	103	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	7
B - B1119 Rendham Rd	3	0	2
C - A12 (S)	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.30	9.37	0.4	A	136	204
B-A	0.28	12.12	0.4	B	97	145
C-AB	0.21	8.25	0.3	A	95	142
C-A					436	655
A-B					0	0
A-C					492	738

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	619	0.180	111	0.0	0.2	7.076	A
B-A	79	20	501	0.158	78	0.0	0.2	8.507	A
C-AB	78	19	600	0.129	77	0.0	0.1	6.872	A
C-A	358	90			358				
A-B	0	0			0				
A-C	404	101			404				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	589	0.226	133	0.2	0.3	7.882	A
B-A	95	24	464	0.204	94	0.2	0.3	9.731	A
C-AB	93	23	579	0.160	93	0.1	0.2	7.395	A
C-A	427	107			427				
A-B	0	0			0				
A-C	482	121			482				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	163	41	548	0.298	163	0.3	0.4	9.338	A
B-A	116	29	413	0.281	115	0.3	0.4	12.078	B
C-AB	114	28	550	0.206	113	0.2	0.3	8.237	A
C-A	524	131			524				
A-B	0	0			0				
A-C	590	148			590				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	163	41	548	0.298	163	0.4	0.4	9.366	A
B-A	116	29	413	0.281	116	0.4	0.4	12.124	B
C-AB	114	28	550	0.206	114	0.3	0.3	8.246	A
C-A	524	131			524				
A-B	0	0			0				
A-C	590	148			590				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	589	0.226	134	0.4	0.3	7.916	A
B-A	95	24	464	0.204	95	0.4	0.3	9.776	A
C-AB	93	23	579	0.160	93	0.3	0.2	7.408	A
C-A	427	107			427				
A-B	0	0			0				
A-C	482	121			482				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	618	0.181	112	0.3	0.2	7.112	A
B-A	79	20	501	0.158	79	0.3	0.2	8.551	A
C-AB	78	19	600	0.129	78	0.2	0.1	6.893	A
C-A	358	90			358				
A-B	0	0			0				
A-C	404	101			404				

2034 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		3.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	468	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	302	100.000
C - A12 (S)		ONE HOUR	✓	644	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	468
B - B1119 Rendham Rd	177	0	125
C - A12 (S)	518	126	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	4
B - B1119 Rendham Rd	0	0	0
C - A12 (S)	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.26	9.31	0.4	A	115	172
B-A	0.42	13.58	0.7	B	162	244
C-AB	0.24	8.04	0.3	A	116	174
C-A					476	714
A-B					0	0
A-C					429	644

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	94	24	598	0.157	93	0.0	0.2	7.125	A
B-A	133	33	552	0.241	132	0.0	0.3	8.549	A
C-AB	95	24	630	0.151	94	0.0	0.2	6.710	A
C-A	390	98			390				
A-B	0	0			0				
A-C	352	88			352				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	569	0.198	112	0.2	0.2	7.879	A
B-A	159	40	513	0.310	159	0.3	0.4	10.134	B
C-AB	113	28	612	0.185	113	0.2	0.2	7.216	A
C-A	466	117			466				
A-B	0	0			0				
A-C	420	105			420				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	525	0.262	137	0.2	0.4	9.276	A
B-A	195	49	460	0.424	194	0.4	0.7	13.469	B
C-AB	139	35	586	0.237	138	0.2	0.3	8.030	A
C-A	571	143			571				
A-B	0	0			0				
A-C	515	129			515				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	524	0.263	138	0.4	0.4	9.309	A
B-A	195	49	460	0.424	195	0.7	0.7	13.580	B
C-AB	139	35	586	0.237	139	0.3	0.3	8.041	A
C-A	571	143			571				
A-B	0	0			0				
A-C	515	129			515				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	568	0.198	113	0.4	0.2	7.914	A
B-A	159	40	513	0.310	160	0.7	0.5	10.229	B
C-AB	113	28	612	0.185	114	0.3	0.2	7.230	A
C-A	466	117			466				
A-B	0	0			0				
A-C	420	105			420				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	94	24	597	0.158	94	0.2	0.2	7.164	A
B-A	133	33	552	0.242	134	0.5	0.3	8.628	A
C-AB	95	24	630	0.151	95	0.2	0.2	6.731	A
C-A	390	98			390				
A-B	0	0			0				
A-C	352	88			352				

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		1.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	261	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	106	100.000
C - A12 (S)		ONE HOUR	✓	160	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	261
B - B1119 Rendham Rd	45	0	61
C - A12 (S)	153	7	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	6
B - B1119 Rendham Rd	0	0	2
C - A12 (S)	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.10	6.04	0.1	A	56	84
B-A	0.08	6.52	0.1	A	42	62
C-AB	0.01	5.60	0.0	A	6	9
C-A					140	210
A-B					0	0
A-C					240	360

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	11	694	0.066	45	0.0	0.1	5.548	A
B-A	34	9	636	0.054	34	0.0	0.1	5.976	A
C-AB	5	1	675	0.008	5	0.0	0.0	5.373	A
C-A	115	29			115				
A-B	0	0			0				
A-C	197	49			197				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	55	14	681	0.080	55	0.1	0.1	5.745	A
B-A	41	10	622	0.066	41	0.1	0.1	6.194	A
C-AB	6	2	665	0.009	6	0.0	0.0	5.467	A
C-A	137	34			137				
A-B	0	0			0				
A-C	235	59			235				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	663	0.101	67	0.1	0.1	6.036	A
B-A	50	12	602	0.083	50	0.1	0.1	6.519	A
C-AB	8	2	650	0.012	8	0.0	0.0	5.602	A
C-A	168	42			168				
A-B	0	0			0				
A-C	288	72			288				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	67	17	663	0.101	67	0.1	0.1	6.036	A
B-A	50	12	602	0.083	50	0.1	0.1	6.519	A
C-AB	8	2	650	0.012	8	0.0	0.0	5.602	A
C-A	168	42			168				
A-B	0	0			0				
A-C	288	72			288				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	55	14	681	0.080	55	0.1	0.1	5.748	A
B-A	41	10	622	0.066	41	0.1	0.1	6.195	A
C-AB	6	2	665	0.009	6	0.0	0.0	5.469	A
C-A	137	34			137				
A-B	0	0			0				
A-C	235	59			235				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	46	11	694	0.066	46	0.1	0.1	5.554	A
B-A	34	9	636	0.054	34	0.1	0.1	5.981	A
C-AB	5	1	675	0.008	5	0.0	0.0	5.373	A
C-A	115	29			115				
A-B	0	0			0				
A-C	197	49			197				

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	408	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	256	100.000
C - A12 (S)		ONE HOUR	✓	515	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	408
B - B1119 Rendham Rd	107	0	149
C - A12 (S)	437	77	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	4
B - B1119 Rendham Rd	3	0	0
C - A12 (S)	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.27	8.21	0.4	A	137	205
B-A	0.25	10.21	0.3	B	98	147
C-AB	0.15	7.19	0.2	A	71	107
C-A					401	602
A-B					0	0
A-C					375	562

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	658	0.170	111	0.0	0.2	6.570	A
B-A	80	20	540	0.149	80	0.0	0.2	7.803	A
C-AB	58	15	623	0.094	58	0.0	0.1	6.367	A
C-A	329	82			329				
A-B	0	0			0				
A-C	308	77			308				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	33	635	0.211	134	0.2	0.3	7.174	A
B-A	96	24	511	0.188	96	0.2	0.2	8.668	A
C-AB	70	17	607	0.115	70	0.1	0.1	6.691	A
C-A	393	98			393				
A-B	0	0			0				
A-C	367	92			367				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	164	41	602	0.272	163	0.3	0.4	8.198	A
B-A	118	29	470	0.250	117	0.2	0.3	10.192	B
C-AB	85	21	586	0.146	85	0.1	0.2	7.188	A
C-A	481	120			481				
A-B	0	0			0				
A-C	450	112			450				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	164	41	602	0.272	164	0.4	0.4	8.214	A
B-A	118	29	470	0.250	118	0.3	0.3	10.215	B
C-AB	85	21	586	0.146	85	0.2	0.2	7.191	A
C-A	481	120			481				
A-B	0	0			0				
A-C	450	112			450				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	134	33	635	0.211	134	0.4	0.3	7.195	A
B-A	96	24	511	0.188	96	0.3	0.2	8.694	A
C-AB	70	17	607	0.115	70	0.2	0.1	6.697	A
C-A	393	98			393				
A-B	0	0			0				
A-C	367	92			367				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	658	0.170	112	0.3	0.2	6.601	A
B-A	80	20	540	0.149	81	0.2	0.2	7.838	A
C-AB	58	15	623	0.094	58	0.1	0.1	6.379	A
C-A	329	82			329				
A-B	0	0			0				
A-C	308	77			308				

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		5.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	525	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	474	100.000
C - A12 (S)		ONE HOUR	✓	616	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	525
B - B1119 Rendham Rd	163	0	311
C - A12 (S)	499	117	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	7
B - B1119 Rendham Rd	2	0	1
C - A12 (S)	5	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.65	19.13	1.8	C	286	428
B-A	0.47	18.00	0.9	C	149	224
C-AB	0.23	8.43	0.3	A	107	161
C-A					458	687
A-B					0	0
A-C					482	723

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	234	59	620	0.378	232	0.0	0.6	9.235	A
B-A	122	31	492	0.249	121	0.0	0.3	9.663	A
C-AB	88	22	605	0.145	87	0.0	0.2	6.942	A
C-A	376	94			376				
A-B	0	0			0				
A-C	395	99			395				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	280	70	585	0.478	279	0.6	0.9	11.708	B
B-A	146	37	450	0.324	146	0.3	0.5	11.788	B
C-AB	105	26	584	0.180	105	0.2	0.2	7.502	A
C-A	449	112			449				
A-B	0	0			0				
A-C	472	118			472				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	343	86	531	0.645	339	0.9	1.7	18.462	C
B-A	179	45	380	0.471	177	0.5	0.9	17.614	C
C-AB	128	32	555	0.231	128	0.2	0.3	8.419	A
C-A	550	137			550				
A-B	0	0			0				
A-C	578	145			578				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	343	86	530	0.646	343	1.7	1.8	19.131	C
B-A	179	45	379	0.473	179	0.9	0.9	17.999	C
C-AB	128	32	555	0.231	128	0.3	0.3	8.430	A
C-A	550	137			550				
A-B	0	0			0				
A-C	578	145			578				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	280	70	584	0.479	283	1.8	0.9	12.096	B
B-A	146	37	450	0.325	148	0.9	0.5	11.988	B
C-AB	105	26	584	0.180	105	0.3	0.2	7.521	A
C-A	449	112			449				
A-B	0	0			0				
A-C	472	118			472				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	234	59	619	0.379	236	0.9	0.6	9.429	A
B-A	122	31	492	0.249	123	0.5	0.3	9.778	A
C-AB	88	22	605	0.145	88	0.2	0.2	6.963	A
C-A	376	94			376				
A-B	0	0			0				
A-C	395	99			395				

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	540	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	243	100.000
C - A12 (S)		ONE HOUR	✓	588	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	540
B - B1119 Rendham Rd	95	0	148
C - A12 (S)	484	104	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	7
B - B1119 Rendham Rd	4	0	2
C - A12 (S)	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.30	9.27	0.4	A	136	204
B-A	0.26	12.09	0.3	B	87	131
C-AB	0.21	8.29	0.3	A	96	143
C-A					444	666
A-B					0	0
A-C					496	744

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	622	0.179	111	0.0	0.2	7.027	A
B-A	72	18	490	0.146	71	0.0	0.2	8.574	A
C-AB	78	20	600	0.131	78	0.0	0.1	6.892	A
C-A	364	91			364				
A-B	0	0			0				
A-C	407	102			407				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	593	0.225	133	0.2	0.3	7.818	A
B-A	86	21	454	0.189	85	0.2	0.2	9.772	A
C-AB	94	23	578	0.162	93	0.1	0.2	7.423	A
C-A	435	109			435				
A-B	0	0			0				
A-C	486	121			486				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	163	41	552	0.296	163	0.3	0.4	9.238	A
B-A	105	26	403	0.260	104	0.2	0.3	12.046	B
C-AB	115	29	549	0.209	114	0.2	0.3	8.281	A
C-A	532	133			532				
A-B	0	0			0				
A-C	595	149			595				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	163	41	552	0.296	163	0.4	0.4	9.267	A
B-A	105	26	403	0.260	105	0.3	0.3	12.087	B
C-AB	115	29	549	0.209	115	0.3	0.3	8.291	A
C-A	532	133			532				
A-B	0	0			0				
A-C	595	149			595				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	593	0.225	134	0.4	0.3	7.850	A
B-A	86	21	453	0.189	86	0.3	0.2	9.810	A
C-AB	94	23	578	0.162	94	0.3	0.2	7.434	A
C-A	435	109			435				
A-B	0	0			0				
A-C	486	121			486				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	622	0.180	112	0.3	0.2	7.065	A
B-A	72	18	490	0.146	72	0.2	0.2	8.615	A
C-AB	78	20	600	0.131	79	0.2	0.2	6.910	A
C-A	364	91			364				
A-B	0	0			0				
A-C	407	102			407				

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J7S a	A12 / B1119	T-Junction	Two-way		2.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 (N)		ONE HOUR	✓	471	100.000
B - B1119 Rendham Rd		ONE HOUR	✓	284	100.000
C - A12 (S)		ONE HOUR	✓	652	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	471
B - B1119 Rendham Rd	159	0	125
C - A12 (S)	525	127	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 (N)	B - B1119 Rendham Rd	C - A12 (S)
A - A12 (N)	0	0	4
B - B1119 Rendham Rd	0	0	0
C - A12 (S)	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.26	9.08	0.3	A	115	172
B-A	0.38	12.86	0.6	B	146	219
C-AB	0.24	8.08	0.3	A	117	175
C-A					482	723
A-B					0	0
A-C					432	648

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	94	24	605	0.156	93	0.0	0.2	7.032	A
B-A	120	30	547	0.219	119	0.0	0.3	8.379	A
C-AB	96	24	630	0.152	95	0.0	0.2	6.726	A
C-A	396	99			396				
A-B	0	0			0				
A-C	354	89			354				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	576	0.195	112	0.2	0.2	7.750	A
B-A	143	36	508	0.281	142	0.3	0.4	9.827	A
C-AB	114	29	611	0.187	114	0.2	0.2	7.238	A
C-A	472	118			472				
A-B	0	0			0				
A-C	423	106			423				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	535	0.258	137	0.2	0.3	9.049	A
B-A	175	44	455	0.385	174	0.4	0.6	12.778	B
C-AB	140	35	586	0.239	140	0.2	0.3	8.065	A
C-A	578	145			578				
A-B	0	0			0				
A-C	518	130			518				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	138	34	534	0.258	138	0.3	0.3	9.077	A
B-A	175	44	455	0.385	175	0.6	0.6	12.860	B
C-AB	140	35	586	0.239	140	0.3	0.3	8.076	A
C-A	578	145			578				
A-B	0	0			0				
A-C	518	130			518				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	112	28	576	0.195	113	0.3	0.2	7.782	A
B-A	143	36	508	0.281	144	0.6	0.4	9.900	A
C-AB	114	29	611	0.187	115	0.3	0.2	7.256	A
C-A	472	118			472				
A-B	0	0			0				
A-C	423	106			423				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	94	24	604	0.156	94	0.2	0.2	7.069	A
B-A	120	30	547	0.219	120	0.4	0.3	8.447	A
C-AB	96	24	630	0.152	96	0.2	0.2	6.747	A
C-A	396	99			396				
A-B	0	0			0				
A-C	354	89			354				

User and Project Details

Project:	Sizewell C - Transport Planning
Title:	Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)
Location:	Saxmundham, Suffolk
Additional detail:	
File name:	2019.08.19 J8_FY_Model_Optimised v11.lsg3x
Author:	
Company:	WSP UK
Address:	62-64 Hills Road, Cambridge
Linsig Version:	3, 2, 40, 0

Network Results

Scenario 1: 'Base Year 6-7AM' (FG1: '17BY_6-7AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	17.4%
J8_B1121/B1119_Saxmundham	-	-	-	17.4%
1/1	High Street Left Ahead Right	0.7	24.2	10.0%
2/1	B1119 Church Street Right Left Ahead	0.7	36.1	17.4%
3/1+3/2	S Entrance Ahead Right Left	0.5	22.1	9.1 : 9.1%
4/1	Chantry Road Left Ahead Right	0.6	30.1	11.8%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	0.0%
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	416.7 416.7	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	1.31 1.31
				Cycle Time (s): 66

Scenario 2: 'Base Year 7-8AM' (FG2: '17BY_7-8AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	55.5%
J8_B1121/B1119_Saxmundham	-	-	-	55.5%
1/1	High Street Left Ahead Right	2.0	26.3	28.9%
2/1	B1119 Church Street Right Left Ahead	2.7	45.6	55.5%
3/1+3/2	S Entrance Ahead Right Left	0.9	22.7	17.3 : 17.3%
4/1	Chantry Road Left Ahead Right	2.3	34.7	40.5%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	0.0%
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	62.3 62.3	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	4.30 4.30
				Cycle Time (s): 66

Scenario 3: 'Base Year 8-9AM' (FG3: '17BY_8-9AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	94.3%	
J8_B1121/B1119_Saxmundham	-	-	-	94.3%	
1/1	High Street Left Ahead Right	3.3	34.6	52.5%	
2/1	B1119 Church Street Right Left Ahead	9.0	105.4	94.3%	
3/1+3/2	S Entrance Ahead Right Left	2.9	26.3	42.6 : 42.6%	
4/1	Chantry Road Left Ahead Right	4.1	43.6	64.5%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	-4.8 -4.8	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	12.19 12.19	Cycle Time (s): 67

Scenario 4: 'Base Year 3-4PM' (FG4: '17BY_3-4PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	77.5%	
J8_B1121/B1119_Saxmundham	-	-	-	77.5%	
1/1	High Street Left Ahead Right	6.2	50.1	71.2%	
2/1	B1119 Church Street Right Left Ahead	9.5	45.8	77.5%	
3/1+3/2	S Entrance Ahead Right Left	2.9	26.3	36.7 : 36.7%	
4/1	Chantry Road Left Ahead Right	4.2	68.2	70.9%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	16.1 16.1	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	12.11 12.11	Cycle Time (s): 85

Scenario 5: 'Base Year 5-6PM' (FG5: '17BY_5-6PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	75.4%	
J8_B1121/B1119_Saxmundham	-	-	-	75.4%	
1/1	High Street Left Ahead Right	7.0	53.9	74.1%	
2/1	B1119 Church Street Right Left Ahead	9.7	45.2	75.4%	
3/1+3/2	S Entrance Ahead Right Left	2.8	27.8	34.9 : 34.9%	
4/1	Chantry Road Left Ahead Right	4.6	61.6	67.1%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	19.3 19.3	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	12.51 12.51	Cycle Time (s): 90

Scenario 6: '2023 Reference Case 6-7AM' (FG6: '23RC_6-7AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	47.5%	
J8_B1121/B1119_Saxmundham	-	-	-	47.5%	
1/1	High Street Left Ahead Right	2.0	44.4	47.5%	
2/1	B1119 Church Street Right Left Ahead	1.1	37.4	25.7%	
3/1+3/2	S Entrance Ahead Right Left	0.5	20.4	9.0 : 9.0%	
4/1	Chantry Road Left Ahead Right	0.8	36.0	18.0%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	89.4 89.4	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	2.48 2.48	Cycle Time (s): 66

Scenario 7: '2023 Reference Case 7-8AM' (FG7: '23RC_7-8AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	63.0%
J8_B1121/B1119_Saxmundham	-	-	-	63.0%
1/1	High Street Left Ahead Right	3.3	49.0	60.7%
2/1	B1119 Church Street Right Left Ahead	3.8	46.9	63.0%
3/1+3/2	S Entrance Ahead Right Left	1.0	22.6	19.3 : 19.3%
4/1	Chantry Road Left Ahead Right	3.1	47.3	58.6%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	0.0%
C1	PRC for Signalled Lanes (%): 42.9 PRC Over All Lanes (%): 42.9	Total Delay for Signalled Lanes (pcuHr): 6.51 Total Delay Over All Lanes(pcuHr): 6.51	Cycle Time (s): 70	

Scenario 8: '2023 Reference Case 8-9AM' (FG8: '23RC_8-9AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	77.1%
J8_B1121/B1119_Saxmundham	-	-	-	77.1%
1/1	High Street Left Ahead Right	7.0	62.8	73.6%
2/1	B1119 Church Street Right Left Ahead	9.8	56.7	76.6%
3/1+3/2	S Entrance Ahead Right Left	4.5	30.8	39.8 : 39.8%
4/1	Chantry Road Left Ahead Right	7.3	70.1	77.1%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	0.0%
C1	PRC for Signalled Lanes (%): 16.7 PRC Over All Lanes (%): 16.7	Total Delay for Signalled Lanes (pcuHr): 14.72 Total Delay Over All Lanes(pcuHr): 14.72	Cycle Time (s): 104	

Scenario 9: '2023 Reference Case 3-4PM' (FG9: '23RC_3-4PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	79.8%	
J8_B1121/B1119_Saxmundham	-	-	-	79.8%	
1/1	High Street Left Ahead Right	8.6	62.1	71.6%	
2/1	B1119 Church Street Right Left Ahead	15.1	54.6	79.8%	
3/1+3/2	S Entrance Ahead Right Left	5.8	40.0	57.6 : 57.6%	
4/1	Chantry Road Left Ahead Right	6.3	89.1	76.5%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	12.8 12.8	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	17.89 17.89	Cycle Time (s): 120

Scenario 10: '2023 Reference Case 5-6PM' (FG10: '23RC_5-6PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	84.5%	
J8_B1121/B1119_Saxmundham	-	-	-	84.5%	
1/1	High Street Left Ahead Right	10.2	68.3	79.0%	
2/1	B1119 Church Street Right Left Ahead	16.1	61.9	84.5%	
3/1+3/2	S Entrance Ahead Right Left	5.2	34.4	43.5 : 43.5%	
4/1	Chantry Road Left Ahead Right	7.1	87.8	78.3%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	6.5 6.5	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	19.19 19.19	Cycle Time (s): 120

Scenario 11: '2023 Early Years 6-7AM' (FG11: '23EY_6-7AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	51.9%	
J8_B1121/B1119_Saxmundham	-	-	-	51.9%	
1/1	High Street Left Ahead Right	2.2	46.2	51.9%	
2/1	B1119 Church Street Right Left Ahead	1.3	38.0	28.9%	
3/1+3/2	S Entrance Ahead Right Left	0.8	21.3	14.7 : 14.7%	
4/1	Chantry Road Left Ahead Right	0.8	36.0	18.0%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	73.5 73.5	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	2.88 2.88	Cycle Time (s): 66

Scenario 12: '2023 Early Years 7-8AM' (FG12: '23EY_7-8AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	74.9%	
J8_B1121/B1119_Saxmundham	-	-	-	74.9%	
1/1	High Street Left Ahead Right	3.6	51.5	65.0%	
2/1	B1119 Church Street Right Left Ahead	5.3	52.6	74.9%	
3/1+3/2	S Entrance Ahead Right Left	1.7	24.8	30.1 : 30.1%	
4/1	Chantry Road Left Ahead Right	3.5	54.8	65.9%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	20.1 20.1	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	8.42 8.42	Cycle Time (s): 70

Scenario 13: '2023 Early Years 8-9AM' (FG13: '23EY_8-9AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	79.9%	
J8_B1121/B1119_Saxmundham	-	-	-	79.9%	
1/1	High Street Left Ahead Right	6.6	60.4	70.8%	
2/1	B1119 Church Street Right Left Ahead	10.6	59.8	79.9%	
3/1+3/2	S Entrance Ahead Right Left	4.7	31.0	41.7 : 41.7%	
4/1	Chantry Road Left Ahead Right	7.3	70.1	77.1%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	12.7 12.7	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	15.10 15.10	Cycle Time (s): 104

Scenario 14: '2023 Early Years 3-4PM' (FG14: '23EY_3-4PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	81.9%	
J8_B1121/B1119_Saxmundham	-	-	-	81.9%	
1/1	High Street Left Ahead Right	8.7	62.3	71.9%	
2/1	B1119 Church Street Right Left Ahead	15.8	56.6	81.9%	
3/1+3/2	S Entrance Ahead Right Left	6.3	41.7	60.3 : 60.3%	
4/1	Chantry Road Left Ahead Right	6.3	89.1	76.5%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	10.0 10.0	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	18.57 18.57	Cycle Time (s): 120

Scenario 15: '2023 Early Years 5-6PM' (FG15: '23EY_5-6PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	89.3%
J8_B1121/B1119_Saxmundham	-	-	-	89.3%
1/1	High Street Left Ahead Right	12.7	88.2	88.9%
2/1	B1119 Church Street Right Left Ahead	18.9	67.7	89.3%
3/1+3/2	S Entrance Ahead Right Left	7.2	37.2	50.9 : 50.9%
4/1	Chantry Road Left Ahead Right	7.8	102.9	84.3%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	0.0%
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	0.8 0.8	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	24.25 24.25
				Cycle Time (s): 120

Scenario 16: '2028 Reference Case 6-7AM' (FG16: '28RC_6-7AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	48.7%
J8_B1121/B1119_Saxmundham	-	-	-	48.7%
1/1	High Street Left Ahead Right	2.1	44.8	48.7%
2/1	B1119 Church Street Right Left Ahead	1.2	37.8	28.0%
3/1+3/2	S Entrance Ahead Right Left	0.5	20.4	9.2 : 9.2%
4/1	Chantry Road Left Ahead Right	0.8	36.3	19.5%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	0.0%
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	84.7 84.7	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	2.62 2.62
				Cycle Time (s): 66

Scenario 17: '2028 Reference Case 7-8AM' (FG17: '28RC_7-8AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	79.3%	
J8_B1121/B1119_Saxmundham	-	-	-	79.3%	
1/1	High Street Left Ahead Right	3.1	49.4	62.4%	
2/1	B1119 Church Street Right Left Ahead	4.9	65.1	79.3%	
3/1+3/2	S Entrance Ahead Right Left	1.2	22.4	23.1 : 23.1%	
4/1	Chantry Road Left Ahead Right	3.4	51.1	65.4%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	13.5 13.5	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	7.87 7.87	Cycle Time (s): 66

Scenario 18: '2028 Reference Case 8-9AM' (FG18: '28RC_8-9AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	80.9%	
J8_B1121/B1119_Saxmundham	-	-	-	80.9%	
1/1	High Street Left Ahead Right	6.9	65.7	74.7%	
2/1	B1119 Church Street Right Left Ahead	11.2	59.4	80.9%	
3/1+3/2	S Entrance Ahead Right Left	5.1	32.3	45.3 : 45.3%	
4/1	Chantry Road Left Ahead Right	7.9	74.3	80.4%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	11.3 11.3	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	16.35 16.35	Cycle Time (s): 104

Scenario 19: '2028 Reference Case 3-4PM' (FG19: '28RC_3-4PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	82.3%	
J8_B1121/B1119_Saxmundham	-	-	-	82.3%	
1/1	High Street Left Ahead Right	9.3	67.3	76.4%	
2/1	B1119 Church Street Right Left Ahead	15.5	58.1	82.3%	
3/1+3/2	S Entrance Ahead Right Left	5.7	38.0	53.1 : 53.1%	
4/1	Chantry Road Left Ahead Right	6.5	84.6	75.4%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	9.4 9.4	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	18.56 18.56	Cycle Time (s): 120

Scenario 20: '2028 Reference Case 5-6PM' (FG20: '28RC_5-6PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	84.3%	
J8_B1121/B1119_Saxmundham	-	-	-	84.3%	
1/1	High Street Left Ahead Right	9.8	72.5	79.9%	
2/1	B1119 Church Street Right Left Ahead	16.7	59.3	84.3%	
3/1+3/2	S Entrance Ahead Right Left	6.0	39.2	54.9 : 54.9%	
4/1	Chantry Road Left Ahead Right	7.8	95.3	82.6%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	6.8 6.8	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	20.59 20.59	Cycle Time (s): 120

Scenario 21: '2028 Peak Construction 6-7AM' (FG21: '28PC_6-7AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	46.3%	
J8_B1121/B1119_Saxmundham	-	-	-	46.3%	
1/1	High Street Left Ahead Right	2.0	43.9	46.3%	
2/1	B1119 Church Street Right Left Ahead	1.0	37.3	24.8%	
3/1+3/2	S Entrance Ahead Right Left	0.7	20.9	12.3 : 12.3%	
4/1	Chantry Road Left Ahead Right	0.8	36.3	19.5%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	94.4 94.4	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	2.57 2.57	Cycle Time (s): 66

Scenario 22: '2028 Peak Construction 7-8AM' (FG22: '28PC_7-8AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	77.5%	
J8_B1121/B1119_Saxmundham	-	-	-	77.5%	
1/1	High Street Left Ahead Right	3.7	55.8	70.3%	
2/1	B1119 Church Street Right Left Ahead	4.6	62.5	77.5%	
3/1+3/2	S Entrance Ahead Right Left	1.6	24.2	30.5 : 30.5%	
4/1	Chantry Road Left Ahead Right	3.4	51.1	65.4%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	16.2 16.2	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	8.33 8.33	Cycle Time (s): 66

Scenario 23: '2028 Peak Construction 8-9AM' (FG23: '28PC_8-9AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	80.4%	
J8_B1121/B1119_Saxmundham	-	-	-	80.4%	
1/1	High Street Left Ahead Right	6.9	65.9	74.9%	
2/1	B1119 Church Street Right Left Ahead	10.9	58.4	79.9%	
3/1+3/2	S Entrance Ahead Right Left	5.2	32.5	46.7 : 46.7%	
4/1	Chantry Road Left Ahead Right	7.9	74.3	80.4%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	12.0 12.0	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	16.33 16.33	Cycle Time (s): 104

Scenario 24: '2028 Peak Construction 3-4PM' (FG24: '28PC_3-4PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	84.7%	
J8_B1121/B1119_Saxmundham	-	-	-	84.7%	
1/1	High Street Left Ahead Right	9.0	69.1	76.5%	
2/1	B1119 Church Street Right Left Ahead	17.2	58.8	84.7%	
3/1+3/2	S Entrance Ahead Right Left	7.1	45.6	66.3 : 66.3%	
4/1	Chantry Road Left Ahead Right	6.5	84.6	75.4%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	6.3 6.3	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	20.23 20.23	Cycle Time (s): 120

Scenario 25: '2028 Peak Construction 5-6PM' (FG25: '28PC_5-6PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	86.8%	
J8_B1121/B1119_Saxmundham	-	-	-	86.8%	
1/1	High Street Left Ahead Right	10.2	79.4	83.3%	
2/1	B1119 Church Street Right Left Ahead	18.2	62.0	86.8%	
3/1+3/2	S Entrance Ahead Right Left	8.1	42.4	62.6 : 62.6%	
4/1	Chantry Road Left Ahead Right	7.8	95.3	82.6%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	3.6 3.6	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	22.66 22.66	Cycle Time (s): 120

Scenario 26: '2034 Reference Case 6-7AM' (FG26: '34RC_6-7AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	49.6%	
J8_B1121/B1119_Saxmundham	-	-	-	49.6%	
1/1	High Street Left Ahead Right	2.1	45.0	49.6%	
2/1	B1119 Church Street Right Left Ahead	1.3	38.2	29.8%	
3/1+3/2	S Entrance Ahead Right Left	0.5	20.4	9.5 : 9.5%	
4/1	Chantry Road Left Ahead Right	0.9	36.4	20.4%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	81.6 81.6	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	2.73 2.73	Cycle Time (s): 66

Scenario 27: '2034 Reference Case 7-8AM' (FG27: '34RC_7-8AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	65.6%	
J8_B1121/B1119_Saxmundham	-	-	-	65.6%	
1/1	High Street Left Ahead Right	3.4	51.3	62.4%	
2/1	B1119 Church Street Right Left Ahead	4.3	43.8	62.7%	
3/1+3/2	S Entrance Ahead Right Left	1.6	25.2	27.5 : 27.5%	
4/1	Chantry Road Left Ahead Right	3.7	52.9	65.6%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	37.1 37.1	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	7.51 7.51	Cycle Time (s): 72

Scenario 28: '2034 Reference Case 8-9AM' (FG28: '34RC_8-9AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	79.2%	
J8_B1121/B1119_Saxmundham	-	-	-	79.2%	
1/1	High Street Left Ahead Right	6.3	66.7	66.6%	
2/1	B1119 Church Street Right Left Ahead	13.9	57.2	79.2%	
3/1+3/2	S Entrance Ahead Right Left	7.2	41.4	53.3 : 53.3%	
4/1	Chantry Road Left Ahead Right	8.4	68.6	73.7%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	13.6 13.6	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	17.46 17.46	Cycle Time (s): 120

Scenario 29: '2034 Reference Case 3-4PM' (FG29: '34RC_3-4PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	87.0%	
J8_B1121/B1119_Saxmundham	-	-	-	87.0%	
1/1	High Street Left Ahead Right	9.9	67.7	78.0%	
2/1	B1119 Church Street Right Left Ahead	17.8	63.4	87.0%	
3/1+3/2	S Entrance Ahead Right Left	7.2	44.4	67.1 : 67.1%	
4/1	Chantry Road Left Ahead Right	7.6	104.0	84.3%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	3.4 3.4	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	22.27 22.27	Cycle Time (s): 120

Scenario 30: '2034 Reference Case 5-6PM' (FG30: '34RC_5-6PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	87.0%	
J8_B1121/B1119_Saxmundham	-	-	-	87.0%	
1/1	High Street Left Ahead Right	10.9	80.1	84.5%	
2/1	B1119 Church Street Right Left Ahead	18.2	62.3	87.0%	
3/1+3/2	S Entrance Ahead Right Left	6.9	50.9	71.5 : 71.5%	
4/1	Chantry Road Left Ahead Right	7.8	87.7	80.1%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	3.4 3.4	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	23.17 23.17	Cycle Time (s): 120

Scenario 31: '2034 Operational Led 6-7AM' (FG31: '34OP_6-7AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	36.7%
J8_B1121/B1119_Saxmundham	-	-	-	36.7%
1/1	High Street Left Ahead Right	1.5	40.7	36.7%
2/1	B1119 Church Street Right Left Ahead	1.1	37.4	25.7%
3/1+3/2	S Entrance Ahead Right Left	0.5	20.3	9.4 : 9.4%
4/1	Chantry Road Left Ahead Right	0.9	36.4	20.4%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	0.0%
C1	PRC for Signalled Lanes (%): 145.5 PRC Over All Lanes (%): 145.5	Total Delay for Signalled Lanes (pcuHr): 2.24 Total Delay Over All Lanes(pcuHr): 2.24	Cycle Time (s): 66	

Scenario 32: '2034 Operational Led 7-8AM' (FG32: '34OP_7-8AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	63.6%
J8_B1121/B1119_Saxmundham	-	-	-	63.6%
1/1	High Street Left Ahead Right	3.0	48.6	57.2%
2/1	B1119 Church Street Right Left Ahead	4.1	46.3	63.6%
3/1+3/2	S Entrance Ahead Right Left	1.7	25.9	30.0 : 30.0%
4/1	Chantry Road Left Ahead Right	3.4	46.5	59.1%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	0.0%
C1	PRC for Signalled Lanes (%): 41.4 PRC Over All Lanes (%): 41.4	Total Delay for Signalled Lanes (pcuHr): 7.03 Total Delay Over All Lanes(pcuHr): 7.03	Cycle Time (s): 72	

Scenario 33: '2034 Operational Led 8-9AM' (FG33: '34OP_8-9AM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	84.1%	
J8_B1121/B1119_Saxmundham	-	-	-	84.1%	
1/1	High Street Left Ahead Right	5.8	51.4	51.1%	
2/1	B1119 Church Street Right Left Ahead	14.7	65.0	84.1%	
3/1+3/2	S Entrance Ahead Right Left	13.1	54.1	79.7 : 79.7%	
4/1	Chantry Road Left Ahead Right	9.2	81.3	81.4%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	7.0 7.0	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	21.23 21.23	Cycle Time (s): 120

Scenario 34: '2034 Operational Led 3-4PM' (FG34: '34OP_3-4PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	85.5%	
J8_B1121/B1119_Saxmundham	-	-	-	85.5%	
1/1	High Street Left Ahead Right	9.3	67.5	76.6%	
2/1	B1119 Church Street Right Left Ahead	16.8	62.2	85.5%	
3/1+3/2	S Entrance Ahead Right Left	7.0	42.1	63.7 : 63.7%	
4/1	Chantry Road Left Ahead Right	6.9	88.7	78.3%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
Ped Link: P4	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	5.2 5.2	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	20.52 20.52	Cycle Time (s): 120

Scenario 35: '2034 Operational Led 5-6PM' (FG35: '34OP_5-6PM', Plan 1: '5 stages')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J8 (B1121 / B1119 Saxmundham)	-	-	-	83.2%
J8_B1121/B1119_Saxmundham	-	-	-	83.2%
1/1	High Street Left Ahead Right	9.2	66.7	75.4%
2/1	B1119 Church Street Right Left Ahead	16.6	57.0	83.2%
3/1+3/2	S Entrance Ahead Right Left	6.4	48.3	66.3 : 66.3%
4/1	Chantry Road Left Ahead Right	7.8	87.7	80.1%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
Ped Link: P4	Unnamed Ped Link	-	-	0.0%
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	8.1 8.1	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	20.42 20.42
				Cycle Time (s): 120

Project and User Details

Project:	Sizewell C Transport Planning
Title:	Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)
Location:	Leiston, Suffolk
Additional detail:	
File name:	J9_FY_Model_Optimised v11.lsg3x
Author:	
Company:	WSP UK
Address:	62-64 Hills Road, Cambridge
Linsig Version:	3, 2, 40, 0

Network Results

Scenario 1: 'Base Year 6-7AM' (FG1: '17BY_6-7AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	21.2%
J9_B1119/B1122/B1069_Leiston	-	-	-	21.2%
1/1+1/2	Station Road (B1122) Left Ahead Right	1.2	28.8	19.7 : 19.7%
2/1	Main Street (B1122) Right Left Ahead	0.6	38.7	13.8%
3/1	Park Hill (B1069) Ahead Right Left	1.3	29.1	18.7%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	0.9	38.8	21.2 : 21.2%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 324.2 Total Delay for Signalled Lanes (pcuHr): 2.00 Cycle Time (s): 71 PRC Over All Lanes (%): 324.2 Total Delay Over All Lanes(pcuHr): 2.00				

Scenario 2: 'Base Year 7-8AM' (FG2: '17BY_7-8AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	51.5%
J9_B1119/B1122/B1069_Leiston	-	-	-	51.5%
1/1+1/2	Station Road (B1122) Left Ahead Right	3.3	33.2	45.7 : 45.7%
2/1	Main Street (B1122) Right Left Ahead	2.0	45.0	43.4%
3/1	Park Hill (B1069) Ahead Right Left	3.7	34.1	49.2%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	2.4	43.8	51.5 : 51.5%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 74.8 Total Delay for Signalled Lanes (pcuHr): 6.13 Cycle Time (s): 71 PRC Over All Lanes (%): 74.8 Total Delay Over All Lanes(pcuHr): 6.13				

Scenario 3: 'Base Year 8-9AM' (FG3: '17BY_8-9AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	76.2%
J9_B1119/B1122/B1069_Leiston	-	-	-	76.2%
1/1+1/2	Station Road (B1122) Left Ahead Right	5.2	38.8	62.1 : 62.1%
2/1	Main Street (B1122) Right Left Ahead	4.2	66.4	74.5%
3/1	Park Hill (B1069) Ahead Right Left	6.4	43.1	71.3%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	5.1	53.4	76.2 : 76.2%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 18.1 Total Delay for Signalled Lanes (pcuHr): 12.20 Cycle Time (s): 74 PRC Over All Lanes (%): 18.1 Total Delay Over All Lanes(pcuHr): 12.20				

Scenario 4: 'Base Year 3-4PM' (FG4: '17BY_3-4PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	79.2%
J9_B1119/B1122/B1069_Leiston	-	-	-	79.2%
1/1+1/2	Station Road (B1122) Left Ahead Right	6.5	44.4	71.9 : 71.9%
2/1	Main Street (B1122) Right Left Ahead	6.0	61.6	79.2%
3/1	Park Hill (B1069) Ahead Right Left	6.8	37.0	67.6%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	2.8	39.2	47.7 : 47.7%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 13.7 Total Delay for Signalled Lanes (pcuHr): 12.09 Cycle Time (s): 75 PRC Over All Lanes (%): 13.7 Total Delay Over All Lanes(pcuHr): 12.09				

Scenario 5: 'Base Year 5-6PM' (FG5: '17BY_5-6PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	71.0%
J9_B1119/B1122/B1069_Leiston	-	-	-	71.0%
1/1+1/2	Station Road (B1122) Left Ahead Right	5.4	45.1	70.3 : 70.3%
2/1	Main Street (B1122) Right Left Ahead	4.5	52.8	71.0%
3/1	Park Hill (B1069) Ahead Right Left	4.7	35.8	58.6%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	3.7	41.0	59.1 : 59.1%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 26.8 Total Delay for Signalled Lanes (pcuHr): 10.08 Cycle Time (s): 71 PRC Over All Lanes (%): 26.8 Total Delay Over All Lanes(pcuHr): 10.08				

Scenario 6: '2023 Reference Case 6-7AM' (FG6: '23RC_6-7AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	49.7%
J9_B1119/B1122/B1069_Leiston	-	-	-	49.7%
1/1+1/2	Station Road (B1122) Left Ahead Right	1.3	29.1	21.2 : 21.2%
2/1	Main Street (B1122) Right Left Ahead	0.9	39.9	20.7%
3/1	Park Hill (B1069) Ahead Right Left	1.6	43.5	37.0%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	2.3	46.4	49.7 : 49.7%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 81.0 Total Delay for Signalled Lanes (pcuHr): 3.38 Cycle Time (s): 71 PRC Over All Lanes (%): 81.0 Total Delay Over All Lanes(pcuHr): 3.38				

Scenario 7: '2023 Reference Case 7-8AM' (FG7: '23RC_7-8AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	55.8%
J9_B1119/B1122/B1069_Leiston	-	-	-	55.8%
1/1+1/2	Station Road (B1122) Left Ahead Right	3.6	28.4	30.1 : 30.1%
2/1	Main Street (B1122) Right Left Ahead	3.5	59.7	55.8%
3/1	Park Hill (B1069) Ahead Right Left	5.0	36.8	44.2%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	3.7	51.6	54.7 : 54.7%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 61.4 Total Delay for Signalled Lanes (pcuHr): 7.79 Cycle Time (s): 96 PRC Over All Lanes (%): 61.4 Total Delay Over All Lanes(pcuHr): 7.79				

Scenario 8: '2023 Reference Case 8-9AM' (FG8: '23RC_8-9AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	76.8%
J9_B1119/B1122/B1069_Leiston	-	-	-	76.8%
1/1+1/2	Station Road (B1122) Left Ahead Right	7.9	39.4	52.5 : 52.5%
2/1	Main Street (B1122) Right Left Ahead	6.9	71.0	73.1%
3/1	Park Hill (B1069) Ahead Right Left	10.2	52.7	71.3%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	8.6	61.5	76.8 : 76.8%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 17.3 Total Delay for Signalled Lanes (pcuHr): 16.62 Cycle Time (s): 112 PRC Over All Lanes (%): 17.3 Total Delay Over All Lanes(pcuHr): 16.62				

Scenario 9: '2023 Reference Case 3-4PM' (FG9: '23RC_3-4PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	80.6%
J9_B1119/B1122/B1069_Leiston	-	-	-	80.6%
1/1+1/2	Station Road (B1122) Left Ahead Right	8.3	39.9	53.5 : 53.5%
2/1	Main Street (B1122) Right Left Ahead	9.4	69.7	79.3%
3/1	Park Hill (B1069) Ahead Right Left	12.2	60.0	80.6%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	7.3	71.9	78.5 : 78.5%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 11.6 Total Delay for Signalled Lanes (pcuHr): 18.91 Cycle Time (s): 112 PRC Over All Lanes (%): 11.6 Total Delay Over All Lanes(pcuHr): 18.91				

Scenario 10: '2023 Reference Case 5-6PM' (FG10: '23RC_5-6PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	70.3%
J9_B1119/B1122/B1069_Leiston	-	-	-	70.3%
1/1+1/2	Station Road (B1122) Left Ahead Right	6.5	37.8	41.3 : 41.3%
2/1	Main Street (B1122) Right Left Ahead	7.8	66.9	70.3%
3/1	Park Hill (B1069) Ahead Right Left	9.5	51.9	65.9%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	7.4	62.4	69.2 : 69.2%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 28.0 Total Delay for Signalled Lanes (pcuHr): 14.71 Cycle Time (s): 120 PRC Over All Lanes (%): 28.0 Total Delay Over All Lanes(pcuHr): 14.71				

Scenario 11: '2023 Early Years 6-7AM' (FG11: '23EY_6-7AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	61.0%
J9_B1119/B1122/B1069_Leiston	-	-	-	61.0%
1/1+1/2	Station Road (B1122) Left Ahead Right	1.5	29.6	24.1 : 24.1%
2/1	Main Street (B1122) Right Left Ahead	0.2	37.7	4.4%
3/1	Park Hill (B1069) Ahead Right Left	3.1	52.6	61.0%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	2.5	43.9	52.8 : 52.8%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 47.7 Total Delay for Signalled Lanes (pcuHr): 4.35 Cycle Time (s): 71 PRC Over All Lanes (%): 47.7 Total Delay Over All Lanes(pcuHr): 4.35				

Scenario 12: '2023 Early Years 7-8AM' (FG12: '23EY_7-8AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	64.8%
J9_B1119/B1122/B1069_Leiston	-	-	-	64.8%
1/1+1/2	Station Road (B1122) Left Ahead Right	4.1	27.9	34.0 : 34.0%
2/1	Main Street (B1122) Right Left Ahead	0.9	56.4	21.3%
3/1	Park Hill (B1069) Ahead Right Left	8.1	36.9	60.2%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	4.4	55.0	64.8 : 64.8%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 38.9 Total Delay for Signalled Lanes (pcuHr): 8.80 Cycle Time (s): 96 PRC Over All Lanes (%): 38.9 Total Delay Over All Lanes(pcuHr): 8.80				

Scenario 13: '2023 Early Years 8-9AM' (FG13: '23EY_8-9AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	78.7%
J9_B1119/B1122/B1069_Leiston	-	-	-	78.7%
1/1+1/2	Station Road (B1122) Left Ahead Right	7.3	32.5	44.5 : 44.5%
2/1	Main Street (B1122) Right Left Ahead	2.3	77.1	49.0%
3/1	Park Hill (B1069) Ahead Right Left	14.4	49.1	78.7%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	8.8	62.1	77.8 : 77.8%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 14.4 Total Delay for Signalled Lanes (pcuHr): 15.47 Cycle Time (s): 112 PRC Over All Lanes (%): 14.4 Total Delay Over All Lanes(pcuHr): 15.47				

Scenario 14: '2023 Early Years 3-4PM' (FG14: '23EY_3-4PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	80.7%
J9_B1119/B1122/B1069_Leiston	-	-	-	80.7%
1/1+1/2	Station Road (B1122) Left Ahead Right	7.8	35.2	52.0 : 52.0%
2/1	Main Street (B1122) Right Left Ahead	6.6	85.4	78.5%
3/1	Park Hill (B1069) Ahead Right Left	13.9	48.4	77.2%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	7.7	74.3	80.7 : 80.7%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 11.5 Total Delay for Signalled Lanes (pcuHr): 18.00 Cycle Time (s): 112 PRC Over All Lanes (%): 11.5 Total Delay Over All Lanes(pcuHr): 18.00				

Scenario 15: '2023 Early Years 5-6PM' (FG15: '23EY_5-6PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	74.1%
J9_B1119/B1122/B1069_Leiston	-	-	-	74.1%
1/1+1/2	Station Road (B1122) Left Ahead Right	7.7	36.5	51.0 : 51.0%
2/1	Main Street (B1122) Right Left Ahead	4.9	82.1	67.8%
3/1	Park Hill (B1069) Ahead Right Left	12.3	44.3	67.3%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	8.2	65.5	74.1 : 74.1%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 21.5 Total Delay for Signalled Lanes (pcuHr): 15.42 Cycle Time (s): 120 PRC Over All Lanes (%): 21.5 Total Delay Over All Lanes(pcuHr): 15.42				

Scenario 16: '2028 Reference Case 6-7AM' (FG16: '28RC_6-7AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	37.4%
J9_B1119/B1122/B1069_Leiston	-	-	-	37.4%
1/1+1/2	Station Road (B1122) Left Ahead Right	1.4	28.5	18.6 : 18.6%
2/1	Main Street (B1122) Right Left Ahead	1.1	46.5	24.4%
3/1	Park Hill (B1069) Ahead Right Left	1.7	38.0	26.6%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	2.3	40.7	37.4 : 37.4%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 140.8 Total Delay for Signalled Lanes (pcuHr): 3.25 Cycle Time (s): 80 PRC Over All Lanes (%): 140.8 Total Delay Over All Lanes(pcuHr): 3.25				

Scenario 17: '2028 Reference Case 7-8AM' (FG17: '28RC_7-8AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	56.9%
J9_B1119/B1122/B1069_Leiston	-	-	-	56.9%
1/1+1/2	Station Road (B1122) Left Ahead Right	3.8	29.6	31.6 : 31.6%
2/1	Main Street (B1122) Right Left Ahead	3.7	56.9	54.7%
3/1	Park Hill (B1069) Ahead Right Left	5.3	38.5	47.6%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	3.9	52.3	56.9 : 56.9%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 58.1 Total Delay for Signalled Lanes (pcuHr): 8.21 Cycle Time (s): 96 PRC Over All Lanes (%): 58.1 Total Delay Over All Lanes(pcuHr): 8.21				

Scenario 18: '2028 Reference Case 8-9AM' (FG18: '28RC_8-9AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	77.6%
J9_B1119/B1122/B1069_Leiston	-	-	-	77.6%
1/1+1/2	Station Road (B1122) Left Ahead Right	8.7	41.6	52.9 : 52.9%
2/1	Main Street (B1122) Right Left Ahead	8.1	75.4	75.9%
3/1	Park Hill (B1069) Ahead Right Left	11.4	55.2	72.5%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	9.8	63.5	77.6 : 77.6%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 16.0 Total Delay for Signalled Lanes (pcuHr): 18.39 Cycle Time (s): 120 PRC Over All Lanes (%): 16.0 Total Delay Over All Lanes(pcuHr): 18.39				

Scenario 19: '2028 Reference Case 3-4PM' (FG19: '28RC_3-4PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	78.1%	
J9_B1119/B1122/B1069_Leiston	-	-	-	78.1%	
1/1+1/2	Station Road (B1122) Left Ahead Right	8.8	38.6	51.0 : 51.0%	
2/1	Main Street (B1122) Right Left Ahead	9.5	72.2	78.1%	
3/1	Park Hill (B1069) Ahead Right Left	12.3	53.5	74.5%	
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	7.3	73.8	76.7 : 76.7%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	15.2 15.2	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	18.33 18.33	Cycle Time (s): 120

Scenario 20: '2028 Reference Case 5-6PM' (FG20: '28RC_5-6PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	73.7%	
J9_B1119/B1122/B1069_Leiston	-	-	-	73.7%	
1/1+1/2	Station Road (B1122) Left Ahead Right	6.7	38.4	43.0 : 43.0%	
2/1	Main Street (B1122) Right Left Ahead	8.1	68.7	72.7%	
3/1	Park Hill (B1069) Ahead Right Left	10.1	53.2	68.5%	
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	8.2	65.6	73.7 : 73.7%	
Ped Link: P1	Unnamed Ped Link	-	-	0.0%	
Ped Link: P2	Unnamed Ped Link	-	-	0.0%	
Ped Link: P3	Unnamed Ped Link	-	-	0.0%	
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	22.1 22.1	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):	15.86 15.86	Cycle Time (s): 120

Scenario 21: '2028 Peak Construction 6-7AM' (FG21: '28PC_6-7AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	68.3%
J9_B1119/B1122/B1069_Leiston	-	-	-	68.3%
1/1+1/2	Station Road (B1122) Left Ahead Right	2.1	25.9	22.9 : 22.9%
2/1	Main Street (B1122) Right Left Ahead	1.4	47.9	31.1%
3/1	Park Hill (B1069) Ahead Right Left	6.5	43.3	68.3%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	2.1	46.0	45.7 : 45.7%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 31.7 Total Delay for Signalled Lanes (pcuHr): 6.44 Cycle Time (s): 80 PRC Over All Lanes (%): 31.7 Total Delay Over All Lanes(pcuHr): 6.44				

Scenario 22: '2028 Peak Construction 7-8AM' (FG22: '28PC_7-8AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	76.8%
J9_B1119/B1122/B1069_Leiston	-	-	-	76.8%
1/1+1/2	Station Road (B1122) Left Ahead Right	4.7	27.5	35.6 : 35.6%
2/1	Main Street (B1122) Right Left Ahead	4.8	75.6	73.1%
3/1	Park Hill (B1069) Ahead Right Left	11.9	44.2	76.8%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	4.9	64.8	74.4 : 74.4%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 17.2 Total Delay for Signalled Lanes (pcuHr): 13.82 Cycle Time (s): 96 PRC Over All Lanes (%): 17.2 Total Delay Over All Lanes(pcuHr): 13.82				

Scenario 23: '2028 Peak Construction 8-9AM' (FG23: '28PC_8-9AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	83.8%
J9_B1119/B1122/B1069_Leiston	-	-	-	83.8%
1/1+1/2	Station Road (B1122) Left Ahead Right	9.3	41.9	55.3 : 55.3%
2/1	Main Street (B1122) Right Left Ahead	8.7	79.9	79.6%
3/1	Park Hill (B1069) Ahead Right Left	14.1	60.4	80.8%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	11.0	70.7	83.8 : 83.8%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 7.4 Total Delay for Signalled Lanes (pcuHr): 21.70 Cycle Time (s): 120 PRC Over All Lanes (%): 7.4 Total Delay Over All Lanes(pcuHr): 21.70				

Scenario 24: '2028 Peak Construction 3-4PM' (FG24: '28PC_3-4PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	90.9%
J9_B1119/B1122/B1069_Leiston	-	-	-	90.9%
1/1+1/2	Station Road (B1122) Left Ahead Right	14.2	39.8	68.4 : 68.4%
2/1	Main Street (B1122) Right Left Ahead	11.2	93.2	87.7%
3/1	Park Hill (B1069) Ahead Right Left	15.1	69.4	88.1%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	9.7	106.3	90.9 : 90.9%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): -1.0 Total Delay for Signalled Lanes (pcuHr): 26.37 Cycle Time (s): 120 PRC Over All Lanes (%): -1.0 Total Delay Over All Lanes(pcuHr): 26.37				

Scenario 25: '2028 Peak Construction 5-6PM' (FG25: '28PC_5-6PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	86.5%
J9_B1119/B1122/B1069_Leiston	-	-	-	86.5%
1/1+1/2	Station Road (B1122) Left Ahead Right	13.1	34.5	62.7 : 62.7%
2/1	Main Street (B1122) Right Left Ahead	6.5	107.9	82.4%
3/1	Park Hill (B1069) Ahead Right Left	14.3	50.8	79.2%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	10.0	86.8	86.5 : 86.5%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 4.1 Total Delay for Signalled Lanes (pcuHr): 20.86 Cycle Time (s): 120 PRC Over All Lanes (%): 4.1 Total Delay Over All Lanes(pcuHr): 20.86				

Scenario 26: '2034 Reference Case 6-7AM' (FG26: '34RC_6-7AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	49.8%
J9_B1119/B1122/B1069_Leiston	-	-	-	49.8%
1/1+1/2	Station Road (B1122) Left Ahead Right	1.5	29.3	23.2 : 23.2%
2/1	Main Street (B1122) Right Left Ahead	1.0	40.4	23.7%
3/1	Park Hill (B1069) Ahead Right Left	1.8	44.3	40.4%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	2.3	46.2	49.8 : 49.8%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 80.9 Total Delay for Signalled Lanes (pcuHr): 3.64 Cycle Time (s): 71 PRC Over All Lanes (%): 80.9 Total Delay Over All Lanes(pcuHr): 3.64				

Scenario 27: '2034 Reference Case 7-8AM' (FG27: '34RC_7-8AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	72.0%
J9_B1119/B1122/B1069_Leiston	-	-	-	72.0%
1/1+1/2	Station Road (B1122) Left Ahead Right	3.6	31.2	40.1 : 40.1%
2/1	Main Street (B1122) Right Left Ahead	3.7	59.3	65.7%
3/1	Park Hill (B1069) Ahead Right Left	6.0	51.2	72.0%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	3.9	51.1	65.3 : 65.3%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 25.0 Total Delay for Signalled Lanes (pcuHr): 9.70 Cycle Time (s): 80 PRC Over All Lanes (%): 25.0 Total Delay Over All Lanes(pcuHr): 9.70				

Scenario 28: '2034 Reference Case 8-9AM' (FG28: '34RC_8-9AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	85.0%
J9_B1119/B1122/B1069_Leiston	-	-	-	85.0%
1/1+1/2	Station Road (B1122) Left Ahead Right	8.2	42.6	51.3 : 51.3%
2/1	Main Street (B1122) Right Left Ahead	10.3	80.8	83.0%
3/1	Park Hill (B1069) Ahead Right Left	14.0	65.8	83.3%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	11.5	74.0	85.0 : 85.0%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 5.8 Total Delay for Signalled Lanes (pcuHr): 22.55 Cycle Time (s): 120 PRC Over All Lanes (%): 5.8 Total Delay Over All Lanes(pcuHr): 22.55				

Scenario 29: '2034 Reference Case 3-4PM' (FG29: '34RC_3-4PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	85.4%
J9_B1119/B1122/B1069_Leiston	-	-	-	85.4%
1/1+1/2	Station Road (B1122) Left Ahead Right	9.9	39.7	55.8 : 55.8%
2/1	Main Street (B1122) Right Left Ahead	11.3	83.1	85.4%
3/1	Park Hill (B1069) Ahead Right Left	14.6	64.3	84.4%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	8.2	77.4	81.9 : 81.9%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 5.4 Total Delay for Signalled Lanes (pcuHr): 22.66 Cycle Time (s): 120 PRC Over All Lanes (%): 5.4 Total Delay Over All Lanes(pcuHr): 22.66				

Scenario 30: '2034 Reference Case 5-6PM' (FG30: '34RC_5-6PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	85.0%
J9_B1119/B1122/B1069_Leiston	-	-	-	85.0%
1/1+1/2	Station Road (B1122) Left Ahead Right	6.7	36.7	49.2 : 49.2%
2/1	Main Street (B1122) Right Left Ahead	8.4	81.4	83.6%
3/1	Park Hill (B1069) Ahead Right Left	10.0	60.5	79.8%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	9.3	74.9	85.0 : 85.0%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 5.9 Total Delay for Signalled Lanes (pcuHr): 18.51 Cycle Time (s): 104 PRC Over All Lanes (%): 5.9 Total Delay Over All Lanes(pcuHr): 18.51				

Scenario 31: '2034 Operational Led 6-7AM' (FG31: '34OP_6-7AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	41.3%
J9_B1119/B1122/B1069_Leiston	-	-	-	41.3%
1/1+1/2	Station Road (B1122) Left Ahead Right	1.4	29.2	22.5 : 22.5%
2/1	Main Street (B1122) Right Left Ahead	0.9	39.8	20.2%
3/1	Park Hill (B1069) Ahead Right Left	1.9	44.5	41.3%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	1.7	42.2	39.0 : 39.0%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 118.0 Total Delay for Signalled Lanes (pcuHr): 3.23 Cycle Time (s): 71 PRC Over All Lanes (%): 118.0 Total Delay Over All Lanes(pcuHr): 3.23				

Scenario 32: '2034 Operational Led 7-8AM' (FG32: '34OP_7-8AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	86.0%
J9_B1119/B1122/B1069_Leiston	-	-	-	86.0%
1/1+1/2	Station Road (B1122) Left Ahead Right	3.4	28.2	35.2 : 35.2%
2/1	Main Street (B1122) Right Left Ahead	3.8	66.3	69.4%
3/1	Park Hill (B1069) Ahead Right Left	9.9	60.6	86.0%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	4.9	69.7	80.3 : 80.3%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 4.6 Total Delay for Signalled Lanes (pcuHr): 13.21 Cycle Time (s): 80 PRC Over All Lanes (%): 4.6 Total Delay Over All Lanes(pcuHr): 13.21				

Scenario 33: '2034 Operational Led 8-9AM' (FG33: '34OP_8-9AM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	103.8%
J9_B1119/B1122/B1069_Leiston	-	-	-	103.8%
1/1+1/2	Station Road (B1122) Left Ahead Right	8.3	39.0	49.8 : 49.8%
2/1	Main Street (B1122) Right Left Ahead	16.8	182.1	101.3%
3/1	Park Hill (B1069) Ahead Right Left	37.6	165.1	103.8%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	25.3	160.9	102.6 : 102.6%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): -15.3 Total Delay for Signalled Lanes (pcuHr): 62.14 Cycle Time (s): 120 PRC Over All Lanes (%): -15.3 Total Delay Over All Lanes(pcuHr): 62.14				

Scenario 34: '2034 Operational Led 3-4PM' (FG34: '34OP_3-4PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	86.6%
J9_B1119/B1122/B1069_Leiston	-	-	-	86.6%
1/1+1/2	Station Road (B1122) Left Ahead Right	9.9	39.7	56.0 : 56.0%
2/1	Main Street (B1122) Right Left Ahead	10.5	78.1	82.5%
3/1	Park Hill (B1069) Ahead Right Left	14.6	64.4	84.5%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	9.6	89.7	86.6 : 86.6%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1 PRC for Signalled Lanes (%): 3.9 Total Delay for Signalled Lanes (pcuHr): 22.74 Cycle Time (s): 120 PRC Over All Lanes (%): 3.9 Total Delay Over All Lanes(pcuHr): 22.74				

Scenario 35: '2034 Operational Led 5-6PM' (FG35: '34OP_5-6PM', Plan 1: '5 Stage Plan')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Standalone Modelling 2018 - J9 (B1119 / B1122 / B1069 Leiston)	-	-	-	81.0%
J9_B1119/B1122/B1069_Leiston	-	-	-	81.0%
1/1+1/2	Station Road (B1122) Left Ahead Right	6.5	33.7	45.0 : 45.0%
2/1	Main Street (B1122) Right Left Ahead	5.1	85.0	75.1%
3/1	Park Hill (B1069) Ahead Right Left	12.4	54.5	81.0%
4/1+4/2	Waterloo Avenue (B1119) Left Ahead Right	8.0	63.5	78.3 : 78.3%
Ped Link: P1	Unnamed Ped Link	-	-	0.0%
Ped Link: P2	Unnamed Ped Link	-	-	0.0%
Ped Link: P3	Unnamed Ped Link	-	-	0.0%
C1	PRC for Signalled Lanes (%): 11.1 PRC Over All Lanes (%): 11.1	Total Delay for Signalled Lanes (pcuHr): 16.30 Total Delay Over All Lanes(pcuHr): 16.30	Cycle Time (s): 104	

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: 2019.05.30 J12a_Model_v11.j9

Path: \\ser01cam1uk.uk.wspgroup.com\projects\50400326 - Sizewell C transport planning\D Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\FOR Issue\Scoped In\11\J12a\Model

Report generation date: 13/03/2020 13:22:40

- »Base Year, 6-7 AM
- »Base Year, 7-8 AM
- »Base Year, 8-9 AM
- »Base Year, 3-4 PM
- »Base Year, 5-6 PM
- »2023 Reference Case , 6-7 AM
- »2023 Reference Case , 7-8 AM
- »2023 Reference Case , 8-9 AM
- »2023 Reference Case , 3-4 PM
- »2023 Reference Case , 5-6 PM
- »2023 Early Years , 6-7 AM
- »2023 Early Years , 7-8 AM
- »2023 Early Years , 8-9 AM
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- »2023 Early Years , 5-6 PM
- »2028 Reference Case , 6-7 AM
- »2028 Reference Case , 7-8 AM
- »2028 Reference Case , 8-9 AM
- »2028 Reference Case , 3-4 PM
- »2028 Reference Case , 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case , 6-7 AM
- »2034 Reference Case , 7-8 AM
- »2034 Reference Case , 8-9 AM
- »2034 Reference Case , 3-4 PM
- »2034 Reference Case , 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM				7-8 AM				8-9 AM				3-4 PM				5-6 PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
Base Year																				
Stream B-AC	0.1	6.39	0.05	A	0.4	8.78	0.29	A	0.3	8.51	0.26	A	0.4	9.24	0.27	A	0.4	9.07	0.27	A
Stream C-AB	0.1	5.79	0.08	A	0.5	5.68	0.21	A	0.7	6.05	0.28	A	2.0	9.86	0.54	A	1.1	8.00	0.40	A
2023 Reference Case																				
Stream B-AC	0.1	6.50	0.12	A	0.5	9.71	0.33	A	0.4	9.13	0.30	A	0.4	9.95	0.31	A	0.4	9.75	0.30	A
Stream C-AB	0.2	5.77	0.11	A	0.6	6.19	0.26	A	0.9	6.21	0.32	A	3.2	12.41	0.65	B	1.8	9.78	0.52	A
2023 Early Years																				
Stream B-AC	0.2	6.90	0.17	A	0.8	12.20	0.46	B	0.5	9.88	0.32	A	0.6	10.68	0.36	B	0.4	10.37	0.31	B
Stream C-AB	0.2	5.74	0.12	A	1.1	6.66	0.36	A	1.3	6.76	0.38	A	5.1	17.77	0.75	C	6.2	23.82	0.80	C
2028 Reference Case																				
Stream B-AC	0.1	6.55	0.12	A	0.5	10.04	0.35	B	0.5	9.55	0.32	A	0.5	10.08	0.32	B	0.4	9.97	0.31	A
Stream C-AB	0.2	5.75	0.11	A	0.7	6.28	0.27	A	0.9	6.34	0.32	A	3.5	13.22	0.67	B	2.0	10.33	0.55	B
2028 Peak Construction																				

Stream B-AC	0.2	7.00	0.19	A	0.7	10.72	0.40	B	0.5	9.71	0.35	A	0.6	10.57	0.37	B	0.5	9.90	0.32	A
Stream C-AB	0.2	5.80	0.12	A	0.7	6.53	0.29	A	0.9	6.46	0.33	A	4.7	17.92	0.75	C	2.5	12.37	0.62	B
2034 Reference Case																				
Stream B-AC	0.1	6.59	0.13	A	0.6	10.58	0.37	B	0.6	10.81	0.38	B	0.7	11.65	0.41	B	0.5	10.40	0.34	B
Stream C-AB	0.2	5.72	0.12	A	0.7	6.44	0.28	A	1.1	6.75	0.36	A	5.5	18.42	0.77	C	2.8	11.52	0.62	B
2034 Operational Led																				
Stream B-AC	0.1	6.55	0.13	A	0.6	10.40	0.37	B	0.6	10.44	0.37	B	0.7	11.39	0.40	B	0.5	10.02	0.33	B
Stream C-AB	0.2	5.74	0.12	A	0.7	6.52	0.28	A	1.2	7.17	0.38	A	4.8	17.25	0.75	C	2.4	11.41	0.60	B

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

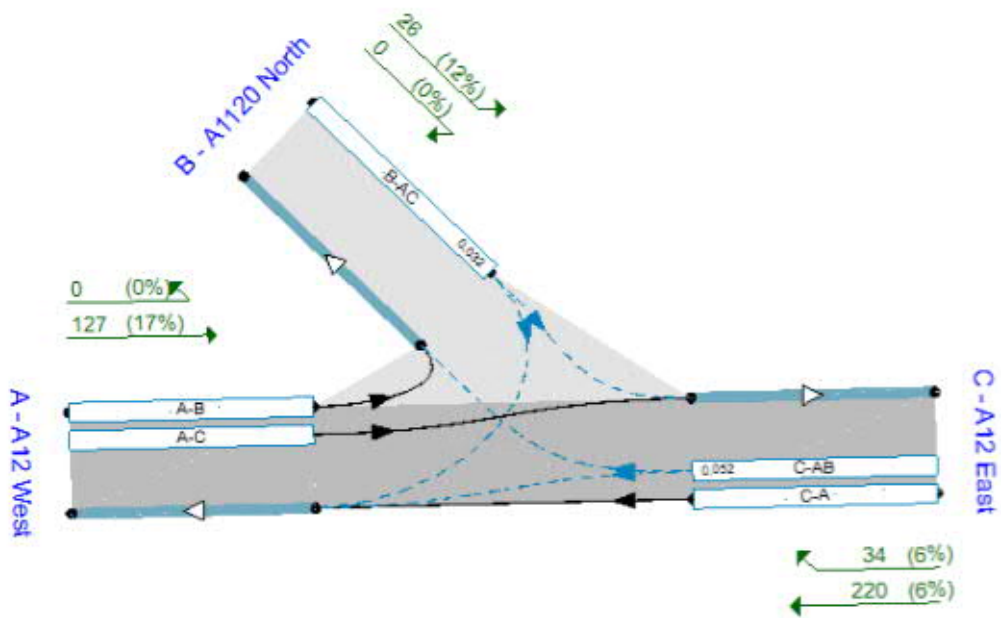
File summary

File Description

Title	A12-A1120
Location	52.264749°, 1.511117°
Site number	12a
Date	05/07/2017
Version	v1
Status	
Identifier	
Client	EDF Energy
Jobnumber	50400326
Enumerator	UKEWS001
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Please check original traffic demand (with stream labels) and see TRC 3

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length	Calculate Queue	Calculate detailed queueing	Calculate residual	RFC	Average Delay	Queue threshold
----------------	-----------------	-----------------------------	--------------------	-----	---------------	-----------------

(m)	Percentiles	delay	capacity	Threshold	threshold (s)	(PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		1.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 West		Major
B	A1120 North		Minor
C	A12 East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 East	7.50			45.0	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - A1120 North	One lane	3.92	102	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	574	0.098	0.247	0.155	0.353
B-C	702	0.101	0.254	-	-
C-B	600	0.217	0.217	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	127	100.000
B - A1120 North		ONE HOUR	✓	26	100.000
C - A12 East		ONE HOUR	✓	254	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 West	B - A1120 North	C - A12 East
A - A12 West	0	0	127
B - A1120 North	0	0	26
C - A12 East	220	34	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 West	B - A1120 North	C - A12 East
A - A12 West	0	0	17
B - A1120 North	0	0	12
C - A12 East	6	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.05	6.39	0.1	A	24	36
C-AB	0.08	5.79	0.1	A	45	68
C-A					188	282
A-B					0	0
A-C					117	175

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	20	5	604	0.032	19	0.0	0.0	6.158	A
C-AB	34	9	656	0.052	34	0.0	0.1	5.786	A
C-A	157	39			157				
A-B	0	0			0				
A-C	96	24			96				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	599	0.039	23	0.0	0.0	6.254	A
C-AB	43	11	674	0.064	43	0.1	0.1	5.710	A
C-A	185	46			185				
A-B	0	0			0				
A-C	114	29			114				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	7	592	0.048	29	0.0	0.1	6.389	A
C-AB	57	14	699	0.082	57	0.1	0.1	5.613	A
C-A	222	56			222				
A-B	0	0			0				
A-C	140	35			140				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	7	592	0.048	29	0.1	0.1	6.389	A
C-AB	57	14	699	0.082	57	0.1	0.1	5.616	A
C-A	222	56			222				
A-B	0	0			0				
A-C	140	35			140				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	7	592	0.048	29	0.1	0.1	6.389	A
C-AB	57	14	699	0.082	57	0.1	0.1	5.616	A
C-A	222	56			222				
A-B	0	0			0				
A-C	140	35			140				

B-AC	23	6	599	0.039	23	0.1	0.0	6.255	A
C-AB	43	11	674	0.064	44	0.1	0.1	5.716	A
C-A	185	46			185				
A-B	0	0			0				
A-C	114	29			114				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	20	5	604	0.032	20	0.0	0.0	6.161	A
C-AB	34	9	656	0.052	34	0.1	0.1	5.793	A
C-A	157	39			157				
A-B	0	0			0				
A-C	96	24			96				

Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	283	100.000
B - A1120 North		ONE HOUR	✓	150	100.000
C - A12 East		ONE HOUR	✓	447	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	283
	B - A1120 North	0	0	150
	C - A12 East	373	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	7
	B - A1120 North	0	0	7
	C - A12 East	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.29	8.78	0.4	A	138	206
C-AB	0.21	5.68	0.5	A	126	189
C-A					284	426
A-B					0	0
A-C					260	390

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	600	0.188	112	0.0	0.2	7.361	A
C-AB	90	23	732	0.123	89	0.0	0.2	5.600	A
C-A	246	62			246				
A-B	0	0			0				
A-C	213	53			213				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	135	34	590	0.229	135	0.2	0.3	7.905	A
C-AB	119	30	761	0.157	119	0.2	0.3	5.598	A
C-A	282	71			282				
A-B	0	0			0				
A-C	254	64			254				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	165	41	575	0.287	165	0.3	0.4	8.759	A
C-AB	168	42	803	0.209	167	0.3	0.5	5.659	A
C-A	324	81			324				
A-B	0	0			0				
A-C	312	78			312				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	165	41	575	0.287	165	0.4	0.4	8.776	A
C-AB	168	42	803	0.209	168	0.5	0.5	5.683	A
C-A	324	81			324				
A-B	0	0			0				
A-C	312	78			312				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	135	34	590	0.229	135	0.4	0.3	7.927	A
C-AB	120	30	762	0.157	120	0.5	0.3	5.646	A
C-A	282	71			282				
A-B	0	0			0				
A-C	254	64			254				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	600	0.188	113	0.3	0.2	7.395	A
C-AB	91	23	732	0.124	91	0.3	0.2	5.641	A
C-A	246	61			246				
A-B	0	0			0				
A-C	213	53			213				

Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	392	100.000
B - A1120 North		ONE HOUR	✓	134	100.000
C - A12 East		ONE HOUR	✓	533	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	392
	B - A1120 North	0	0	134
	C - A12 East	449	84	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	8
	B - A1120 North	0	0	2
	C - A12 East	6	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.26	8.51	0.3	A	123	184
C-AB	0.28	6.05	0.7	A	169	253
C-A					320	480
A-B					0	0
A-C					360	540

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	101	25	607	0.166	100	0.0	0.2	7.091	A
C-AB	117	29	739	0.158	115	0.0	0.3	5.769	A
C-A	285	71			285				
A-B	0	0			0				
A-C	295	74			295				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	592	0.204	120	0.2	0.3	7.633	A
C-AB	158	40	776	0.204	158	0.3	0.5	5.833	A
C-A	321	80			321				
A-B	0	0			0				
A-C	352	88			352				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	148	37	570	0.259	147	0.3	0.3	8.500	A
C-AB	231	58	828	0.279	230	0.5	0.7	6.031	A
C-A	356	89			356				
A-B	0	0			0				
A-C	432	108			432				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	148	37	570	0.259	148	0.3	0.3	8.515	A
C-AB	232	58	829	0.279	232	0.7	0.7	6.052	A
C-A	355	89			355				
A-B	0	0			0				
A-C	432	108			432				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	592	0.204	121	0.3	0.3	7.653	A
C-AB	159	40	777	0.205	160	0.7	0.5	5.861	A
C-A	320	80			320				
A-B	0	0			0				
A-C	352	88			352				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	101	25	607	0.166	101	0.3	0.2	7.117	A
C-AB	117	29	740	0.159	118	0.5	0.3	5.805	A
C-A	284	71			284				
A-B	0	0			0				
A-C	295	74			295				

Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		3.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	494	100.000
B - A1120 North		ONE HOUR	✓	133	100.000
C - A12 East		ONE HOUR	✓	590	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	494
	B - A1120 North	0	0	133
	C - A12 East	432	158	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	3
	B - A1120 North	0	0	5
	C - A12 East	6	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.27	9.24	0.4	A	122	183
C-AB	0.54	9.86	2.0	A	315	473
C-A					226	339
A-B					0	0
A-C					453	680

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	100	25	579	0.173	99	0.0	0.2	7.495	A
C-AB	217	54	720	0.301	214	0.0	0.7	7.102	A
C-A	227	57			227				
A-B	0	0			0				
A-C	372	93			372				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	561	0.213	119	0.2	0.3	8.149	A
C-AB	295	74	754	0.391	293	0.7	1.0	7.834	A
C-A	236	59			236				
A-B	0	0			0				
A-C	444	111			444				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	146	37	536	0.273	146	0.3	0.4	9.222	A
C-AB	432	108	803	0.538	428	1.0	1.9	9.667	A
C-A	218	55			218				
A-B	0	0			0				
A-C	544	136			544				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	146	37	536	0.273	146	0.4	0.4	9.242	A
C-AB	434	108	804	0.539	434	1.9	2.0	9.862	A
C-A	216	54			216				
A-B	0	0			0				
A-C	544	136			544				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	561	0.213	120	0.4	0.3	8.174	A
C-AB	297	74	757	0.393	301	2.0	1.1	8.014	A
C-A	233	58			233				
A-B	0	0			0				
A-C	444	111			444				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	100	25	579	0.173	100	0.3	0.2	7.526	A
C-AB	219	55	722	0.303	220	1.1	0.7	7.229	A
C-A	225	56			225				
A-B	0	0			0				
A-C	372	93			372				

Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	547	100.000
B - A1120 North		ONE HOUR	✓	132	100.000
C - A12 East		ONE HOUR	✓	482	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	547
	B - A1120 North	0	0	132
	C - A12 East	353	129	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	2
	B - A1120 North	0	0	1
	C - A12 East	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.27	9.07	0.4	A	121	182
C-AB	0.40	8.00	1.1	A	222	332
C-A					221	331
A-B					0	0
A-C					502	753

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	99	25	591	0.168	99	0.0	0.2	7.299	A
C-AB	157	39	694	0.227	156	0.0	0.4	6.680	A
C-A	205	51			205				
A-B	0	0			0				
A-C	412	103			412				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	570	0.208	118	0.2	0.3	7.961	A
C-AB	209	52	717	0.292	208	0.4	0.6	7.088	A
C-A	224	56			224				
A-B	0	0			0				
A-C	492	123			492				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	145	36	542	0.268	145	0.3	0.4	9.057	A
C-AB	297	74	750	0.396	295	0.6	1.1	7.938	A
C-A	234	58			234				
A-B	0	0			0				
A-C	602	151			602				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	145	36	542	0.268	145	0.4	0.4	9.075	A
C-AB	298	74	751	0.397	298	1.1	1.1	8.005	A
C-A	233	58			233				
A-B	0	0			0				
A-C	602	151			602				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	570	0.208	119	0.4	0.3	7.983	A
C-AB	210	52	718	0.292	212	1.1	0.7	7.170	A
C-A	223	56			223				
A-B	0	0			0				
A-C	492	123			492				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	99	25	591	0.168	100	0.3	0.2	7.330	A
C-AB	158	40	695	0.228	159	0.7	0.5	6.751	A
C-A	205	51			205				
A-B	0	0			0				
A-C	412	103			412				

2023 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		1.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	142	100.000
B - A1120 North		ONE HOUR	✓	67	100.000
C - A12 East		ONE HOUR	✓	285	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	142
	B - A1120 North	0	0	67
	C - A12 East	240	45	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	16
	B - A1120 North	0	0	4
	C - A12 East	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.12	6.50	0.1	A	61	92
C-AB	0.11	5.77	0.2	A	61	92
C-A					200	300
A-B					0	0
A-C					130	195

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	642	0.079	50	0.0	0.1	6.083	A
C-AB	46	12	671	0.069	46	0.0	0.1	5.757	A
C-A	168	42			168				
A-B	0	0			0				
A-C	107	27			107				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	636	0.095	60	0.1	0.1	6.253	A
C-AB	59	15	690	0.085	59	0.1	0.1	5.701	A
C-A	197	49			197				
A-B	0	0			0				
A-C	128	32			128				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	74	18	628	0.118	74	0.1	0.1	6.495	A
C-AB	79	20	718	0.110	78	0.1	0.2	5.634	A
C-A	235	59			235				
A-B	0	0			0				
A-C	156	39			156				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	74	18	628	0.118	74	0.1	0.1	6.497	A
C-AB	79	20	718	0.110	79	0.2	0.2	5.638	A
C-A	235	59			235				
A-B	0	0			0				
A-C	156	39			156				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	636	0.095	60	0.1	0.1	6.255	A
C-AB	59	15	691	0.086	59	0.2	0.1	5.712	A
C-A	197	49			197				
A-B	0	0			0				
A-C	128	32			128				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	642	0.079	51	0.1	0.1	6.089	A
C-AB	47	12	671	0.069	47	0.1	0.1	5.769	A
C-A	168	42			168				
A-B	0	0			0				
A-C	107	27			107				

2023 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	354	100.000
B - A1120 North		ONE HOUR	✓	169	100.000
C - A12 East		ONE HOUR	✓	464	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	354
	B - A1120 North	0	0	169
	C - A12 East	375	89	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	7
	B - A1120 North	0	0	7
	C - A12 East	10	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.33	9.71	0.5	A	155	233
C-AB	0.26	6.19	0.6	A	154	232
C-A					271	407
A-B					0	0
A-C					325	487

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32	588	0.216	126	0.0	0.3	7.778	A
C-AB	110	27	723	0.152	109	0.0	0.3	5.864	A
C-A	239	60			239				
A-B	0	0			0				
A-C	267	67			267				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	152	38	575	0.264	152	0.3	0.4	8.499	A
C-AB	146	36	750	0.194	145	0.3	0.4	5.942	A
C-A	271	68			271				
A-B	0	0			0				
A-C	318	80			318				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	186	47	557	0.334	186	0.4	0.5	9.684	A
C-AB	206	52	790	0.261	206	0.4	0.6	6.154	A
C-A	304	76			304				
A-B	0	0			0				
A-C	390	97			390				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	186	47	557	0.334	186	0.5	0.5	9.713	A
C-AB	207	52	790	0.262	207	0.6	0.6	6.194	A
C-A	304	76			304				
A-B	0	0			0				
A-C	390	97			390				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	152	38	575	0.264	152	0.5	0.4	8.534	A
C-AB	146	37	751	0.195	147	0.6	0.4	6.015	A
C-A	271	68			271				
A-B	0	0			0				
A-C	318	80			318				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32	588	0.216	128	0.4	0.3	7.825	A
C-AB	111	28	723	0.153	111	0.4	0.3	5.917	A
C-A	239	60			239				
A-B	0	0			0				
A-C	267	67			267				

2023 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	428	100.000
B - A1120 North		ONE HOUR	✓	151	100.000
C - A12 East		ONE HOUR	✓	586	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	428
	B - A1120 North	0	0	151
	C - A12 East	495	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	9
	B - A1120 North	0	0	2
	C - A12 East	6	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.30	9.13	0.4	A	139	208
C-AB	0.32	6.21	0.9	A	199	299
C-A					339	508
A-B					0	0
A-C					393	589

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	114	28	601	0.189	113	0.0	0.2	7.362	A
C-AB	134	34	760	0.177	133	0.0	0.4	5.743	A
C-A	307	77			307				
A-B	0	0			0				
A-C	322	81			322				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	136	34	584	0.232	135	0.2	0.3	8.022	A
C-AB	185	46	801	0.231	185	0.4	0.6	5.852	A
C-A	342	85			342				
A-B	0	0			0				
A-C	385	96			385				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	166	42	560	0.297	166	0.3	0.4	9.110	A
C-AB	276	69	860	0.321	275	0.6	0.9	6.172	A
C-A	369	92			369				
A-B	0	0			0				
A-C	471	118			471				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	166	42	560	0.297	166	0.4	0.4	9.132	A
C-AB	277	69	861	0.322	277	0.9	0.9	6.208	A
C-A	368	92			368				
A-B	0	0			0				
A-C	471	118			471				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	136	34	584	0.232	136	0.4	0.3	8.048	A
C-AB	186	47	802	0.232	188	0.9	0.6	5.894	A
C-A	341	85			341				
A-B	0	0			0				
A-C	385	96			385				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	114	28	601	0.189	114	0.3	0.2	7.396	A
C-AB	136	34	761	0.178	136	0.6	0.4	5.787	A
C-A	306	76			306				
A-B	0	0			0				
A-C	322	81			322				

2023 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		5.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	545	100.000
B - A1120 North		ONE HOUR	✓	146	100.000
C - A12 East		ONE HOUR	✓	668	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	545
	B - A1120 North	0	0	146
	C - A12 East	494	174	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	3
	B - A1120 North	0	0	4
	C - A12 East	7	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.31	9.95	0.4	A	134	201
C-AB	0.65	12.41	3.2	B	391	587
C-A					222	333
A-B					0	0
A-C					500	750

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	27	571	0.193	109	0.0	0.2	7.783	A
C-AB	261	65	748	0.348	257	0.0	0.9	7.322	A
C-A	242	61			242				
A-B	0	0			0				
A-C	410	103			410				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	550	0.238	131	0.2	0.3	8.574	A
C-AB	361	90	788	0.459	359	0.9	1.4	8.429	A
C-A	239	60			239				
A-B	0	0			0				
A-C	490	122			490				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	523	0.308	160	0.3	0.4	9.919	A
C-AB	545	136	846	0.645	538	1.4	3.1	11.838	B
C-A	190	48			190				
A-B	0	0			0				
A-C	600	150			600				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	523	0.308	161	0.4	0.4	9.946	A
C-AB	550	137	849	0.648	549	3.1	3.2	12.410	B
C-A	186	46			186				
A-B	0	0			0				
A-C	600	150			600				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	550	0.238	132	0.4	0.3	8.606	A
C-AB	366	92	793	0.462	373	3.2	1.5	8.818	A
C-A	234	59			234				
A-B	0	0			0				
A-C	490	122			490				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	27	571	0.193	110	0.3	0.2	7.824	A
C-AB	263	66	751	0.351	266	1.5	0.9	7.514	A
C-A	239	60			239				
A-B	0	0			0				
A-C	410	103			410				

2023 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		3.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	597	100.000
B - A1120 North		ONE HOUR	✓	143	100.000
C - A12 East		ONE HOUR	✓	557	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	597
	B - A1120 North	0	0	143
	C - A12 East	400	157	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	3
	B - A1120 North	0	0	1
	C - A12 East	5	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.30	9.75	0.4	A	131	197
C-AB	0.52	9.78	1.8	A	296	444
C-A					215	323
A-B					0	0
A-C					548	822

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	108	27	580	0.185	107	0.0	0.2	7.586	A
C-AB	205	51	711	0.289	203	0.0	0.6	7.101	A
C-A	214	54			214				
A-B	0	0			0				
A-C	449	112			449				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	558	0.230	128	0.2	0.3	8.376	A
C-AB	277	69	738	0.376	276	0.6	0.9	7.808	A
C-A	224	56			224				
A-B	0	0			0				
A-C	537	134			537				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	157	39	526	0.299	157	0.3	0.4	9.727	A
C-AB	403	101	777	0.519	400	0.9	1.8	9.587	A
C-A	210	53			210				
A-B	0	0			0				
A-C	657	164			657				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	157	39	526	0.299	157	0.4	0.4	9.755	A
C-AB	405	101	778	0.520	405	1.8	1.8	9.781	A
C-A	208	52			208				
A-B	0	0			0				
A-C	657	164			657				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	129	32	558	0.230	129	0.4	0.3	8.407	A
C-AB	279	70	740	0.377	282	1.8	1.0	8.002	A
C-A	222	55			222				
A-B	0	0			0				
A-C	537	134			537				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	108	27	580	0.185	108	0.3	0.2	7.625	A
C-AB	207	52	712	0.290	208	1.0	0.6	7.210	A
C-A	213	53			213				
A-B	0	0			0				
A-C	449	112			449				

2023 Early Years , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		1.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	161	100.000
B - A1120 North		ONE HOUR	✓	97	100.000
C - A12 East		ONE HOUR	✓	313	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	161
	B - A1120 North	0	0	97
	C - A12 East	263	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	20
	B - A1120 North	0	0	3
	C - A12 East	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	6.90	0.2	A	89	134
C-AB	0.12	5.74	0.2	A	71	106
C-A					216	325
A-B					0	0
A-C					148	222

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	645	0.113	73	0.0	0.1	6.281	A
C-AB	53	13	681	0.078	53	0.0	0.1	5.724	A
C-A	183	46			183				
A-B	0	0			0				
A-C	121	30			121				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22	638	0.137	87	0.1	0.2	6.530	A
C-AB	68	17	702	0.097	68	0.1	0.2	5.674	A
C-A	213	53			213				
A-B	0	0			0				
A-C	145	36			145				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	629	0.170	107	0.2	0.2	6.896	A
C-AB	91	23	732	0.125	91	0.2	0.2	5.619	A
C-A	253	63			253				
A-B	0	0			0				
A-C	177	44			177				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	629	0.170	107	0.2	0.2	6.898	A
C-AB	91	23	732	0.125	91	0.2	0.2	5.627	A
C-A	253	63			253				
A-B	0	0			0				
A-C	177	44			177				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22	638	0.137	87	0.2	0.2	6.539	A
C-AB	68	17	703	0.097	68	0.2	0.2	5.687	A
C-A	213	53			213				
A-B	0	0			0				
A-C	145	36			145				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	645	0.113	73	0.2	0.1	6.297	A
C-AB	53	13	682	0.078	53	0.2	0.1	5.738	A
C-A	182	46			182				
A-B	0	0			0				
A-C	121	30			121				

2023 Early Years , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		3.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	416	100.000
B - A1120 North		ONE HOUR	✓	225	100.000
C - A12 East		ONE HOUR	✓	582	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	416
	B - A1120 North	0	0	225
	C - A12 East	474	108	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	12
	B - A1120 North	0	0	5
	C - A12 East	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.46	12.20	0.8	B	206	310
C-AB	0.36	6.66	1.1	A	224	336
C-A					310	465
A-B					0	0
A-C					382	573

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	169	42	582	0.291	168	0.0	0.4	8.662	A
C-AB	153	38	763	0.200	151	0.0	0.4	5.878	A
C-A	285	71			285				
A-B	0	0			0				
A-C	313	78			313				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	202	51	565	0.358	202	0.4	0.5	9.883	A
C-AB	209	52	800	0.261	208	0.4	0.6	6.075	A
C-A	314	79			314				
A-B	0	0			0				
A-C	374	93			374				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	248	62	543	0.457	247	0.5	0.8	12.115	B
C-AB	309	77	853	0.362	307	0.6	1.1	6.595	A
C-A	332	83			332				
A-B	0	0			0				
A-C	458	115			458				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	248	62	543	0.457	248	0.8	0.8	12.201	B
C-AB	310	77	854	0.363	310	1.1	1.1	6.665	A
C-A	331	83			331				
A-B	0	0			0				
A-C	458	115			458				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	202	51	565	0.358	203	0.8	0.6	9.974	A
C-AB	210	52	801	0.262	212	1.1	0.7	6.181	A
C-A	313	78			313				
A-B	0	0			0				
A-C	374	93			374				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	169	42	582	0.291	170	0.6	0.4	8.756	A
C-AB	154	38	764	0.201	155	0.7	0.5	5.955	A
C-A	284	71			284				
A-B	0	0			0				
A-C	313	78			313				

2023 Early Years , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	474	100.000
B - A1120 North		ONE HOUR	✓	157	100.000
C - A12 East		ONE HOUR	✓	621	100.000

Origin-Destination Data

Demand (Veh/hr)

	To		
	A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	474
	B - A1120 North	0	157
	C - A12 East	521	0

Vehicle Mix

Heavy Vehicle Percentages

	To		
	A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	16
	B - A1120 North	0	2
	C - A12 East	8	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	9.88	0.5	A	144	216
C-AB	0.38	6.76	1.3	A	234	351
C-A					336	504
A-B					0	0
A-C					435	652

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	118	30	585	0.202	117	0.0	0.3	7.677	A
C-AB	155	39	763	0.203	153	0.0	0.5	5.899	A
C-A	313	78			313				
A-B	0	0			0				
A-C	357	89			357				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	141	35	565	0.250	141	0.3	0.3	8.480	A
C-AB	216	54	806	0.269	215	0.5	0.7	6.107	A
C-A	342	85			342				
A-B	0	0			0				
A-C	426	107			426				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	173	43	537	0.322	172	0.3	0.5	9.850	A
C-AB	329	82	867	0.380	327	0.7	1.2	6.695	A
C-A	355	89			355				
A-B	0	0			0				
A-C	522	130			522				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	173	43	537	0.322	173	0.5	0.5	9.879	A
C-AB	330	83	868	0.381	330	1.2	1.3	6.762	A
C-A	353	88			353				
A-B	0	0			0				
A-C	522	130			522				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	141	35	565	0.250	142	0.5	0.3	8.514	A
C-AB	218	54	807	0.270	220	1.3	0.7	6.193	A
C-A	341	85			341				
A-B	0	0			0				
A-C	426	107			426				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	118	30	585	0.202	119	0.3	0.3	7.721	A
C-AB	156	39	764	0.205	157	0.7	0.5	5.969	A
C-A	311	78			311				
A-B	0	0			0				
A-C	357	89			357				

2023 Early Years , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		7.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	527	100.000
B - A1120 North		ONE HOUR	✓	173	100.000
C - A12 East		ONE HOUR	✓	703	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	527
	B - A1120 North	0	0	173
	C - A12 East	507	196	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	6
	B - A1120 North	0	0	3
	C - A12 East	11	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.36	10.68	0.6	B	159	238
C-AB	0.75	17.77	5.1	C	455	682
C-A					191	286
A-B					0	0
A-C					484	725

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	130	33	575	0.226	129	0.0	0.3	8.048	A
C-AB	299	75	753	0.397	295	0.0	1.1	7.836	A
C-A	230	58			230				
A-B	0	0			0				
A-C	397	99			397				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	39	555	0.280	155	0.3	0.4	8.991	A
C-AB	418	104	794	0.526	415	1.1	1.8	9.506	A
C-A	214	54			214				
A-B	0	0			0				
A-C	474	118			474				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	190	48	528	0.361	190	0.4	0.6	10.636	B
C-AB	636	159	853	0.745	624	1.8	4.7	15.862	C
C-A	138	35			138				
A-B	0	0			0				
A-C	580	145			580				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	190	48	528	0.361	190	0.6	0.6	10.678	B
C-AB	645	161	859	0.751	644	4.7	5.1	17.765	C
C-A	129	32			129				
A-B	0	0			0				
A-C	580	145			580				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	156	39	555	0.280	156	0.6	0.4	9.036	A
C-AB	426	107	802	0.531	439	5.1	2.0	10.469	B
C-A	206	51			206				
A-B	0	0			0				
A-C	474	118			474				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	130	33	575	0.226	131	0.4	0.3	8.105	A
C-AB	303	76	756	0.401	307	2.0	1.1	8.167	A
C-A	226	57			226				
A-B	0	0			0				
A-C	397	99			397				

2023 Early Years , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		9.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	675	100.000
B - A1120 North		ONE HOUR	✓	140	100.000
C - A12 East		ONE HOUR	✓	661	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	675
	B - A1120 North	0	0	140
	C - A12 East	446	215	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	4
	B - A1120 North	0	0	1
	C - A12 East	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.31	10.37	0.4	B	128	193
C-AB	0.80	23.82	6.2	C	455	683
C-A					151	227
A-B					0	0
A-C					619	929

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	105	26	563	0.187	104	0.0	0.2	7.829	A
C-AB	303	76	720	0.422	299	0.0	1.1	8.533	A
C-A	194	49			194				
A-B	0	0			0				
A-C	508	127			508				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	126	31	537	0.234	126	0.2	0.3	8.737	A
C-AB	419	105	750	0.559	416	1.1	2.0	10.773	B
C-A	175	44			175				
A-B	0	0			0				
A-C	607	152			607				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	39	501	0.307	154	0.3	0.4	10.334	B
C-AB	630	158	795	0.793	616	2.0	5.6	20.092	C
C-A	98	24			98				
A-B	0	0			0				
A-C	743	186			743				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	39	501	0.307	154	0.4	0.4	10.367	B
C-AB	641	160	802	0.799	639	5.6	6.2	23.818	C
C-A	86	22			86				
A-B	0	0			0				
A-C	743	186			743				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	126	31	537	0.234	126	0.4	0.3	8.773	A
C-AB	430	107	760	0.565	445	6.2	2.3	12.395	B
C-A	165	41			165				
A-B	0	0			0				
A-C	607	152			607				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	105	26	563	0.187	106	0.3	0.2	7.874	A
C-AB	308	77	723	0.425	312	2.3	1.2	8.978	A
C-A	190	48			190				
A-B	0	0			0				
A-C	508	127			508				

2028 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		1.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	150	100.000
B - A1120 North		ONE HOUR	✓	69	100.000
C - A12 East		ONE HOUR	✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	150
	B - A1120 North	0	0	69
	C - A12 East	251	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	17
	B - A1120 North	0	0	4
	C - A12 East	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.12	6.55	0.1	A	63	95
C-AB	0.11	5.75	0.2	A	64	96
C-A					209	313
A-B					0	0
A-C					138	206

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	13	641	0.081	52	0.0	0.1	6.106	A
C-AB	48	12	676	0.071	48	0.0	0.1	5.731	A
C-A	176	44			176				
A-B	0	0			0				
A-C	113	28			113				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	62	16	634	0.098	62	0.1	0.1	6.288	A
C-AB	61	15	696	0.088	61	0.1	0.1	5.673	A
C-A	206	51			206				
A-B	0	0			0				
A-C	135	34			135				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	76	19	626	0.121	76	0.1	0.1	6.543	A
C-AB	82	21	724	0.113	82	0.1	0.2	5.606	A
C-A	245	61			245				
A-B	0	0			0				
A-C	165	41			165				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	76	19	626	0.121	76	0.1	0.1	6.546	A
C-AB	82	21	724	0.114	82	0.2	0.2	5.610	A
C-A	245	61			245				
A-B	0	0			0				
A-C	165	41			165				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	62	16	634	0.098	62	0.1	0.1	6.293	A
C-AB	61	15	696	0.088	62	0.2	0.2	5.683	A
C-A	206	51			206				
A-B	0	0			0				
A-C	135	34			135				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	52	13	641	0.081	52	0.1	0.1	6.118	A
C-AB	48	12	676	0.071	48	0.2	0.1	5.746	A
C-A	175	44			175				
A-B	0	0			0				
A-C	113	28			113				

2028 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	381	100.000
B - A1120 North		ONE HOUR	✓	175	100.000
C - A12 East		ONE HOUR	✓	462	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	381
	B - A1120 North	0	0	175
	C - A12 East	372	90	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	6
	B - A1120 North	0	0	7
	C - A12 East	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.35	10.04	0.5	B	161	241
C-AB	0.27	6.28	0.7	A	156	234
C-A					268	402
A-B					0	0
A-C					350	524

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	132	33	585	0.225	131	0.0	0.3	7.910	A
C-AB	111	28	718	0.155	110	0.0	0.3	5.914	A
C-A	237	59			237				
A-B	0	0			0				
A-C	287	72			287				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	157	39	571	0.276	157	0.3	0.4	8.697	A
C-AB	147	37	745	0.198	147	0.3	0.4	6.009	A
C-A	268	67			268				
A-B	0	0			0				
A-C	343	86			343				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	193	48	551	0.350	192	0.4	0.5	10.008	B
C-AB	209	52	784	0.266	208	0.4	0.6	6.244	A
C-A	300	75			300				
A-B	0	0			0				
A-C	419	105			419				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	193	48	551	0.350	193	0.5	0.5	10.042	B
C-AB	209	52	784	0.267	209	0.6	0.7	6.281	A
C-A	300	75			300				
A-B	0	0			0				
A-C	419	105			419				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	157	39	571	0.276	158	0.5	0.4	8.737	A
C-AB	148	37	746	0.198	149	0.6	0.4	6.080	A
C-A	267	67			267				
A-B	0	0			0				
A-C	343	86			343				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	132	33	585	0.225	132	0.4	0.3	7.963	A
C-AB	112	28	719	0.155	112	0.4	0.3	5.969	A
C-A	236	59			236				
A-B	0	0			0				
A-C	287	72			287				

2028 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	468	100.000
B - A1120 North		ONE HOUR	✓	158	100.000
C - A12 East		ONE HOUR	✓	574	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	468
	B - A1120 North	0	0	158
	C - A12 East	483	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	7
	B - A1120 North	0	0	2
	C - A12 East	6	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	9.55	0.5	A	145	217
C-AB	0.32	6.34	0.9	A	197	295
C-A					330	495
A-B					0	0
A-C					429	644

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	594	0.200	118	0.0	0.2	7.540	A
C-AB	133	33	749	0.178	132	0.0	0.4	5.827	A
C-A	299	75			299				
A-B	0	0			0				
A-C	352	88			352				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	142	36	576	0.247	142	0.2	0.3	8.281	A
C-AB	183	46	788	0.232	183	0.4	0.6	5.951	A
C-A	333	83			333				
A-B	0	0			0				
A-C	421	105			421				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	174	43	551	0.316	173	0.3	0.5	9.527	A
C-AB	273	68	845	0.323	271	0.6	0.9	6.302	A
C-A	359	90			359				
A-B	0	0			0				
A-C	515	129			515				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	174	43	551	0.316	174	0.5	0.5	9.553	A
C-AB	274	68	846	0.324	274	0.9	0.9	6.336	A
C-A	358	90			358				
A-B	0	0			0				
A-C	515	129			515				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	142	36	576	0.247	143	0.5	0.3	8.312	A
C-AB	184	46	790	0.233	186	0.9	0.6	5.996	A
C-A	332	83			332				
A-B	0	0			0				
A-C	421	105			421				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	594	0.200	119	0.3	0.3	7.582	A
C-AB	134	34	750	0.179	135	0.6	0.4	5.874	A
C-A	298	74			298				
A-B	0	0			0				
A-C	352	88			352				

2028 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		5.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	549	100.000
B - A1120 North		ONE HOUR	✓	150	100.000
C - A12 East		ONE HOUR	✓	674	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	549
	B - A1120 North	0	0	150
	C - A12 East	494	180	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	3
	B - A1120 North	0	0	4
	C - A12 East	6	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	10.08	0.5	B	138	206
C-AB	0.67	13.22	3.5	B	404	606
C-A					214	322
A-B					0	0
A-C					504	756

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	570	0.198	112	0.0	0.2	7.835	A
C-AB	269	67	749	0.359	266	0.0	0.9	7.432	A
C-A	238	60			238				
A-B	0	0			0				
A-C	413	103			413				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	135	34	550	0.245	135	0.2	0.3	8.655	A
C-AB	373	93	789	0.473	371	0.9	1.5	8.650	A
C-A	232	58			232				
A-B	0	0			0				
A-C	494	123			494				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	165	41	522	0.316	165	0.3	0.5	10.054	B
C-AB	563	141	847	0.665	556	1.5	3.3	12.511	B
C-A	179	45			179				
A-B	0	0			0				
A-C	604	151			604				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	165	41	522	0.316	165	0.5	0.5	10.083	B
C-AB	568	142	850	0.668	568	3.3	3.5	13.216	B
C-A	174	43			174				
A-B	0	0			0				
A-C	604	151			604				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	135	34	550	0.245	135	0.5	0.3	8.688	A
C-AB	379	95	794	0.477	386	3.5	1.6	9.100	A
C-A	227	57			227				
A-B	0	0			0				
A-C	494	123			494				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	570	0.198	113	0.3	0.2	7.880	A
C-AB	272	68	752	0.362	275	1.6	0.9	7.646	A
C-A	235	59			235				
A-B	0	0			0				
A-C	413	103			413				

2028 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		3.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	616	100.000
B - A1120 North		ONE HOUR	✓	146	100.000
C - A12 East		ONE HOUR	✓	574	100.000

Origin-Destination Data

Demand (Veh/hr)

	To		
	A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	616
	B - A1120 North	0	146
	C - A12 East	411	0

Vehicle Mix

Heavy Vehicle Percentages

	To		
	A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	2
	B - A1120 North	0	1
	C - A12 East	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.31	9.97	0.4	A	134	201
C-AB	0.55	10.33	2.0	B	314	471
C-A					213	319
A-B					0	0
A-C					565	848

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	27	577	0.190	109	0.0	0.2	7.672	A
C-AB	216	54	715	0.303	214	0.0	0.7	7.170	A
C-A	216	54			216				
A-B	0	0			0				
A-C	464	116			464				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	554	0.237	131	0.2	0.3	8.503	A
C-AB	293	73	743	0.395	292	0.7	1.0	7.995	A
C-A	223	56			223				
A-B	0	0			0				
A-C	554	138			554				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	522	0.308	160	0.3	0.4	9.940	A
C-AB	429	107	784	0.547	425	1.0	2.0	10.085	B
C-A	203	51			203				
A-B	0	0			0				
A-C	678	170			678				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	522	0.308	161	0.4	0.4	9.969	A
C-AB	431	108	786	0.549	431	2.0	2.0	10.328	B
C-A	201	50			201				
A-B	0	0			0				
A-C	678	170			678				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	554	0.237	132	0.4	0.3	8.535	A
C-AB	296	74	746	0.396	299	2.0	1.1	8.217	A
C-A	220	55			220				
A-B	0	0			0				
A-C	554	138			554				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	110	27	577	0.190	110	0.3	0.2	7.714	A
C-AB	218	55	716	0.304	220	1.1	0.7	7.311	A
C-A	214	53			214				
A-B	0	0			0				
A-C	464	116			464				

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	161	100.000
B - A1120 North		ONE HOUR	✓	108	100.000
C - A12 East		ONE HOUR	✓	294	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	161
	B - A1120 North	0	0	108
	C - A12 East	245	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	14
	B - A1120 North	0	0	3
	C - A12 East	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.19	7.00	0.2	A	99	149
C-AB	0.12	5.80	0.2	A	67	101
C-A					202	303
A-B					0	0
A-C					148	222

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	649	0.125	81	0.0	0.1	6.328	A
C-AB	51	13	673	0.076	50	0.0	0.1	5.784	A
C-A	171	43			171				
A-B	0	0			0				
A-C	121	30			121				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	97	24	642	0.151	97	0.1	0.2	6.598	A
C-AB	65	16	692	0.094	65	0.1	0.2	5.737	A
C-A	200	50			200				
A-B	0	0			0				
A-C	145	36			145				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	633	0.188	119	0.2	0.2	6.993	A
C-AB	87	22	719	0.120	86	0.2	0.2	5.687	A
C-A	237	59			237				
A-B	0	0			0				
A-C	177	44			177				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	633	0.188	119	0.2	0.2	6.998	A
C-AB	87	22	719	0.120	87	0.2	0.2	5.694	A
C-A	237	59			237				
A-B	0	0			0				
A-C	177	44			177				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	97	24	642	0.151	97	0.2	0.2	6.606	A
C-AB	65	16	692	0.094	65	0.2	0.2	5.752	A
C-A	199	50			199				
A-B	0	0			0				
A-C	145	36			145				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	81	20	649	0.125	81	0.2	0.1	6.346	A
C-AB	51	13	673	0.076	51	0.2	0.1	5.798	A
C-A	170	43			170				
A-B	0	0			0				
A-C	121	30			121				

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		3.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	365	100.000
B - A1120 North		ONE HOUR	✓	205	100.000
C - A12 East		ONE HOUR	✓	455	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	365
	B - A1120 North	0	0	205
	C - A12 East	356	99	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	5
	B - A1120 North	0	0	6
	C - A12 East	10	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.40	10.72	0.7	B	188	282
C-AB	0.29	6.53	0.7	A	167	250
C-A					251	376
A-B					0	0
A-C					335	502

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	39	594	0.260	153	0.0	0.3	8.145	A
C-AB	119	30	713	0.168	118	0.0	0.3	6.050	A
C-A	223	56			223				
A-B	0	0			0				
A-C	275	69			275				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	184	46	580	0.318	184	0.3	0.5	9.075	A
C-AB	158	39	739	0.214	157	0.3	0.4	6.185	A
C-A	251	63			251				
A-B	0	0			0				
A-C	328	82			328				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	226	56	561	0.402	225	0.5	0.7	10.673	B
C-AB	222	55	775	0.286	221	0.4	0.7	6.486	A
C-A	279	70			279				
A-B	0	0			0				
A-C	402	100			402				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	226	56	561	0.402	226	0.7	0.7	10.721	B
C-AB	222	56	776	0.286	222	0.7	0.7	6.527	A
C-A	279	70			279				
A-B	0	0			0				
A-C	402	100			402				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	184	46	580	0.318	185	0.7	0.5	9.133	A
C-AB	158	40	739	0.214	159	0.7	0.5	6.260	A
C-A	251	63			251				
A-B	0	0			0				
A-C	328	82			328				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	39	594	0.260	155	0.5	0.4	8.213	A
C-AB	120	30	713	0.168	121	0.5	0.3	6.110	A
C-A	222	56			222				
A-B	0	0			0				
A-C	275	69			275				

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	415	100.000
B - A1120 North		ONE HOUR	✓	178	100.000
C - A12 East		ONE HOUR	✓	561	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	415
	B - A1120 North	0	0	178
	C - A12 East	463	98	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	8
	B - A1120 North	0	0	2
	C - A12 East	6	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.35	9.71	0.5	A	163	245
C-AB	0.33	6.46	0.9	A	202	303
C-A					313	469
A-B					0	0
A-C					381	571

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	134	34	606	0.221	133	0.0	0.3	7.588	A
C-AB	138	35	746	0.185	137	0.0	0.4	5.903	A
C-A	284	71			284				
A-B	0	0			0				
A-C	312	78			312				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	160	40	589	0.271	160	0.3	0.4	8.369	A
C-AB	189	47	784	0.241	188	0.4	0.6	6.047	A
C-A	316	79			316				
A-B	0	0			0				
A-C	373	93			373				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	196	49	567	0.346	195	0.4	0.5	9.675	A
C-AB	278	69	838	0.331	276	0.6	0.9	6.423	A
C-A	340	85			340				
A-B	0	0			0				
A-C	457	114			457				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	196	49	567	0.346	196	0.5	0.5	9.708	A
C-AB	278	70	839	0.332	278	0.9	0.9	6.461	A
C-A	339	85			339				
A-B	0	0			0				
A-C	457	114			457				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	160	40	589	0.271	161	0.5	0.4	8.405	A
C-AB	190	47	786	0.241	191	0.9	0.6	6.097	A
C-A	315	79			315				
A-B	0	0			0				
A-C	373	93			373				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	134	34	606	0.221	134	0.4	0.3	7.640	A
C-AB	139	35	747	0.187	140	0.6	0.4	5.954	A
C-A	283	71			283				
A-B	0	0			0				
A-C	312	78			312				

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		8.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	490	100.000
B - A1120 North		ONE HOUR	✓	184	100.000
C - A12 East		ONE HOUR	✓	681	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	490
	B - A1120 North	0	0	184
	C - A12 East	466	215	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	3
	B - A1120 North	0	0	3
	C - A12 East	7	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.37	10.57	0.6	B	169	253
C-AB	0.75	17.92	4.7	C	453	679
C-A					172	258
A-B					0	0
A-C					450	674

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	586	0.236	137	0.0	0.3	7.997	A
C-AB	306	77	744	0.411	302	0.0	1.1	8.119	A
C-A	206	52			206				
A-B	0	0			0				
A-C	369	92			369				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	165	41	568	0.291	165	0.3	0.4	8.922	A
C-AB	420	105	782	0.537	417	1.1	1.8	9.906	A
C-A	192	48			192				
A-B	0	0			0				
A-C	441	110			441				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	203	51	543	0.373	202	0.4	0.6	10.533	B
C-AB	623	156	836	0.745	612	1.8	4.4	16.230	C
C-A	127	32			127				
A-B	0	0			0				
A-C	540	135			540				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	203	51	543	0.373	203	0.6	0.6	10.574	B
C-AB	631	158	841	0.750	629	4.4	4.7	17.917	C
C-A	119	30			119				
A-B	0	0			0				
A-C	540	135			540				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	165	41	568	0.291	166	0.6	0.4	8.971	A
C-AB	427	107	789	0.542	438	4.7	2.0	10.781	B
C-A	185	46			185				
A-B	0	0			0				
A-C	441	110			441				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	586	0.236	139	0.4	0.3	8.056	A
C-AB	310	77	747	0.415	313	2.0	1.1	8.435	A
C-A	203	51			203				
A-B	0	0			0				
A-C	369	92			369				

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		4.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	575	100.000
B - A1120 North		ONE HOUR	✓	155	100.000
C - A12 East		ONE HOUR	✓	575	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	575
	B - A1120 North	0	0	155
	C - A12 East	383	192	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	2
	B - A1120 North	0	0	1
	C - A12 East	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	9.90	0.5	A	142	213
C-AB	0.62	12.37	2.5	B	349	524
C-A					178	267
A-B					0	0
A-C					528	791

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	117	29	586	0.199	116	0.0	0.2	7.641	A
C-AB	244	61	707	0.346	241	0.0	0.8	7.715	A
C-A	189	47			189				
A-B	0	0			0				
A-C	433	108			433				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	564	0.247	139	0.2	0.3	8.461	A
C-AB	328	82	733	0.447	326	0.8	1.2	8.874	A
C-A	189	47			189				
A-B	0	0			0				
A-C	517	129			517				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	171	43	534	0.319	170	0.3	0.5	9.871	A
C-AB	472	118	770	0.613	467	1.2	2.4	11.956	B
C-A	161	40			161				
A-B	0	0			0				
A-C	633	158			633				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	171	43	534	0.319	171	0.5	0.5	9.900	A
C-AB	475	119	772	0.615	475	2.4	2.5	12.375	B
C-A	158	40			158				
A-B	0	0			0				
A-C	633	158			633				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	564	0.247	140	0.5	0.3	8.494	A
C-AB	331	83	736	0.449	335	2.5	1.3	9.205	A
C-A	186	47			186				
A-B	0	0			0				
A-C	517	129			517				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	117	29	586	0.199	117	0.3	0.3	7.683	A
C-AB	246	62	708	0.348	248	1.3	0.8	7.904	A
C-A	187	47			187				
A-B	0	0			0				
A-C	433	108			433				

2034 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		1.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	158	100.000
B - A1120 North		ONE HOUR	✓	72	100.000
C - A12 East		ONE HOUR	✓	309	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	158
	B - A1120 North	0	0	72
	C - A12 East	261	48	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	15
	B - A1120 North	0	0	4
	C - A12 East	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.13	6.59	0.1	A	66	99
C-AB	0.12	5.72	0.2	A	68	102
C-A					216	324
A-B					0	0
A-C					145	217

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	14	641	0.085	54	0.0	0.1	6.132	A
C-AB	51	13	681	0.075	50	0.0	0.1	5.709	A
C-A	182	45			182				
A-B	0	0			0				
A-C	119	30			119				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	634	0.102	65	0.1	0.1	6.322	A
C-AB	65	16	702	0.093	65	0.1	0.2	5.651	A
C-A	213	53			213				
A-B	0	0			0				
A-C	142	36			142				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	20	625	0.127	79	0.1	0.1	6.592	A
C-AB	87	22	732	0.119	87	0.2	0.2	5.587	A
C-A	253	63			253				
A-B	0	0			0				
A-C	174	43			174				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	20	625	0.127	79	0.1	0.1	6.595	A
C-AB	87	22	732	0.119	87	0.2	0.2	5.593	A
C-A	253	63			253				
A-B	0	0			0				
A-C	174	43			174				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	634	0.102	65	0.1	0.1	6.328	A
C-AB	65	16	702	0.093	65	0.2	0.2	5.665	A
C-A	213	53			213				
A-B	0	0			0				
A-C	142	36			142				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	14	641	0.085	54	0.1	0.1	6.143	A
C-AB	51	13	681	0.075	51	0.2	0.1	5.723	A
C-A	182	45			182				
A-B	0	0			0				
A-C	119	30			119				

2034 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	418	100.000
B - A1120 North		ONE HOUR	✓	185	100.000
C - A12 East		ONE HOUR	✓	466	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	418
	B - A1120 North	0	0	185
	C - A12 East	373	93	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	5
	B - A1120 North	0	0	6
	C - A12 East	9	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.37	10.58	0.6	B	170	255
C-AB	0.28	6.44	0.7	A	162	244
C-A					265	398
A-B					0	0
A-C					384	575

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	580	0.240	138	0.0	0.3	8.116	A
C-AB	115	29	714	0.161	114	0.0	0.3	5.994	A
C-A	235	59			235				
A-B	0	0			0				
A-C	315	79			315				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	166	42	565	0.294	166	0.3	0.4	9.010	A
C-AB	153	38	741	0.207	153	0.3	0.4	6.117	A
C-A	266	66			266				
A-B	0	0			0				
A-C	376	94			376				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	204	51	544	0.375	203	0.4	0.6	10.538	B
C-AB	218	54	779	0.280	217	0.4	0.7	6.398	A
C-A	295	74			295				
A-B	0	0			0				
A-C	460	115			460				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	204	51	544	0.375	204	0.6	0.6	10.580	B
C-AB	218	55	779	0.280	218	0.7	0.7	6.441	A
C-A	295	74			295				
A-B	0	0			0				
A-C	460	115			460				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	166	42	565	0.294	167	0.6	0.4	9.059	A
C-AB	154	38	741	0.208	155	0.7	0.5	6.187	A
C-A	265	66			265				
A-B	0	0			0				
A-C	376	94			376				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	35	580	0.240	140	0.4	0.3	8.177	A
C-AB	116	29	715	0.162	117	0.5	0.3	6.053	A
C-A	235	59			235				
A-B	0	0			0				
A-C	315	79			315				

2034 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	520	100.000
B - A1120 North		ONE HOUR	✓	186	100.000
C - A12 East		ONE HOUR	✓	585	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	520
	B - A1120 North	0	0	186
	C - A12 East	486	99	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	7
	B - A1120 North	0	0	2
	C - A12 East	6	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	10.81	0.6	B	171	256
C-AB	0.36	6.75	1.1	A	218	327
C-A					319	479
A-B					0	0
A-C					477	716

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	140	35	586	0.239	139	0.0	0.3	8.022	A
C-AB	146	37	746	0.196	145	0.0	0.4	5.984	A
C-A	294	74			294				
A-B	0	0			0				
A-C	391	98			391				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	167	42	566	0.296	167	0.3	0.4	9.013	A
C-AB	202	51	785	0.258	201	0.4	0.6	6.185	A
C-A	324	81			324				
A-B	0	0			0				
A-C	467	117			467				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	205	51	538	0.381	204	0.4	0.6	10.764	B
C-AB	303	76	840	0.360	301	0.6	1.1	6.703	A
C-A	341	85			341				
A-B	0	0			0				
A-C	573	143			573				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	205	51	538	0.381	205	0.6	0.6	10.810	B
C-AB	304	76	841	0.361	304	1.1	1.1	6.750	A
C-A	340	85			340				
A-B	0	0			0				
A-C	573	143			573				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	167	42	566	0.296	168	0.6	0.4	9.066	A
C-AB	203	51	786	0.259	205	1.1	0.7	6.246	A
C-A	323	81			323				
A-B	0	0			0				
A-C	467	117			467				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	140	35	586	0.239	140	0.4	0.3	8.086	A
C-AB	148	37	747	0.197	148	0.7	0.4	6.041	A
C-A	293	73			293				
A-B	0	0			0				
A-C	391	98			391				

2034 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		8.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	563	100.000
B - A1120 North		ONE HOUR	✓	193	100.000
C - A12 East		ONE HOUR	✓	737	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	563
	B - A1120 North	0	0	193
	C - A12 East	540	197	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	3
	B - A1120 North	0	0	4
	C - A12 East	6	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.41	11.65	0.7	B	177	266
C-AB	0.77	18.42	5.5	C	479	719
C-A					197	296
A-B					0	0
A-C					517	775

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	145	36	571	0.255	144	0.0	0.3	8.411	A
C-AB	312	78	775	0.403	308	0.0	1.1	7.695	A
C-A	243	61			243				
A-B	0	0			0				
A-C	424	106			424				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	174	43	550	0.315	173	0.3	0.5	9.537	A
C-AB	439	110	820	0.535	435	1.1	1.9	9.414	A
C-A	224	56			224				
A-B	0	0			0				
A-C	506	127			506				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	212	53	521	0.408	212	0.5	0.7	11.590	B
C-AB	674	168	886	0.761	661	1.9	5.1	16.283	C
C-A	138	34			138				
A-B	0	0			0				
A-C	620	155			620				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	212	53	521	0.408	212	0.7	0.7	11.654	B
C-AB	685	171	892	0.767	683	5.1	5.5	18.420	C
C-A	127	32			127				
A-B	0	0			0				
A-C	620	155			620				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	174	43	550	0.315	174	0.7	0.5	9.607	A
C-AB	449	112	830	0.541	462	5.5	2.1	10.365	B
C-A	214	53			214				
A-B	0	0			0				
A-C	506	127			506				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	145	36	571	0.255	146	0.5	0.3	8.483	A
C-AB	316	79	778	0.407	320	2.1	1.2	7.993	A
C-A	238	60			238				
A-B	0	0			0				
A-C	424	106			424				

2034 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		4.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	620	100.000
B - A1120 North		ONE HOUR	✓	160	100.000
C - A12 East		ONE HOUR	✓	640	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	620
	B - A1120 North	0	0	160
	C - A12 East	465	175	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	2
	B - A1120 North	0	0	1
	C - A12 East	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.34	10.40	0.5	B	147	220
C-AB	0.62	11.52	2.8	B	368	552
C-A					219	329
A-B					0	0
A-C					569	853

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	578	0.209	119	0.0	0.3	7.840	A
C-AB	248	62	745	0.333	245	0.0	0.8	7.187	A
C-A	233	58			233				
A-B	0	0			0				
A-C	467	117			467				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	144	36	554	0.259	143	0.3	0.3	8.755	A
C-AB	342	85	780	0.438	340	0.8	1.3	8.200	A
C-A	234	58			234				
A-B	0	0			0				
A-C	557	139			557				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	176	44	522	0.337	176	0.3	0.5	10.368	B
C-AB	509	127	830	0.613	504	1.3	2.6	11.108	B
C-A	196	49			196				
A-B	0	0			0				
A-C	683	171			683				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	176	44	522	0.337	176	0.5	0.5	10.405	B
C-AB	513	128	833	0.616	512	2.6	2.7	11.522	B
C-A	192	48			192				
A-B	0	0			0				
A-C	683	171			683				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	144	36	554	0.259	144	0.5	0.4	8.795	A
C-AB	345	86	784	0.440	351	2.7	1.4	8.511	A
C-A	230	58			230				
A-B	0	0			0				
A-C	557	139			557				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	578	0.209	121	0.4	0.3	7.886	A
C-AB	251	63	748	0.336	253	1.4	0.8	7.353	A
C-A	231	58			231				
A-B	0	0			0				
A-C	467	117			467				

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		1.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	142	100.000
B - A1120 North		ONE HOUR	✓	73	100.000
C - A12 East		ONE HOUR	✓	302	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	142
	B - A1120 North	0	0	73
	C - A12 East	253	49	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A12 West	B - A1120 North	C - A12 East
	A - A12 West	0	0	16
	B - A1120 North	0	0	4
	C - A12 East	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.13	6.55	0.1	A	67	100
C-AB	0.12	5.74	0.2	A	68	102
C-A					209	313
A-B					0	0
A-C					130	195

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	55	14	644	0.085	55	0.0	0.1	6.103	A
C-AB	51	13	679	0.075	51	0.0	0.1	5.726	A
C-A	176	44			176				
A-B	0	0			0				
A-C	107	27			107				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	16	638	0.103	66	0.1	0.1	6.287	A
C-AB	65	16	700	0.093	65	0.1	0.2	5.671	A
C-A	206	52			206				
A-B	0	0			0				
A-C	128	32			128				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	630	0.128	80	0.1	0.1	6.547	A
C-AB	88	22	729	0.120	87	0.2	0.2	5.613	A
C-A	245	61			245				
A-B	0	0			0				
A-C	156	39			156				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	630	0.128	80	0.1	0.1	6.549	A
C-AB	88	22	729	0.120	88	0.2	0.2	5.620	A
C-A	245	61			245				
A-B	0	0			0				
A-C	156	39			156				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	66	16	638	0.103	66	0.1	0.1	6.292	A
C-AB	66	16	700	0.094	66	0.2	0.2	5.686	A
C-A	206	51			206				
A-B	0	0			0				
A-C	128	32			128				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	55	14	644	0.085	55	0.1	0.1	6.112	A
C-AB	51	13	679	0.076	52	0.2	0.1	5.742	A
C-A	176	44			176				
A-B	0	0			0				
A-C	107	27			107				

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		3.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	389	100.000
B - A1120 North		ONE HOUR	✓	187	100.000
C - A12 East		ONE HOUR	✓	450	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	389
	B - A1120 North	0	0	187
	C - A12 East	354	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	5
	B - A1120 North	0	0	6
	C - A12 East	10	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.37	10.40	0.6	B	172	257
C-AB	0.28	6.52	0.7	A	162	243
C-A					251	377
A-B					0	0
A-C					357	535

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	141	35	586	0.240	140	0.0	0.3	8.039	A
C-AB	116	29	708	0.164	115	0.0	0.3	6.059	A
C-A	223	56			223				
A-B	0	0			0				
A-C	293	73			293				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	168	42	572	0.294	168	0.3	0.4	8.898	A
C-AB	153	38	733	0.209	153	0.3	0.4	6.189	A
C-A	251	63			251				
A-B	0	0			0				
A-C	350	87			350				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	206	51	552	0.373	205	0.4	0.6	10.356	B
C-AB	215	54	769	0.280	214	0.4	0.7	6.484	A
C-A	280	70			280				
A-B	0	0			0				
A-C	428	107			428				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	206	51	552	0.373	206	0.6	0.6	10.395	B
C-AB	216	54	770	0.280	216	0.7	0.7	6.525	A
C-A	280	70			280				
A-B	0	0			0				
A-C	428	107			428				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	168	42	572	0.294	169	0.6	0.4	8.947	A
C-AB	154	38	734	0.209	154	0.7	0.4	6.265	A
C-A	251	63			251				
A-B	0	0			0				
A-C	350	87			350				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	141	35	586	0.240	141	0.4	0.3	8.098	A
C-AB	116	29	709	0.164	117	0.4	0.3	6.119	A
C-A	222	56			222				
A-B	0	0			0				
A-C	293	73			293				

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		2.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	478	100.000
B - A1120 North		ONE HOUR	✓	186	100.000
C - A12 East		ONE HOUR	✓	563	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	478
	B - A1120 North	0	0	186
	C - A12 East	453	110	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	7
	B - A1120 North	0	0	2
	C - A12 East	7	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.37	10.44	0.6	B	171	256
C-AB	0.38	7.17	1.2	A	227	341
C-A					289	434
A-B					0	0
A-C					439	658

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	140	35	594	0.236	139	0.0	0.3	7.883	A
C-AB	155	39	732	0.212	153	0.0	0.4	6.222	A
C-A	269	67			269				
A-B	0	0			0				
A-C	360	90			360				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	167	42	575	0.291	167	0.3	0.4	8.799	A
C-AB	212	53	767	0.276	211	0.4	0.7	6.484	A
C-A	294	74			294				
A-B	0	0			0				
A-C	430	107			430				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	205	51	550	0.373	204	0.4	0.6	10.398	B
C-AB	313	78	819	0.382	311	0.7	1.1	7.118	A
C-A	307	77			307				
A-B	0	0			0				
A-C	526	132			526				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	205	51	550	0.373	205	0.6	0.6	10.439	B
C-AB	314	78	820	0.383	314	1.1	1.2	7.171	A
C-A	306	77			306				
A-B	0	0			0				
A-C	526	132			526				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	167	42	575	0.291	168	0.6	0.4	8.848	A
C-AB	213	53	769	0.277	215	1.2	0.7	6.552	A
C-A	293	73			293				
A-B	0	0			0				
A-C	430	107			430				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	140	35	594	0.236	140	0.4	0.3	7.941	A
C-AB	156	39	733	0.213	157	0.7	0.5	6.288	A
C-A	268	67			268				
A-B	0	0			0				
A-C	360	90			360				

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		7.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	534	100.000
B - A1120 North		ONE HOUR	✓	194	100.000
C - A12 East		ONE HOUR	✓	703	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	534
	B - A1120 North	0	0	194
	C - A12 East	502	201	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	3
	B - A1120 North	0	0	4
	C - A12 East	6	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.40	11.39	0.7	B	178	267
C-AB	0.75	17.25	4.8	C	456	684
C-A					189	284
A-B					0	0
A-C					490	735

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	146	37	576	0.253	145	0.0	0.3	8.315	A
C-AB	303	76	756	0.400	298	0.0	1.0	7.853	A
C-A	227	57			227				
A-B	0	0			0				
A-C	402	101			402				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	174	44	557	0.313	174	0.3	0.4	9.394	A
C-AB	420	105	798	0.527	417	1.0	1.8	9.522	A
C-A	212	53			212				
A-B	0	0			0				
A-C	480	120			480				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	214	53	530	0.403	213	0.4	0.7	11.328	B
C-AB	634	159	857	0.740	624	1.8	4.5	15.624	C
C-A	140	35			140				
A-B	0	0			0				
A-C	588	147			588				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	214	53	530	0.403	214	0.7	0.7	11.392	B
C-AB	643	161	863	0.745	642	4.5	4.8	17.246	C
C-A	131	33			131				
A-B	0	0			0				
A-C	588	147			588				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	174	44	557	0.313	175	0.7	0.5	9.457	A
C-AB	428	107	805	0.532	440	4.8	2.0	10.330	B
C-A	204	51			204				
A-B	0	0			0				
A-C	480	120			480				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	146	37	576	0.253	147	0.5	0.3	8.386	A
C-AB	306	77	759	0.404	310	2.0	1.1	8.138	A
C-A	223	56			223				
A-B	0	0			0				
A-C	402	101			402				

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J12a	A12-A1120	T-Junction	Two-way		4.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 West		ONE HOUR	✓	580	100.000
B - A1120 North		ONE HOUR	✓	158	100.000
C - A12 East		ONE HOUR	✓	600	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	580
	B - A1120 North	0	0	158
	C - A12 East	419	181	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 West	B - A1120 North	C - A12 East
From	A - A12 West	0	0	2
	B - A1120 North	0	0	1
	C - A12 East	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.33	10.02	0.5	B	145	217
C-AB	0.60	11.41	2.4	B	349	524
C-A					201	302
A-B					0	0
A-C					532	798

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	585	0.203	118	0.0	0.3	7.689	A
C-AB	241	60	726	0.332	238	0.0	0.7	7.363	A
C-A	211	53			211				
A-B	0	0			0				
A-C	437	109			437				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	142	36	563	0.252	142	0.3	0.3	8.524	A
C-AB	327	82	756	0.432	325	0.7	1.2	8.371	A
C-A	213	53			213				
A-B	0	0			0				
A-C	521	130			521				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	174	43	533	0.326	173	0.3	0.5	9.989	A
C-AB	477	119	799	0.596	472	1.2	2.4	11.061	B
C-A	184	46			184				
A-B	0	0			0				
A-C	639	160			639				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	174	43	533	0.326	174	0.5	0.5	10.020	B
C-AB	479	120	801	0.598	479	2.4	2.4	11.408	B
C-A	181	45			181				
A-B	0	0			0				
A-C	639	160			639				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	142	36	563	0.252	143	0.5	0.3	8.566	A
C-AB	329	82	759	0.434	334	2.4	1.3	8.651	A
C-A	210	52			210				
A-B	0	0			0				
A-C	521	130			521				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	585	0.203	119	0.3	0.3	7.733	A
C-AB	243	61	728	0.334	245	1.3	0.8	7.529	A
C-A	209	52			209				
A-B	0	0			0				
A-C	437	109			437				

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: 2019.09.04 J13_Model_Miti_Adjusted_v11.j9

Path: \\user01cam1uk.uk.wspgroup.com\projects\50400326 - Sizewell C transport planning\D Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\v11\Mitigation Models\J13\Model

Report generation date: 16/03/2020 11:41:03

»A12 / B1122 - 2023 Reference Case , 6-7 AM
 »A12 / B1122 - 2023 Reference Case , 7-8 AM
 »A12 / B1122 - 2023 Reference Case , 8-9 AM
 »A12 / B1122 - 2023 Reference Case , 3-4 PM
 »A12 / B1122 - 2023 Reference Case , 5-6 PM
 »A12 / B1122 - 2023 Early Years , 6-7 AM
 »A12 / B1122 - 2023 Early Years , 7-8 AM
 »A12 / B1122 - 2023 Early Years , 8-9 AM
 »A12 / B1122 - 2023 Early Years , 3-4 PM
 »A12 / B1122 - 2023 Early Years , 5-6 PM
 »A12 / B1122 - 2028 Reference Case , 6-7 AM
 »A12 / B1122 - 2028 Reference Case , 7-8 AM
 »A12 / B1122 - 2028 Reference Case , 8-9 AM
 »A12 / B1122 - 2028 Reference Case , 3-4 PM
 »A12 / B1122 - 2028 Reference Case , 5-6 PM
 »A12 / B1122 - 2028 Peak Construction, 6-7 AM
 »A12 / B1122 - 2028 Peak Construction, 7-8 AM
 »A12 / B1122 - 2028 Peak Construction, 8-9 AM
 »A12 / B1122 - 2028 Peak Construction, 3-4 PM
 »A12 / B1122 - 2028 Peak Construction, 5-6 PM
 »A12 / B1122 - 2034 Reference Case , 6-7 AM
 »A12 / B1122 - 2034 Reference Case , 7-8 AM
 »A12 / B1122 - 2034 Reference Case , 8-9 AM
 »A12 / B1122 - 2034 Reference Case , 3-4 PM
 »A12 / B1122 - 2034 Reference Case , 5-6 PM
 »A12 / B1122 - 2034 Operational Led, 6-7 AM
 »A12 / B1122 - 2034 Operational Led, 7-8 AM
 »A12 / B1122 - 2034 Operational Led, 8-9 AM
 »A12 / B1122 - 2034 Operational Led, 3-4 PM
 »A12 / B1122 - 2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM				7-8 AM				8-9 AM				3-4 PM				5-6 PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
A12 / B1122 - 2023 Reference Case																				
A - A12 North	0.6	5.22	0.37	A	1.4	8.18	0.58	A	1.9	9.76	0.65	A	1.8	9.35	0.64	A	1.2	7.29	0.56	A
B - B1122 Middleton Road	0.1	2.46	0.05	A	0.1	2.87	0.10	A	0.1	3.03	0.09	A	0.2	3.41	0.17	A	0.2	2.99	0.14	A
C - A12 South	0.3	4.49	0.22	A	1.2	7.50	0.55	A	1.5	8.33	0.60	A	2.6	12.46	0.73	B	3.2	13.87	0.76	B
A12 / B1122 - 2023 Early Years																				
A - A12 North	0.7	5.77	0.42	A	2.8	13.97	0.74	B	2.4	12.39	0.71	B	1.9	9.92	0.65	A	1.5	8.25	0.60	A
B - B1122 Middleton Road	0.1	2.49	0.06	A	0.2	3.08	0.13	A	0.1	3.31	0.11	A	0.3	3.89	0.23	A	0.3	3.71	0.24	A
C - A12 South	0.4	4.90	0.28	A	2.2	11.37	0.69	B	2.1	11.31	0.69	B	3.0	13.97	0.76	B	5.8	23.78	0.86	C
A12 / B1122 - 2028 Reference Case																				
A - A12 North	0.6	5.34	0.39	A	1.4	8.29	0.59	A	1.8	9.60	0.65	A	1.8	9.54	0.65	A	1.3	7.60	0.57	A
B - B1122 Middleton Road	0.1	2.54	0.06	A	0.1	2.83	0.10	A	0.1	2.91	0.08	A	0.2	3.35	0.17	A	0.2	2.98	0.14	A
C - A12 South	0.3	4.54	0.23	A	1.3	7.91	0.57	A	1.8	9.25	0.64	A	2.7	12.54	0.73	B	3.8	15.99	0.80	C
A12 / B1122 - 2028 Peak Construction																				
A - A12 North	0.7	5.88	0.43	A	1.8	9.76	0.64	A	2.1	10.81	0.68	B	2.3	11.42	0.70	B	1.6	8.41	0.61	A
B - B1122 Middleton Road	0.1	2.83	0.07	A	0.1	3.07	0.11	A	0.1	3.21	0.10	A	0.2	3.70	0.20	A	0.2	3.27	0.16	A
C - A12 South	0.4	4.83	0.28	A	1.5	8.51	0.60	A	1.6	8.83	0.62	A	2.6	12.45	0.73	B	3.3	14.59	0.77	B
A12 / B1122 - 2034 Reference Case																				
A - A12 North	0.7	5.48	0.40	A	1.4	8.33	0.59	A	1.9	9.89	0.66	A	2.3	11.27	0.70	B	1.7	8.77	0.63	A
B - B1122 Middleton Road	0.1	2.49	0.05	A	0.1	2.76	0.10	A	0.1	2.90	0.09	A	0.2	3.45	0.19	A	0.2	3.01	0.15	A
C - A12 South	0.3	4.59	0.24	A	1.6	8.88	0.62	A	2.5	11.74	0.72	B	3.6	15.92	0.79	C	3.8	16.09	0.80	C
A12 / B1122 - 2034 Operational Led																				
A - A12 North	0.7	5.50	0.41	A	1.4	8.26	0.59	A	1.8	9.61	0.65	A	2.3	10.90	0.70	B	1.6	8.41	0.62	A
B - B1122 Middleton Road	0.1	2.51	0.05	A	0.1	2.76	0.10	A	0.1	2.93	0.08	A	0.2	3.38	0.17	A	0.2	2.95	0.13	A
C - A12 South	0.3	4.56	0.23	A	1.5	8.39	0.60	A	2.1	10.46	0.68	B	3.2	14.33	0.77	B	3.2	13.99	0.77	B

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

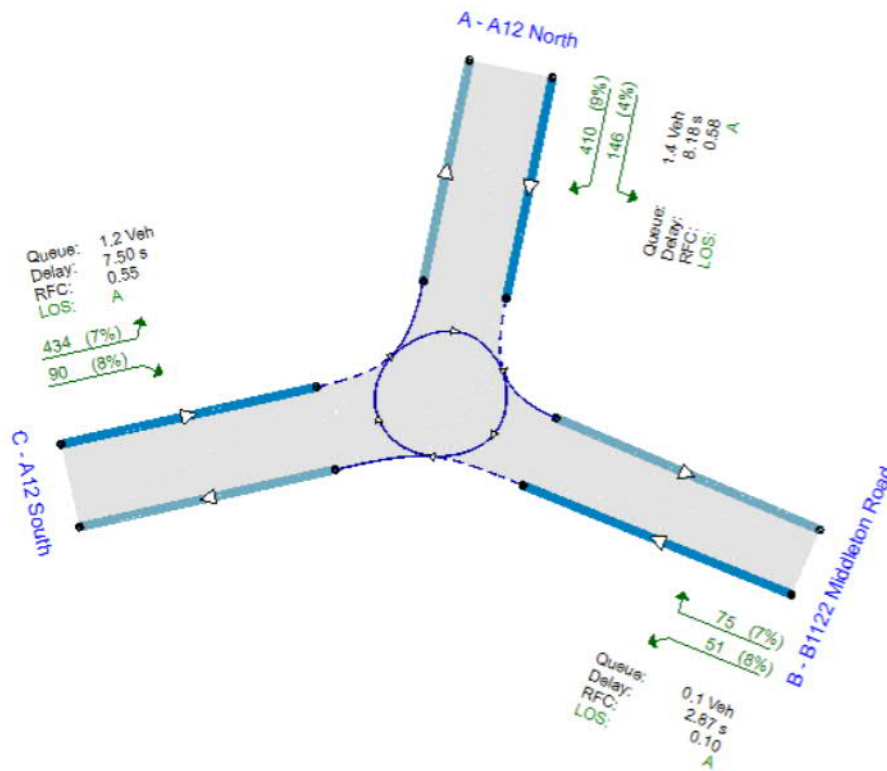
File summary

File Description

Title	A12 / B1122
Location	52.264371°, 1.513843°
Site number	13
Date	21/03/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKWSPGROUP\ukcxm014
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



Please show original traffic demand (1/1/16)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

D29	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
AJ13	A12 / B1122	✓	100.000	100.000

A12 / B1122 - 2023 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	4.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	B1122 Middleton Road	
C	A12 South	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	3.80	4.00	10.0	20.9	55.0	37.0	
B - B1122 Middleton Road	3.80	7.50	19.5	20.4	55.0	41.0	
C - A12 South	3.60	4.00	10.0	20.9	55.0	37.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.484	1182
B - B1122 Middleton Road	0.589	1780
C - A12 South	0.482	1172

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	374	100.000
B - B1122 Middleton Road		ONE HOUR	✓	72	100.000
C - A12 South		ONE HOUR	✓	205	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	122	252
	B - B1122 Middleton Road	41	0	31
	C - A12 South	143	62	0

Vehicle Mix

Heavy Vehicle Percentages

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		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	1	6
	B - B1122 Middleton Road	7	0	0
	C - A12 South	17	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.37	5.22	0.6	A	343	515
B - B1122 Middleton Road	0.05	2.46	0.1	A	66	99
C - A12 South	0.22	4.49	0.3	A	188	282

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	282	70	46	1112	0.253	280	138	0.0	0.3	4.323	A
B - B1122 Middleton Road	54	14	189	1596	0.034	54	138	0.0	0.0	2.334	A
C - A12 South	154	39	31	1035	0.149	154	212	0.0	0.2	4.080	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	336	84	56	1107	0.304	336	165	0.3	0.4	4.665	A
B - B1122 Middleton Road	65	16	226	1573	0.041	65	165	0.0	0.0	2.385	A
C - A12 South	184	46	37	1032	0.179	184	254	0.2	0.2	4.245	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	412	103	68	1101	0.374	411	202	0.4	0.6	5.211	A
B - B1122 Middleton Road	79	20	277	1543	0.051	79	202	0.0	0.1	2.458	A
C - A12 South	226	56	45	1028	0.220	225	311	0.2	0.3	4.485	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	412	103	68	1101	0.374	412	203	0.6	0.6	5.219	A
B - B1122 Middleton Road	79	20	277	1543	0.051	79	203	0.1	0.1	2.459	A
C - A12 South	226	56	45	1028	0.220	226	312	0.3	0.3	4.487	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	336	84	56	1107	0.304	337	166	0.6	0.4	4.678	A
B - B1122 Middleton Road	65	16	227	1573	0.041	65	166	0.1	0.0	2.386	A
C - A12 South	184	46	37	1032	0.179	185	255	0.3	0.2	4.251	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	282	70	47	1111	0.253	282	139	0.4	0.3	4.343	A
B - B1122 Middleton Road	54	14	190	1595	0.034	54	139	0.0	0.0	2.337	A
C - A12 South	154	39	31	1035	0.149	155	213	0.2	0.2	4.092	A

A12 / B1122 - 2023 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	7.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	556	100.000
B - B1122 Middleton Road		ONE HOUR	✓	126	100.000
C - A12 South		ONE HOUR	✓	524	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	146	410
	B - B1122 Middleton Road	75	0	51
	C - A12 South	434	90	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	4	9
	B - B1122 Middleton Road	7	0	8
	C - A12 South	7	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.58	8.18	1.4	A	510	765
B - B1122 Middleton Road	0.10	2.87	0.1	A	116	173
C - A12 South	0.55	7.50	1.2	A	481	721

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	419	105	67	1068	0.392	416	381	0.0	0.6	5.504	A
B - B1122 Middleton Road	95	24	307	1479	0.064	95	177	0.0	0.1	2.601	A
C - A12 South	394	99	56	1069	0.369	392	345	0.0	0.6	5.299	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	500	125	81	1061	0.471	499	457	0.6	0.9	6.392	A
B - B1122 Middleton Road	113	28	368	1442	0.079	113	212	0.1	0.1	2.708	A
C - A12 South	471	118	67	1064	0.443	470	414	0.6	0.8	6.055	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	612	153	99	1052	0.582	610	559	0.9	1.4	8.105	A
B - B1122 Middleton Road	139	35	450	1393	0.100	139	259	0.1	0.1	2.869	A
C - A12 South	577	144	83	1057	0.546	575	506	0.8	1.2	7.453	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	612	153	99	1052	0.582	612	560	1.4	1.4	8.176	A
B - B1122 Middleton Road	139	35	451	1392	0.100	139	260	0.1	0.1	2.871	A
C - A12 South	577	144	83	1057	0.546	577	508	1.2	1.2	7.504	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	500	125	81	1061	0.471	502	459	1.4	0.9	6.460	A
B - B1122 Middleton Road	113	28	370	1441	0.079	113	213	0.1	0.1	2.711	A
C - A12 South	471	118	67	1064	0.443	473	416	1.2	0.8	6.104	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	419	105	68	1067	0.392	420	384	0.9	0.7	5.567	A
B - B1122 Middleton Road	95	24	309	1477	0.064	95	178	0.1	0.1	2.604	A
C - A12 South	394	99	57	1069	0.369	395	348	0.8	0.6	5.351	A

A12 / B1122 - 2023 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	8.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	629	100.000
B - B1122 Middleton Road		ONE HOUR	✓	106	100.000
C - A12 South		ONE HOUR	✓	580	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	113	516
	B - B1122 Middleton Road	44	0	62
	C - A12 South	477	103	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	5	6
	B - B1122 Middleton Road	9	0	10
	C - A12 South	7	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	9.76	1.9	A	577	866
B - B1122 Middleton Road	0.09	3.03	0.1	A	97	146
C - A12 South	0.60	8.33	1.5	A	532	798

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	474	118	77	1079	0.439	470	390	0.0	0.8	5.890	A
B - B1122 Middleton Road	80	20	386	1407	0.057	80	162	0.0	0.1	2.712	A
C - A12 South	437	109	33	1078	0.405	434	432	0.0	0.7	5.565	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	565	141	92	1071	0.528	564	468	0.8	1.1	7.081	A
B - B1122 Middleton Road	95	24	463	1363	0.070	95	194	0.1	0.1	2.839	A
C - A12 South	521	130	40	1075	0.485	520	519	0.7	0.9	6.480	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	693	173	113	1061	0.653	690	572	1.1	1.8	9.611	A
B - B1122 Middleton Road	117	29	566	1304	0.089	117	237	0.1	0.1	3.031	A
C - A12 South	639	160	48	1071	0.597	637	634	0.9	1.4	8.254	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	693	173	113	1061	0.653	692	574	1.8	1.9	9.759	A
B - B1122 Middleton Road	117	29	568	1303	0.090	117	238	0.1	0.1	3.034	A
C - A12 South	639	160	48	1071	0.597	639	636	1.4	1.5	8.331	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	565	141	93	1071	0.528	568	470	1.9	1.1	7.201	A
B - B1122 Middleton Road	95	24	466	1361	0.070	95	195	0.1	0.1	2.846	A
C - A12 South	521	130	40	1075	0.485	523	522	1.5	1.0	6.551	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	474	118	78	1078	0.439	475	393	1.1	0.8	5.981	A
B - B1122 Middleton Road	80	20	390	1405	0.057	80	163	0.1	0.1	2.719	A
C - A12 South	437	109	33	1078	0.405	438	436	1.0	0.7	5.633	A

A12 / B1122 - 2023 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	9.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	625	100.000
B - B1122 Middleton Road		ONE HOUR	✓	201	100.000
C - A12 South		ONE HOUR	✓	708	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	59	566
	B - B1122 Middleton Road	97	0	104
	C - A12 South	632	76	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	8	6
	B - B1122 Middleton Road	8	0	10
	C - A12 South	4	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.64	9.35	1.8	A	574	860
B - B1122 Middleton Road	0.17	3.41	0.2	A	184	277
C - A12 South	0.73	12.46	2.6	B	650	975

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	471	118	57	1086	0.433	468	545	0.0	0.8	5.795	A
B - B1122 Middleton Road	151	38	423	1392	0.109	151	101	0.0	0.1	2.901	A
C - A12 South	533	133	73	1085	0.491	529	501	0.0	1.0	6.438	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	562	140	68	1080	0.520	561	654	0.8	1.1	6.910	A
B - B1122 Middleton Road	181	45	508	1344	0.134	181	121	0.1	0.2	3.095	A
C - A12 South	636	159	87	1077	0.591	635	601	1.0	1.4	8.094	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	688	172	83	1073	0.641	685	798	1.1	1.7	9.226	A
B - B1122 Middleton Road	221	55	621	1279	0.173	221	148	0.2	0.2	3.403	A
C - A12 South	780	195	107	1068	0.730	775	735	1.4	2.6	12.098	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	688	172	84	1073	0.642	688	802	1.7	1.8	9.354	A
B - B1122 Middleton Road	221	55	623	1278	0.173	221	149	0.2	0.2	3.407	A
C - A12 South	780	195	107	1068	0.730	779	738	2.6	2.6	12.456	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	562	140	69	1080	0.520	565	660	1.8	1.1	7.021	A
B - B1122 Middleton Road	181	45	511	1342	0.135	181	122	0.2	0.2	3.101	A
C - A12 South	636	159	87	1077	0.591	641	605	2.6	1.5	8.339	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	471	118	57	1086	0.433	472	551	1.1	0.8	5.880	A
B - B1122 Middleton Road	151	38	427	1390	0.109	151	102	0.2	0.1	2.909	A
C - A12 South	533	133	73	1084	0.491	535	506	1.5	1.0	6.574	A

A12 / B1122 - 2023 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	10.10	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	560	100.000
B - B1122 Middleton Road		ONE HOUR	✓	179	100.000
C - A12 South		ONE HOUR	✓	763	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	74	486
	B - B1122 Middleton Road	91	0	88
	C - A12 South	687	76	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	0	3
	B - B1122 Middleton Road	1	0	7
	C - A12 South	2	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.56	7.29	1.2	A	514	771
B - B1122 Middleton Road	0.14	2.99	0.2	A	164	246
C - A12 South	0.76	13.87	3.2	B	700	1050

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	422	105	57	1124	0.375	419	582	0.0	0.6	5.089	A
B - B1122 Middleton Road	135	34	364	1501	0.090	134	112	0.0	0.1	2.634	A
C - A12 South	574	144	68	1114	0.516	570	430	0.0	1.0	6.577	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	503	126	68	1118	0.450	503	697	0.6	0.8	5.836	A
B - B1122 Middleton Road	161	40	436	1459	0.110	161	135	0.1	0.1	2.772	A
C - A12 South	686	171	82	1107	0.620	684	515	1.0	1.6	8.457	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	617	154	83	1111	0.555	615	851	0.8	1.2	7.233	A
B - B1122 Middleton Road	197	49	534	1402	0.141	197	164	0.1	0.2	2.986	A
C - A12 South	840	210	100	1098	0.765	834	630	1.6	3.1	13.329	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	617	154	84	1111	0.555	617	856	1.2	1.2	7.285	A
B - B1122 Middleton Road	197	49	535	1401	0.141	197	165	0.2	0.2	2.988	A
C - A12 South	840	210	100	1098	0.765	840	632	3.1	3.2	13.865	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	503	126	69	1118	0.450	505	705	1.2	0.8	5.887	A
B - B1122 Middleton Road	161	40	438	1458	0.110	161	136	0.2	0.1	2.776	A
C - A12 South	686	171	82	1107	0.620	692	518	3.2	1.7	8.789	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	422	105	57	1124	0.375	422	588	0.8	0.6	5.139	A
B - B1122 Middleton Road	135	34	367	1499	0.090	135	113	0.1	0.1	2.637	A
C - A12 South	574	144	69	1113	0.516	577	433	1.7	1.1	6.736	A

A12 / B1122 - 2023 Early Years , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	5.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	409	100.000
B - B1122 Middleton Road		ONE HOUR	✓	81	100.000
C - A12 South		ONE HOUR	✓	254	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	135	274
	B - B1122 Middleton Road	44	0	37
	C - A12 South	155	99	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	2	6
	B - B1122 Middleton Road	7	0	0
	C - A12 South	16	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	5.77	0.7	A	375	563
B - B1122 Middleton Road	0.06	2.49	0.1	A	74	111
C - A12 South	0.28	4.90	0.4	A	233	350

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	308	77	74	1092	0.282	306	149	0.0	0.4	4.572	A
B - B1122 Middleton Road	61	15	205	1593	0.038	61	175	0.0	0.0	2.349	A
C - A12 South	191	48	33	1022	0.187	190	233	0.0	0.2	4.325	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	368	92	89	1085	0.339	367	179	0.4	0.5	5.014	A
B - B1122 Middleton Road	73	18	246	1569	0.046	73	210	0.0	0.0	2.406	A
C - A12 South	228	57	40	1019	0.224	228	279	0.2	0.3	4.551	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	450	113	109	1075	0.419	449	219	0.5	0.7	5.751	A
B - B1122 Middleton Road	89	22	301	1536	0.058	89	257	0.0	0.1	2.488	A
C - A12 South	280	70	48	1015	0.276	279	342	0.3	0.4	4.892	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	450	113	109	1075	0.419	450	219	0.7	0.7	5.765	A
B - B1122 Middleton Road	89	22	302	1535	0.058	89	258	0.1	0.1	2.488	A
C - A12 South	280	70	48	1015	0.276	280	342	0.4	0.4	4.896	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	368	92	89	1085	0.339	368	179	0.7	0.5	5.034	A
B - B1122 Middleton Road	73	18	247	1568	0.046	73	211	0.1	0.0	2.408	A
C - A12 South	228	57	40	1019	0.224	229	280	0.4	0.3	4.557	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	308	77	75	1092	0.282	308	150	0.5	0.4	4.599	A
B - B1122 Middleton Road	61	15	207	1592	0.038	61	176	0.0	0.0	2.350	A
C - A12 South	191	48	33	1022	0.187	191	234	0.3	0.2	4.338	A

A12 / B1122 - 2023 Early Years , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	11.66	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	673	100.000
B - B1122 Middleton Road		ONE HOUR	✓	161	100.000
C - A12 South		ONE HOUR	✓	644	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	171	502
	B - B1122 Middleton Road	85	0	76
	C - A12 South	480	164	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	8	8
	B - B1122 Middleton Road	6	0	7
	C - A12 South	6	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.74	13.97	2.8	B	618	926
B - B1122 Middleton Road	0.13	3.08	0.2	A	148	222
C - A12 South	0.69	11.37	2.2	B	591	886

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	507	127	123	1028	0.493	503	423	0.0	1.0	6.801	A
B - B1122 Middleton Road	121	30	375	1451	0.084	121	250	0.0	0.1	2.706	A
C - A12 South	485	121	64	1039	0.467	481	432	0.0	0.9	6.416	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	605	151	147	1015	0.596	603	507	1.0	1.4	8.688	A
B - B1122 Middleton Road	145	36	450	1406	0.103	145	300	0.1	0.1	2.852	A
C - A12 South	579	145	76	1033	0.560	577	518	0.9	1.3	7.870	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	741	185	180	998	0.742	736	619	1.4	2.7	13.462	B
B - B1122 Middleton Road	177	44	549	1347	0.132	177	367	0.1	0.2	3.076	A
C - A12 South	709	177	94	1025	0.692	705	632	1.3	2.2	11.127	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	741	185	181	998	0.743	741	622	2.7	2.8	13.967	B
B - B1122 Middleton Road	177	44	552	1345	0.132	177	369	0.2	0.2	3.082	A
C - A12 South	709	177	94	1025	0.692	709	636	2.2	2.2	11.368	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	605	151	148	1015	0.596	610	511	2.8	1.5	9.008	A
B - B1122 Middleton Road	145	36	455	1403	0.103	145	303	0.2	0.1	2.862	A
C - A12 South	579	145	76	1033	0.560	583	524	2.2	1.3	8.051	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	507	127	124	1028	0.493	509	427	1.5	1.0	6.966	A
B - B1122 Middleton Road	121	30	379	1449	0.084	121	253	0.1	0.1	2.714	A
C - A12 South	485	121	64	1039	0.467	486	437	1.3	0.9	6.537	A

A12 / B1122 - 2023 Early Years , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	11.04	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	654	100.000
B - B1122 Middleton Road		ONE HOUR	✓	128	100.000
C - A12 South		ONE HOUR	✓	632	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	120	534
	B - B1122 Middleton Road	48	0	80
	C - A12 South	489	143	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	10	7
	B - B1122 Middleton Road	10	0	18
	C - A12 South	8	30	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	12.39	2.4	B	600	900
B - B1122 Middleton Road	0.11	3.31	0.1	A	117	176
C - A12 South	0.69	11.31	2.1	B	580	870

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	492	123	107	1039	0.474	489	402	0.0	0.9	6.497	A
B - B1122 Middleton Road	96	24	399	1332	0.072	96	197	0.0	0.1	2.912	A
C - A12 South	476	119	36	1022	0.466	472	459	0.0	0.9	6.515	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	588	147	128	1027	0.573	586	482	0.9	1.3	8.137	A
B - B1122 Middleton Road	115	29	479	1289	0.089	115	236	0.1	0.1	3.066	A
C - A12 South	568	142	43	1018	0.558	567	551	0.9	1.2	7.945	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	720	180	157	1010	0.713	716	589	1.3	2.4	12.054	B
B - B1122 Middleton Road	141	35	584	1231	0.115	141	288	0.1	0.1	3.302	A
C - A12 South	696	174	53	1014	0.686	692	672	1.2	2.1	11.081	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	720	180	157	1010	0.713	720	591	2.4	2.4	12.393	B
B - B1122 Middleton Road	141	35	588	1229	0.115	141	289	0.1	0.1	3.307	A
C - A12 South	696	174	53	1014	0.687	696	676	2.1	2.1	11.308	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	588	147	129	1026	0.573	592	485	2.4	1.4	8.372	A
B - B1122 Middleton Road	115	29	484	1286	0.089	115	238	0.1	0.1	3.074	A
C - A12 South	568	142	43	1018	0.558	572	556	2.1	1.3	8.123	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	492	123	108	1039	0.474	494	406	1.4	0.9	6.634	A
B - B1122 Middleton Road	96	24	404	1330	0.072	96	199	0.1	0.1	2.920	A
C - A12 South	476	119	36	1021	0.466	477	464	1.3	0.9	6.635	A

A12 / B1122 - 2023 Early Years , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	10.71	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	623	100.000
B - B1122 Middleton Road		ONE HOUR	✓	247	100.000
C - A12 South		ONE HOUR	✓	718	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	62	561
	B - B1122 Middleton Road	102	0	145
	C - A12 South	629	89	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	13	7
	B - B1122 Middleton Road	12	0	19
	C - A12 South	4	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	9.92	1.9	A	572	858
B - B1122 Middleton Road	0.23	3.89	0.3	A	227	340
C - A12 South	0.76	13.97	3.0	B	659	988

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	469	117	67	1065	0.440	466	547	0.0	0.8	5.979	A
B - B1122 Middleton Road	186	46	420	1305	0.142	185	113	0.0	0.2	3.213	A
C - A12 South	541	135	77	1065	0.507	536	528	0.0	1.0	6.759	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	560	140	80	1058	0.529	559	655	0.8	1.1	7.193	A
B - B1122 Middleton Road	222	56	503	1260	0.176	222	135	0.2	0.2	3.467	A
C - A12 South	645	161	92	1057	0.610	643	633	1.0	1.5	8.650	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	686	171	97	1049	0.654	683	800	1.1	1.8	9.768	A
B - B1122 Middleton Road	272	68	615	1199	0.227	272	165	0.2	0.3	3.887	A
C - A12 South	791	198	112	1047	0.755	785	775	1.5	2.9	13.455	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	686	171	98	1048	0.654	686	805	1.8	1.9	9.924	A
B - B1122 Middleton Road	272	68	618	1198	0.227	272	166	0.3	0.3	3.887	A
C - A12 South	791	198	112	1047	0.755	790	777	2.9	3.0	13.971	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	560	140	81	1057	0.530	563	662	1.9	1.1	7.321	A
B - B1122 Middleton Road	222	56	507	1258	0.177	222	137	0.3	0.2	3.479	A
C - A12 South	645	161	92	1057	0.610	651	637	3.0	1.6	8.977	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	469	117	67	1065	0.441	470	552	1.1	0.8	6.075	A
B - B1122 Middleton Road	186	46	424	1303	0.143	186	114	0.2	0.2	3.223	A
C - A12 South	541	135	77	1065	0.508	543	533	1.6	1.0	6.925	A

A12 / B1122 - 2023 Early Years , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	14.98	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	598	100.000
B - B1122 Middleton Road		ONE HOUR	✓	276	100.000
C - A12 South		ONE HOUR	✓	839	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	80	518
	B - B1122 Middleton Road	115	0	161
	C - A12 South	748	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	1	3
	B - B1122 Middleton Road	6	0	17
	C - A12 South	2	15	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.60	8.25	1.5	A	549	823
B - B1122 Middleton Road	0.24	3.71	0.3	A	253	380
C - A12 South	0.86	23.78	5.8	C	770	1155

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	450	113	68	1112	0.405	448	645	0.0	0.7	5.396	A
B - B1122 Middleton Road	208	52	388	1371	0.152	207	128	0.0	0.2	3.091	A
C - A12 South	632	158	86	1090	0.580	626	508	0.0	1.4	7.679	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	538	134	81	1105	0.487	537	773	0.7	0.9	6.325	A
B - B1122 Middleton Road	248	62	465	1330	0.187	248	153	0.2	0.2	3.328	A
C - A12 South	754	189	103	1081	0.697	751	609	1.4	2.2	10.769	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	658	165	99	1095	0.601	656	939	0.9	1.5	8.160	A
B - B1122 Middleton Road	304	76	568	1274	0.239	304	187	0.2	0.3	3.711	A
C - A12 South	924	231	126	1070	0.863	911	746	2.2	5.4	21.099	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	658	165	100	1095	0.602	658	949	1.5	1.5	8.248	A
B - B1122 Middleton Road	304	76	570	1273	0.239	304	188	0.3	0.3	3.714	A
C - A12 South	924	231	127	1070	0.863	922	748	5.4	5.8	23.779	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	538	134	83	1104	0.487	540	788	1.5	1.0	6.406	A
B - B1122 Middleton Road	248	62	468	1328	0.187	248	155	0.3	0.2	3.334	A
C - A12 South	754	189	104	1081	0.698	768	612	5.8	2.4	11.944	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	450	113	69	1111	0.405	451	653	1.0	0.7	5.461	A
B - B1122 Middleton Road	208	52	391	1369	0.152	208	129	0.2	0.2	3.102	A
C - A12 South	632	158	87	1090	0.580	636	512	2.4	1.4	7.995	A

A12 / B1122 - 2028 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	4.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	387	100.000
B - B1122 Middleton Road		ONE HOUR	✓	75	100.000
C - A12 South		ONE HOUR	✓	214	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	123	264
	B - B1122 Middleton Road	41	0	34
	C - A12 South	151	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	1	6
	B - B1122 Middleton Road	7	0	6
	C - A12 South	17	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.39	5.34	0.6	A	355	533
B - B1122 Middleton Road	0.06	2.54	0.1	A	69	103
C - A12 South	0.23	4.54	0.3	A	196	295

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	291	73	47	1110	0.263	290	144	0.0	0.4	4.383	A
B - B1122 Middleton Road	56	14	198	1553	0.036	56	139	0.0	0.0	2.404	A
C - A12 South	161	40	31	1035	0.156	160	223	0.0	0.2	4.113	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	348	87	57	1106	0.315	347	172	0.4	0.5	4.747	A
B - B1122 Middleton Road	67	17	237	1530	0.044	67	167	0.0	0.0	2.460	A
C - A12 South	192	48	37	1032	0.186	192	268	0.2	0.2	4.285	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	426	107	69	1100	0.387	425	211	0.5	0.6	5.333	A
B - B1122 Middleton Road	83	21	290	1499	0.055	83	204	0.0	0.1	2.541	A
C - A12 South	236	59	45	1028	0.229	235	328	0.2	0.3	4.539	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	426	107	69	1100	0.387	426	211	0.6	0.6	5.344	A
B - B1122 Middleton Road	83	21	291	1499	0.055	83	205	0.1	0.1	2.541	A
C - A12 South	236	59	45	1028	0.229	236	328	0.3	0.3	4.541	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	348	87	57	1106	0.315	349	173	0.6	0.5	4.761	A
B - B1122 Middleton Road	67	17	238	1530	0.044	67	167	0.1	0.0	2.461	A
C - A12 South	192	48	37	1032	0.186	193	268	0.3	0.2	4.289	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	291	73	47	1110	0.263	292	145	0.5	0.4	4.404	A
B - B1122 Middleton Road	56	14	199	1552	0.036	56	140	0.0	0.0	2.408	A
C - A12 South	161	40	31	1035	0.156	161	225	0.2	0.2	4.123	A

A12 / B1122 - 2028 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	7.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	560	100.000
B - B1122 Middleton Road		ONE HOUR	✓	125	100.000
C - A12 South		ONE HOUR	✓	555	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	149	411
	B - B1122 Middleton Road	75	0	50
	C - A12 South	464	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	5	9
	B - B1122 Middleton Road	7	0	4
	C - A12 South	6	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.59	8.29	1.4	A	514	771
B - B1122 Middleton Road	0.10	2.83	0.1	A	115	172
C - A12 South	0.57	7.91	1.3	A	509	764

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	422	105	68	1066	0.396	419	404	0.0	0.6	5.545	A
B - B1122 Middleton Road	94	24	308	1499	0.063	94	180	0.0	0.1	2.561	A
C - A12 South	418	104	56	1079	0.387	415	345	0.0	0.6	5.407	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	503	126	82	1059	0.475	502	484	0.6	0.9	6.451	A
B - B1122 Middleton Road	112	28	369	1462	0.077	112	215	0.1	0.1	2.666	A
C - A12 South	499	125	67	1073	0.465	498	414	0.6	0.9	6.248	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	617	154	100	1051	0.587	615	592	0.9	1.4	8.212	A
B - B1122 Middleton Road	138	34	451	1412	0.097	138	263	0.1	0.1	2.823	A
C - A12 South	611	153	83	1066	0.573	609	506	0.9	1.3	7.852	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	617	154	100	1051	0.587	617	593	1.4	1.4	8.287	A
B - B1122 Middleton Road	138	34	452	1411	0.098	138	264	0.1	0.1	2.825	A
C - A12 South	611	153	83	1066	0.573	611	508	1.3	1.3	7.913	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	503	126	82	1059	0.475	505	486	1.4	0.9	6.525	A
B - B1122 Middleton Road	112	28	371	1461	0.077	112	217	0.1	0.1	2.671	A
C - A12 South	499	125	67	1073	0.465	501	416	1.3	0.9	6.310	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	422	105	69	1065	0.396	423	407	0.9	0.7	5.609	A
B - B1122 Middleton Road	94	24	310	1498	0.063	94	181	0.1	0.1	2.564	A
C - A12 South	418	104	57	1078	0.387	419	348	0.9	0.6	5.466	A

A12 / B1122 - 2028 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	8.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	622	100.000
B - B1122 Middleton Road		ONE HOUR	✓	104	100.000
C - A12 South		ONE HOUR	✓	628	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	113	509
	B - B1122 Middleton Road	45	0	59
	C - A12 South	522	106	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	5	6
	B - B1122 Middleton Road	9	0	3
	C - A12 South	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	9.60	1.8	A	571	856
B - B1122 Middleton Road	0.08	2.91	0.1	A	95	143
C - A12 South	0.64	9.25	1.8	A	576	864

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	468	117	79	1077	0.435	465	424	0.0	0.8	5.858	A
B - B1122 Middleton Road	78	20	381	1458	0.054	78	164	0.0	0.1	2.609	A
C - A12 South	473	118	34	1088	0.435	470	425	0.0	0.8	5.795	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	559	140	95	1069	0.523	558	509	0.8	1.1	7.022	A
B - B1122 Middleton Road	93	23	457	1413	0.066	93	196	0.1	0.1	2.727	A
C - A12 South	565	141	40	1085	0.520	563	510	0.8	1.1	6.886	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	685	171	116	1059	0.646	682	622	1.1	1.8	9.465	A
B - B1122 Middleton Road	115	29	558	1353	0.085	114	240	0.1	0.1	2.906	A
C - A12 South	691	173	50	1080	0.640	689	623	1.1	1.7	9.132	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	685	171	117	1059	0.647	685	624	1.8	1.8	9.604	A
B - B1122 Middleton Road	115	29	560	1352	0.085	115	241	0.1	0.1	2.909	A
C - A12 South	691	173	50	1080	0.640	691	625	1.7	1.8	9.250	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	559	140	96	1069	0.523	562	512	1.8	1.1	7.136	A
B - B1122 Middleton Road	93	23	460	1411	0.066	94	198	0.1	0.1	2.734	A
C - A12 South	565	141	40	1085	0.520	567	513	1.8	1.1	6.989	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	468	117	80	1076	0.435	470	428	1.1	0.8	5.948	A
B - B1122 Middleton Road	78	20	384	1456	0.054	78	165	0.1	0.1	2.615	A
C - A12 South	473	118	34	1088	0.435	474	429	1.1	0.8	5.875	A

A12 / B1122 - 2028 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	10.08	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	632	100.000
B - B1122 Middleton Road		ONE HOUR	✓	202	100.000
C - A12 South		ONE HOUR	✓	713	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	61	571
	B - B1122 Middleton Road	99	0	103
	C - A12 South	638	75	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	10	6
	B - B1122 Middleton Road	8	0	6
	C - A12 South	4	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	9.54	1.8	A	580	870
B - B1122 Middleton Road	0.17	3.35	0.2	A	185	278
C - A12 South	0.73	12.54	2.7	B	654	981

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	476	119	56	1085	0.439	473	551	0.0	0.8	5.850	A
B - B1122 Middleton Road	152	38	427	1416	0.107	152	102	0.0	0.1	2.848	A
C - A12 South	537	134	74	1089	0.493	533	504	0.0	1.0	6.435	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	568	142	67	1080	0.526	567	661	0.8	1.1	6.999	A
B - B1122 Middleton Road	182	45	512	1366	0.133	181	122	0.1	0.2	3.038	A
C - A12 South	641	160	89	1081	0.593	639	605	1.0	1.4	8.106	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	696	174	82	1073	0.649	693	807	1.1	1.8	9.403	A
B - B1122 Middleton Road	222	56	626	1300	0.171	222	149	0.2	0.2	3.341	A
C - A12 South	785	196	109	1071	0.733	780	739	1.4	2.6	12.167	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	696	174	83	1073	0.649	696	811	1.8	1.8	9.544	A
B - B1122 Middleton Road	222	56	629	1298	0.171	222	150	0.2	0.2	3.345	A
C - A12 South	785	196	109	1071	0.733	785	742	2.6	2.7	12.536	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	568	142	68	1079	0.526	571	667	1.8	1.1	7.118	A
B - B1122 Middleton Road	182	45	516	1364	0.133	182	123	0.2	0.2	3.045	A
C - A12 South	641	160	89	1081	0.593	646	609	2.7	1.5	8.354	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	476	119	57	1085	0.439	477	557	1.1	0.8	5.940	A
B - B1122 Middleton Road	152	38	431	1413	0.108	152	103	0.2	0.1	2.854	A
C - A12 South	537	134	75	1089	0.493	539	509	1.5	1.0	6.574	A

A12 / B1122 - 2028 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	11.35	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	575	100.000
B - B1122 Middleton Road		ONE HOUR	✓	182	100.000
C - A12 South		ONE HOUR	✓	792	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	75	500
	B - B1122 Middleton Road	91	0	91
	C - A12 South	709	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	0	3
	B - B1122 Middleton Road	1	0	4
	C - A12 South	2	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.57	7.60	1.3	A	528	791
B - B1122 Middleton Road	0.14	2.98	0.2	A	167	251
C - A12 South	0.80	15.99	3.8	C	727	1090

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	433	108	62	1122	0.386	430	598	0.0	0.6	5.189	A
B - B1122 Middleton Road	137	34	374	1512	0.091	137	118	0.0	0.1	2.617	A
C - A12 South	596	149	68	1110	0.537	592	443	0.0	1.1	6.884	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	517	129	74	1115	0.463	516	717	0.6	0.9	5.987	A
B - B1122 Middleton Road	164	41	449	1468	0.111	164	142	0.1	0.1	2.758	A
C - A12 South	712	178	82	1104	0.645	709	530	1.1	1.8	9.068	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	633	158	91	1107	0.572	631	874	0.9	1.3	7.538	A
B - B1122 Middleton Road	200	50	549	1409	0.142	200	173	0.1	0.2	2.977	A
C - A12 South	872	218	100	1095	0.796	865	649	1.8	3.6	15.133	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	633	158	91	1107	0.572	633	880	1.3	1.3	7.597	A
B - B1122 Middleton Road	200	50	550	1408	0.142	200	174	0.2	0.2	2.979	A
C - A12 South	872	218	100	1095	0.796	871	651	3.6	3.8	15.991	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	517	129	75	1115	0.464	519	726	1.3	0.9	6.056	A
B - B1122 Middleton Road	164	41	451	1467	0.112	164	143	0.2	0.1	2.764	A
C - A12 South	712	178	82	1104	0.645	720	533	3.8	1.9	9.543	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	433	108	63	1121	0.386	434	605	0.9	0.6	5.245	A
B - B1122 Middleton Road	137	34	377	1510	0.091	137	119	0.1	0.1	2.621	A
C - A12 South	596	149	69	1110	0.537	599	446	1.9	1.2	7.081	A

A12 / B1122 - 2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	5.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	416	100.000
B - B1122 Middleton Road		ONE HOUR	✓	85	100.000
C - A12 South		ONE HOUR	✓	266	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	150	265
	B - B1122 Middleton Road	58	0	27
	C - A12 South	206	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	10	6
	B - B1122 Middleton Road	25	0	1
	C - A12 South	12	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	5.88	0.7	A	382	572
B - B1122 Middleton Road	0.07	2.83	0.1	A	78	116
C - A12 South	0.28	4.83	0.4	A	244	366

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	313	78	45	1079	0.290	311	198	0.0	0.4	4.680	A
B - B1122 Middleton Road	64	16	199	1413	0.045	63	157	0.0	0.0	2.667	A
C - A12 South	200	50	43	1050	0.191	199	219	0.0	0.2	4.229	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	374	93	54	1075	0.348	373	237	0.4	0.5	5.126	A
B - B1122 Middleton Road	76	19	238	1392	0.055	76	189	0.0	0.1	2.734	A
C - A12 South	239	60	52	1045	0.229	239	262	0.2	0.3	4.465	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	458	114	66	1070	0.428	457	290	0.5	0.7	5.866	A
B - B1122 Middleton Road	93	23	292	1364	0.068	93	231	0.1	0.1	2.832	A
C - A12 South	293	73	63	1038	0.282	292	321	0.3	0.4	4.823	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	458	114	66	1070	0.428	458	291	0.7	0.7	5.882	A
B - B1122 Middleton Road	93	23	292	1363	0.068	93	231	0.1	0.1	2.833	A
C - A12 South	293	73	63	1038	0.282	293	322	0.4	0.4	4.827	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	374	93	54	1075	0.348	375	238	0.7	0.5	5.145	A
B - B1122 Middleton Road	76	19	239	1392	0.055	76	189	0.1	0.1	2.738	A
C - A12 South	239	60	52	1045	0.229	239	263	0.4	0.3	4.471	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	313	78	45	1079	0.290	314	199	0.5	0.4	4.707	A
B - B1122 Middleton Road	64	16	200	1412	0.045	64	158	0.1	0.0	2.668	A
C - A12 South	200	50	43	1049	0.191	200	220	0.3	0.2	4.242	A

A12 / B1122 - 2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	8.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	600	100.000
B - B1122 Middleton Road		ONE HOUR	✓	138	100.000
C - A12 South		ONE HOUR	✓	572	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	186	414
	B - B1122 Middleton Road	97	0	41
	C - A12 South	494	78	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	15	9
	B - B1122 Middleton Road	17	0	1
	C - A12 South	6	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.64	9.76	1.8	A	550	825
B - B1122 Middleton Road	0.11	3.07	0.1	A	127	190
C - A12 South	0.60	8.51	1.5	A	525	787

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	451	113	59	1041	0.434	448	442	0.0	0.8	6.044	A
B - B1122 Middleton Road	104	26	309	1406	0.074	104	198	0.0	0.1	2.763	A
C - A12 South	431	108	73	1071	0.402	428	340	0.0	0.7	5.578	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	539	135	70	1036	0.520	538	530	0.8	1.1	7.208	A
B - B1122 Middleton Road	124	31	371	1371	0.091	124	237	0.1	0.1	2.885	A
C - A12 South	514	129	87	1063	0.484	513	408	0.7	0.9	6.534	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	660	165	86	1029	0.642	657	649	1.1	1.7	9.625	A
B - B1122 Middleton Road	152	38	454	1324	0.115	152	290	0.1	0.1	3.070	A
C - A12 South	630	157	107	1053	0.598	628	499	0.9	1.5	8.428	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	660	165	86	1029	0.642	660	650	1.7	1.8	9.760	A
B - B1122 Middleton Road	152	38	455	1323	0.115	152	291	0.1	0.1	3.072	A
C - A12 South	630	157	107	1053	0.598	630	501	1.5	1.5	8.509	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	539	135	71	1036	0.520	542	533	1.8	1.1	7.328	A
B - B1122 Middleton Road	124	31	374	1370	0.091	124	239	0.1	0.1	2.890	A
C - A12 South	514	129	87	1063	0.484	516	411	1.5	0.9	6.610	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	451	113	59	1041	0.434	453	446	1.1	0.8	6.133	A
B - B1122 Middleton Road	104	26	312	1405	0.074	104	200	0.1	0.1	2.767	A
C - A12 South	431	108	73	1071	0.402	432	343	0.9	0.7	5.642	A

A12 / B1122 - 2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	9.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	654	100.000
B - B1122 Middleton Road		ONE HOUR	✓	112	100.000
C - A12 South		ONE HOUR	✓	594	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	146	508
	B - B1122 Middleton Road	66	0	46
	C - A12 South	515	80	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	15	6
	B - B1122 Middleton Road	21	0	5
	C - A12 South	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.68	10.81	2.1	B	600	900
B - B1122 Middleton Road	0.10	3.21	0.1	A	103	154
C - A12 South	0.62	8.83	1.6	A	545	818

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	492	123	60	1065	0.462	489	435	0.0	0.8	6.211	A
B - B1122 Middleton Road	84	21	380	1343	0.063	84	169	0.0	0.1	2.859	A
C - A12 South	447	112	50	1074	0.416	444	414	0.0	0.7	5.692	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	588	147	71	1060	0.555	586	521	0.8	1.2	7.579	A
B - B1122 Middleton Road	101	25	455	1302	0.077	100	203	0.1	0.1	2.996	A
C - A12 South	534	134	60	1069	0.500	533	496	0.7	1.0	6.705	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	720	180	87	1053	0.684	717	637	1.2	2.1	10.603	B
B - B1122 Middleton Road	123	31	556	1247	0.099	123	248	0.1	0.1	3.202	A
C - A12 South	654	164	73	1061	0.616	652	606	1.0	1.6	8.737	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	720	180	88	1052	0.684	720	639	2.1	2.1	10.813	B
B - B1122 Middleton Road	123	31	559	1245	0.099	123	249	0.1	0.1	3.206	A
C - A12 South	654	164	73	1061	0.616	654	609	1.6	1.6	8.833	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	588	147	72	1060	0.555	591	524	2.1	1.3	7.742	A
B - B1122 Middleton Road	101	25	459	1300	0.077	101	204	0.1	0.1	3.004	A
C - A12 South	534	134	60	1069	0.500	536	500	1.6	1.0	6.790	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	492	123	60	1065	0.462	494	438	1.3	0.9	6.320	A
B - B1122 Middleton Road	84	21	383	1341	0.063	84	171	0.1	0.1	2.866	A
C - A12 South	447	112	50	1074	0.416	448	418	1.0	0.7	5.766	A

A12 / B1122 - 2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	10.73	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	677	100.000
B - B1122 Middleton Road		ONE HOUR	✓	220	100.000
C - A12 South		ONE HOUR	✓	691	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	89	588
	B - B1122 Middleton Road	125	0	95
	C - A12 South	631	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	26	6
	B - B1122 Middleton Road	19	0	6
	C - A12 South	4	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.70	11.42	2.3	B	621	931
B - B1122 Middleton Road	0.20	3.70	0.2	A	202	302
C - A12 South	0.73	12.45	2.6	B	634	951

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	509	127	45	1069	0.476	506	566	0.0	0.9	6.310	A
B - B1122 Middleton Road	165	41	439	1329	0.124	165	111	0.0	0.1	3.090	A
C - A12 South	520	130	94	1073	0.485	517	510	0.0	0.9	6.424	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	608	152	54	1065	0.571	607	678	0.9	1.3	7.823	A
B - B1122 Middleton Road	197	49	527	1281	0.154	197	134	0.1	0.2	3.321	A
C - A12 South	621	155	112	1063	0.584	619	612	0.9	1.4	8.080	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	745	186	65	1060	0.703	741	828	1.3	2.3	11.166	B
B - B1122 Middleton Road	242	60	643	1217	0.199	242	163	0.2	0.2	3.690	A
C - A12 South	761	190	138	1049	0.725	756	748	1.4	2.5	12.099	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	745	186	66	1060	0.703	745	833	2.3	2.3	11.424	B
B - B1122 Middleton Road	242	60	647	1215	0.199	242	164	0.2	0.2	3.697	A
C - A12 South	761	190	138	1049	0.725	761	751	2.5	2.6	12.451	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	608	152	54	1065	0.571	612	684	2.3	1.4	8.020	A
B - B1122 Middleton Road	197	49	532	1279	0.154	198	135	0.2	0.2	3.330	A
C - A12 South	621	155	113	1063	0.584	626	617	2.6	1.4	8.318	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	509	127	45	1069	0.477	511	571	1.4	0.9	6.475	A
B - B1122 Middleton Road	165	41	444	1327	0.125	166	113	0.2	0.1	3.100	A
C - A12 South	520	130	94	1073	0.485	522	515	1.4	1.0	6.559	A

A12 / B1122 - 2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	10.66	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	616	100.000
B - B1122 Middleton Road		ONE HOUR	✓	195	100.000
C - A12 South		ONE HOUR	✓	755	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	98	517
	B - B1122 Middleton Road	125	0	71
	C - A12 South	695	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	13	2
	B - B1122 Middleton Road	15	0	0
	C - A12 South	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.61	8.41	1.6	A	565	847
B - B1122 Middleton Road	0.16	3.27	0.2	A	179	269
C - A12 South	0.77	14.59	3.3	B	693	1039

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	463	116	45	1115	0.416	461	613	0.0	0.7	5.476	A
B - B1122 Middleton Road	147	37	387	1415	0.104	147	118	0.0	0.1	2.839	A
C - A12 South	568	142	93	1100	0.517	564	440	0.0	1.1	6.665	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	553	138	53	1111	0.498	552	735	0.7	1.0	6.428	A
B - B1122 Middleton Road	176	44	464	1372	0.128	176	142	0.1	0.1	3.007	A
C - A12 South	679	170	112	1090	0.623	677	528	1.1	1.6	8.653	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	678	169	65	1106	0.613	675	897	1.0	1.5	8.326	A
B - B1122 Middleton Road	215	54	567	1315	0.164	215	173	0.1	0.2	3.271	A
C - A12 South	831	208	137	1077	0.772	825	646	1.6	3.2	13.962	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	678	169	66	1105	0.613	678	902	1.5	1.6	8.414	A
B - B1122 Middleton Road	215	54	569	1314	0.164	215	174	0.2	0.2	3.274	A
C - A12 South	831	208	137	1077	0.772	831	647	3.2	3.3	14.591	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	553	138	54	1111	0.498	556	743	1.6	1.0	6.509	A
B - B1122 Middleton Road	176	44	467	1371	0.128	176	143	0.2	0.1	3.014	A
C - A12 South	679	170	112	1090	0.623	685	531	3.3	1.7	9.023	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	463	116	45	1115	0.416	465	620	1.0	0.7	5.543	A
B - B1122 Middleton Road	147	37	390	1413	0.104	147	119	0.1	0.1	2.846	A
C - A12 South	568	142	94	1100	0.517	571	444	1.7	1.1	6.835	A

A12 / B1122 - 2034 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	4.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	402	100.000
B - B1122 Middleton Road		ONE HOUR	✓	75	100.000
C - A12 South		ONE HOUR	✓	226	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	127	275
	B - B1122 Middleton Road	42	0	33
	C - A12 South	160	66	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	1	6
	B - B1122 Middleton Road	7	0	0
	C - A12 South	16	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.40	5.48	0.7	A	369	553
B - B1122 Middleton Road	0.05	2.49	0.1	A	69	103
C - A12 South	0.24	4.59	0.3	A	207	311

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	303	76	49	1111	0.273	301	151	0.0	0.4	4.439	A
B - B1122 Middleton Road	56	14	206	1588	0.036	56	145	0.0	0.0	2.349	A
C - A12 South	170	43	32	1040	0.164	169	231	0.0	0.2	4.130	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	361	90	59	1106	0.327	361	181	0.4	0.5	4.828	A
B - B1122 Middleton Road	67	17	247	1564	0.043	67	173	0.0	0.0	2.405	A
C - A12 South	203	51	38	1037	0.196	203	277	0.2	0.2	4.313	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	443	111	73	1100	0.402	442	222	0.5	0.7	5.465	A
B - B1122 Middleton Road	83	21	302	1531	0.054	83	212	0.0	0.1	2.485	A
C - A12 South	249	62	46	1033	0.241	249	339	0.2	0.3	4.585	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	443	111	73	1100	0.402	443	222	0.7	0.7	5.476	A
B - B1122 Middleton Road	83	21	303	1530	0.054	83	212	0.1	0.1	2.486	A
C - A12 South	249	62	46	1033	0.241	249	339	0.3	0.3	4.587	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	361	90	59	1106	0.327	362	182	0.7	0.5	4.845	A
B - B1122 Middleton Road	67	17	248	1563	0.043	67	174	0.1	0.0	2.408	A
C - A12 South	203	51	38	1037	0.196	203	277	0.3	0.2	4.319	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	303	76	50	1111	0.273	303	152	0.5	0.4	4.460	A
B - B1122 Middleton Road	56	14	207	1588	0.036	56	145	0.0	0.0	2.352	A
C - A12 South	170	43	32	1040	0.164	170	232	0.2	0.2	4.139	A

A12 / B1122 - 2034 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	8.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	563	100.000
B - B1122 Middleton Road		ONE HOUR	✓	127	100.000
C - A12 South		ONE HOUR	✓	604	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	149	414
	B - B1122 Middleton Road	77	0	50
	C - A12 South	507	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	3	9
	B - B1122 Middleton Road	5	0	0
	C - A12 South	6	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.59	8.33	1.4	A	517	775
B - B1122 Middleton Road	0.10	2.76	0.1	A	117	175
C - A12 South	0.62	8.88	1.6	A	554	831

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	424	106	73	1068	0.397	421	437	0.0	0.7	5.548	A
B - B1122 Middleton Road	96	24	310	1534	0.062	95	184	0.0	0.1	2.502	A
C - A12 South	455	114	58	1083	0.420	452	347	0.0	0.7	5.678	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	506	127	87	1061	0.477	505	524	0.7	0.9	6.465	A
B - B1122 Middleton Road	114	29	371	1495	0.076	114	221	0.1	0.1	2.605	A
C - A12 South	543	136	69	1078	0.504	542	416	0.7	1.0	6.702	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	620	155	106	1052	0.589	618	641	0.9	1.4	8.255	A
B - B1122 Middleton Road	140	35	454	1444	0.097	140	270	0.1	0.1	2.759	A
C - A12 South	665	166	85	1070	0.621	663	509	1.0	1.6	8.779	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	620	155	107	1052	0.589	620	643	1.4	1.4	8.333	A
B - B1122 Middleton Road	140	35	456	1443	0.097	140	271	0.1	0.1	2.761	A
C - A12 South	665	166	85	1070	0.621	665	511	1.6	1.6	8.879	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	506	127	88	1061	0.477	508	527	1.4	0.9	6.538	A
B - B1122 Middleton Road	114	29	374	1494	0.076	114	222	0.1	0.1	2.610	A
C - A12 South	543	136	69	1078	0.504	545	419	1.6	1.0	6.794	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	424	106	73	1067	0.397	425	441	0.9	0.7	5.614	A
B - B1122 Middleton Road	96	24	312	1532	0.062	96	186	0.1	0.1	2.508	A
C - A12 South	455	114	58	1083	0.420	456	350	1.0	0.7	5.752	A

A12 / B1122 - 2034 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	10.27	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	628	100.000
B - B1122 Middleton Road		ONE HOUR	✓	111	100.000
C - A12 South		ONE HOUR	✓	708	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	114	514
	B - B1122 Middleton Road	47	0	64
	C - A12 South	592	116	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	4	6
	B - B1122 Middleton Road	6	0	3
	C - A12 South	6	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.66	9.89	1.9	A	576	864
B - B1122 Middleton Road	0.09	2.90	0.1	A	102	153
C - A12 South	0.72	11.74	2.5	B	650	975

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	473	118	87	1074	0.440	470	478	0.0	0.8	5.930	A
B - B1122 Middleton Road	84	21	384	1473	0.057	83	172	0.0	0.1	2.590	A
C - A12 South	533	133	35	1093	0.488	529	432	0.0	0.9	6.341	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	565	141	104	1066	0.530	563	573	0.8	1.1	7.144	A
B - B1122 Middleton Road	100	25	461	1427	0.070	100	206	0.1	0.1	2.711	A
C - A12 South	636	159	42	1090	0.584	635	518	0.9	1.4	7.870	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	691	173	127	1055	0.655	688	700	1.1	1.8	9.738	A
B - B1122 Middleton Road	122	31	564	1366	0.089	122	252	0.1	0.1	2.894	A
C - A12 South	780	195	52	1085	0.718	775	634	1.4	2.4	11.448	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	691	173	128	1055	0.655	691	703	1.8	1.9	9.893	A
B - B1122 Middleton Road	122	31	566	1364	0.090	122	253	0.1	0.1	2.897	A
C - A12 South	780	195	52	1085	0.718	779	636	2.4	2.5	11.743	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	565	141	105	1065	0.530	567	578	1.9	1.1	7.270	A
B - B1122 Middleton Road	100	25	464	1425	0.070	100	208	0.1	0.1	2.718	A
C - A12 South	636	159	42	1090	0.584	641	522	2.5	1.4	8.087	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	473	118	88	1073	0.440	474	483	1.1	0.8	6.023	A
B - B1122 Middleton Road	84	21	388	1471	0.057	84	174	0.1	0.1	2.596	A
C - A12 South	533	133	35	1093	0.488	535	436	1.4	1.0	6.468	A

A12 / B1122 - 2034 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	12.36	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	689	100.000
B - B1122 Middleton Road		ONE HOUR	✓	218	100.000
C - A12 South		ONE HOUR	✓	772	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	64	625
	B - B1122 Middleton Road	104	0	114
	C - A12 South	687	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	6	5
	B - B1122 Middleton Road	6	0	5
	C - A12 South	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.70	11.27	2.3	B	632	948
B - B1122 Middleton Road	0.19	3.45	0.2	A	200	300
C - A12 South	0.79	15.92	3.6	C	708	1063

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	519	130	63	1091	0.475	515	591	0.0	0.9	6.208	A
B - B1122 Middleton Road	164	41	467	1413	0.116	164	111	0.0	0.1	2.880	A
C - A12 South	581	145	78	1092	0.532	577	553	0.0	1.1	6.925	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	619	155	76	1086	0.571	618	709	0.9	1.3	7.668	A
B - B1122 Middleton Road	196	49	560	1358	0.144	196	134	0.1	0.2	3.097	A
C - A12 South	694	174	93	1085	0.640	692	663	1.1	1.7	9.099	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	759	190	93	1078	0.704	755	864	1.3	2.3	11.007	B
B - B1122 Middleton Road	240	60	685	1285	0.187	240	163	0.2	0.2	3.443	A
C - A12 South	850	212	114	1074	0.791	843	810	1.7	3.5	15.090	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	759	190	94	1077	0.704	758	870	2.3	2.3	11.269	B
B - B1122 Middleton Road	240	60	688	1283	0.187	240	164	0.2	0.2	3.450	A
C - A12 South	850	212	115	1074	0.791	849	813	3.5	3.6	15.917	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	619	155	77	1085	0.571	623	718	2.3	1.4	7.862	A
B - B1122 Middleton Road	196	49	565	1355	0.145	196	135	0.2	0.2	3.106	A
C - A12 South	694	174	94	1085	0.640	701	668	3.6	1.8	9.561	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	519	130	64	1091	0.475	520	598	1.4	0.9	6.329	A
B - B1122 Middleton Road	164	41	472	1410	0.116	164	113	0.2	0.1	2.891	A
C - A12 South	581	145	78	1092	0.532	584	558	1.8	1.2	7.122	A

A12 / B1122 - 2034 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	11.73	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	639	100.000
B - B1122 Middleton Road		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	803	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	77	562
	B - B1122 Middleton Road	92	0	94
	C - A12 South	719	84	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	0	2
	B - B1122 Middleton Road	1	0	0
	C - A12 South	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.63	8.77	1.7	A	586	880
B - B1122 Middleton Road	0.15	3.01	0.2	A	171	256
C - A12 South	0.80	16.09	3.8	C	737	1105

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	481	120	63	1128	0.427	478	606	0.0	0.7	5.517	A
B - B1122 Middleton Road	140	35	421	1519	0.092	140	120	0.0	0.1	2.610	A
C - A12 South	605	151	69	1121	0.539	600	491	0.0	1.2	6.846	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	574	144	75	1122	0.512	573	727	0.7	1.0	6.547	A
B - B1122 Middleton Road	167	42	504	1469	0.114	167	144	0.1	0.1	2.765	A
C - A12 South	722	180	83	1115	0.648	719	589	1.2	1.8	9.045	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	704	176	92	1114	0.632	701	886	1.0	1.7	8.663	A
B - B1122 Middleton Road	205	51	617	1401	0.146	205	176	0.1	0.2	3.008	A
C - A12 South	884	221	101	1106	0.800	877	720	1.8	3.7	15.206	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	704	176	92	1114	0.632	703	892	1.7	1.7	8.771	A
B - B1122 Middleton Road	205	51	619	1400	0.146	205	177	0.2	0.2	3.011	A
C - A12 South	884	221	101	1106	0.800	884	722	3.7	3.8	16.094	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	574	144	76	1121	0.512	577	736	1.7	1.1	6.644	A
B - B1122 Middleton Road	167	42	507	1467	0.114	167	146	0.2	0.1	2.770	A
C - A12 South	722	180	83	1115	0.648	730	592	3.8	1.9	9.530	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	481	120	64	1127	0.427	482	613	1.1	0.8	5.590	A
B - B1122 Middleton Road	140	35	424	1517	0.092	140	122	0.1	0.1	2.617	A
C - A12 South	605	151	69	1121	0.539	607	495	1.9	1.2	7.046	A

A12 / B1122 - 2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	4.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	407	100.000
B - B1122 Middleton Road		ONE HOUR	✓	75	100.000
C - A12 South		ONE HOUR	✓	213	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	134	274
	B - B1122 Middleton Road	47	0	27
	C - A12 South	157	56	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	1	6
	B - B1122 Middleton Road	7	0	1
	C - A12 South	16	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.41	5.50	0.7	A	374	561
B - B1122 Middleton Road	0.05	2.51	0.1	A	68	103
C - A12 South	0.23	4.56	0.3	A	195	293

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	307	77	42	1113	0.276	305	153	0.0	0.4	4.450	A
B - B1122 Middleton Road	56	14	205	1576	0.036	56	142	0.0	0.0	2.368	A
C - A12 South	160	40	35	1032	0.155	160	226	0.0	0.2	4.123	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	366	92	50	1109	0.330	366	184	0.4	0.5	4.842	A
B - B1122 Middleton Road	67	17	246	1551	0.043	67	170	0.0	0.0	2.425	A
C - A12 South	192	48	42	1029	0.186	191	271	0.2	0.2	4.297	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	449	112	61	1104	0.406	448	225	0.5	0.7	5.485	A
B - B1122 Middleton Road	82	21	301	1518	0.054	82	208	0.0	0.1	2.505	A
C - A12 South	235	59	52	1024	0.229	234	331	0.2	0.3	4.555	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	449	112	61	1104	0.406	449	225	0.7	0.7	5.495	A
B - B1122 Middleton Road	82	21	301	1518	0.054	82	208	0.1	0.1	2.506	A
C - A12 South	235	59	52	1024	0.229	235	332	0.3	0.3	4.557	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	366	92	50	1109	0.330	367	184	0.7	0.5	4.857	A
B - B1122 Middleton Road	67	17	247	1551	0.043	67	170	0.1	0.0	2.427	A
C - A12 South	192	48	42	1029	0.186	192	271	0.3	0.2	4.303	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	307	77	42	1113	0.276	307	154	0.5	0.4	4.474	A
B - B1122 Middleton Road	56	14	206	1575	0.036	56	143	0.0	0.0	2.370	A
C - A12 South	160	40	36	1032	0.155	161	227	0.2	0.2	4.131	A

A12 / B1122 - 2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	7.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	569	100.000
B - B1122 Middleton Road		ONE HOUR	✓	126	100.000
C - A12 South		ONE HOUR	✓	578	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	160	409
	B - B1122 Middleton Road	85	0	41
	C - A12 South	501	77	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	4	9
	B - B1122 Middleton Road	5	0	1
	C - A12 South	6	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.59	8.26	1.4	A	522	783
B - B1122 Middleton Road	0.10	2.76	0.1	A	116	174
C - A12 South	0.60	8.39	1.5	A	530	795

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	428	107	57	1074	0.399	426	439	0.0	0.7	5.528	A
B - B1122 Middleton Road	95	24	306	1531	0.062	95	177	0.0	0.1	2.506	A
C - A12 South	435	109	64	1080	0.403	432	336	0.0	0.7	5.541	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	511	128	69	1069	0.478	510	527	0.7	0.9	6.432	A
B - B1122 Middleton Road	113	28	367	1493	0.076	113	212	0.1	0.1	2.608	A
C - A12 South	520	130	77	1074	0.484	519	403	0.7	0.9	6.474	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	626	157	84	1062	0.590	624	644	0.9	1.4	8.190	A
B - B1122 Middleton Road	139	35	449	1442	0.096	139	260	0.1	0.1	2.761	A
C - A12 South	636	159	94	1065	0.597	634	494	0.9	1.5	8.310	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	626	157	84	1062	0.590	626	646	1.4	1.4	8.265	A
B - B1122 Middleton Road	139	35	450	1442	0.096	139	261	0.1	0.1	2.763	A
C - A12 South	636	159	94	1065	0.597	636	495	1.5	1.5	8.389	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	511	128	69	1069	0.479	513	529	1.4	0.9	6.506	A
B - B1122 Middleton Road	113	28	369	1492	0.076	114	214	0.1	0.1	2.611	A
C - A12 South	520	130	77	1073	0.484	522	406	1.5	1.0	6.549	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	428	107	58	1074	0.399	429	443	0.9	0.7	5.594	A
B - B1122 Middleton Road	95	24	309	1529	0.062	95	179	0.1	0.1	2.512	A
C - A12 South	435	109	64	1079	0.403	436	339	1.0	0.7	5.607	A

A12 / B1122 - 2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	9.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	638	100.000
B - B1122 Middleton Road		ONE HOUR	✓	102	100.000
C - A12 South		ONE HOUR	✓	666	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	129	509
	B - B1122 Middleton Road	54	0	47
	C - A12 South	591	75	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	4	7
	B - B1122 Middleton Road	8	0	5
	C - A12 South	6	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	9.61	1.8	A	585	878
B - B1122 Middleton Road	0.08	2.93	0.1	A	93	140
C - A12 South	0.68	10.46	2.1	B	611	917

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	480	120	56	1089	0.441	477	483	0.0	0.8	5.853	A
B - B1122 Middleton Road	77	19	380	1445	0.053	76	153	0.0	0.1	2.630	A
C - A12 South	502	125	41	1087	0.462	498	416	0.0	0.8	6.085	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	574	143	68	1084	0.529	572	579	0.8	1.1	7.015	A
B - B1122 Middleton Road	92	23	456	1401	0.065	91	184	0.1	0.1	2.749	A
C - A12 South	599	150	49	1083	0.553	598	499	0.8	1.2	7.398	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	702	176	83	1077	0.652	700	707	1.1	1.8	9.465	A
B - B1122 Middleton Road	112	28	558	1341	0.084	112	225	0.1	0.1	2.928	A
C - A12 South	734	183	60	1077	0.681	730	610	1.2	2.1	10.269	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	702	176	83	1077	0.652	702	710	1.8	1.8	9.606	A
B - B1122 Middleton Road	112	28	560	1340	0.084	112	225	0.1	0.1	2.931	A
C - A12 South	734	183	60	1077	0.681	733	612	2.1	2.1	10.460	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	574	143	68	1084	0.529	576	583	1.8	1.1	7.136	A
B - B1122 Middleton Road	92	23	459	1399	0.065	92	185	0.1	0.1	2.755	A
C - A12 South	599	150	49	1083	0.553	602	502	2.1	1.3	7.548	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	480	120	57	1089	0.441	482	487	1.1	0.8	5.940	A
B - B1122 Middleton Road	77	19	384	1443	0.053	77	155	0.1	0.1	2.636	A
C - A12 South	502	125	41	1087	0.462	503	420	1.3	0.9	6.189	A

A12 / B1122 - 2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	11.53	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	691	100.000
B - B1122 Middleton Road		ONE HOUR	✓	197	100.000
C - A12 South		ONE HOUR	✓	745	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	74	617
	B - B1122 Middleton Road	111	0	86
	C - A12 South	683	61	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	5	5
	B - B1122 Middleton Road	6	0	6
	C - A12 South	4	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.70	10.90	2.3	B	634	951
B - B1122 Middleton Road	0.17	3.38	0.2	A	181	271
C - A12 South	0.77	14.33	3.2	B	683	1025

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	520	130	46	1101	0.473	517	594	0.0	0.9	6.128	A
B - B1122 Middleton Road	148	37	461	1409	0.105	148	101	0.0	0.1	2.855	A
C - A12 South	561	140	83	1089	0.515	556	526	0.0	1.0	6.711	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	621	155	55	1096	0.567	619	712	0.9	1.3	7.524	A
B - B1122 Middleton Road	177	44	553	1355	0.131	177	121	0.1	0.1	3.055	A
C - A12 South	669	167	99	1081	0.619	667	631	1.0	1.6	8.660	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	761	190	67	1090	0.698	757	869	1.3	2.2	10.668	B
B - B1122 Middleton Road	217	54	676	1284	0.169	217	148	0.1	0.2	3.374	A
C - A12 South	820	205	122	1070	0.766	814	771	1.6	3.1	13.748	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	761	190	67	1090	0.698	760	874	2.2	2.3	10.901	B
B - B1122 Middleton Road	217	54	679	1282	0.169	217	149	0.2	0.2	3.380	A
C - A12 South	820	205	122	1070	0.766	820	774	3.1	3.2	14.327	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	621	155	56	1096	0.567	625	720	2.3	1.3	7.700	A
B - B1122 Middleton Road	177	44	558	1352	0.131	177	122	0.2	0.2	3.063	A
C - A12 South	669	167	100	1081	0.619	675	636	3.2	1.7	9.014	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	520	130	46	1100	0.473	522	600	1.3	0.9	6.240	A
B - B1122 Middleton Road	148	37	466	1406	0.106	148	102	0.2	0.1	2.861	A
C - A12 South	561	140	83	1089	0.515	563	531	1.7	1.1	6.878	A

A12 / B1122 - 2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J13	A12 / B1122	Standard Roundabout		A, B, C	10.53	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	640	100.000
B - B1122 Middleton Road		ONE HOUR	✓	171	100.000
C - A12 South		ONE HOUR	✓	764	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	90	550
	B - B1122 Middleton Road	106	0	65
	C - A12 South	708	56	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - B1122 Middleton Road	C - A12 South
From	A - A12 North	0	0	2
	B - B1122 Middleton Road	1	0	0
	C - A12 South	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.62	8.41	1.6	A	587	881
B - B1122 Middleton Road	0.13	2.95	0.2	A	157	235
C - A12 South	0.77	13.99	3.2	B	701	1052

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

A - A12 North	482	120	42	1142	0.422	479	609	0.0	0.7	5.409	A
B - B1122 Middleton Road	129	32	412	1523	0.084	128	109	0.0	0.1	2.581	A
C - A12 South	575	144	79	1115	0.516	571	460	0.0	1.0	6.568	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	575	144	50	1138	0.506	574	730	0.7	1.0	6.374	A
B - B1122 Middleton Road	154	38	494	1474	0.104	153	131	0.1	0.1	2.725	A
C - A12 South	687	172	95	1108	0.620	685	552	1.0	1.6	8.467	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	705	176	61	1133	0.622	702	891	1.0	1.6	8.320	A
B - B1122 Middleton Road	188	47	604	1409	0.134	188	160	0.1	0.2	2.949	A
C - A12 South	841	210	116	1098	0.767	835	675	1.6	3.1	13.427	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	705	176	61	1132	0.622	705	896	1.6	1.6	8.412	A
B - B1122 Middleton Road	188	47	606	1407	0.134	188	160	0.2	0.2	2.951	A
C - A12 South	841	210	116	1098	0.767	841	677	3.1	3.2	13.987	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	575	144	51	1138	0.506	578	738	1.6	1.0	6.458	A
B - B1122 Middleton Road	154	38	497	1472	0.104	154	132	0.2	0.1	2.729	A
C - A12 South	687	172	95	1108	0.620	693	555	3.2	1.7	8.806	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	482	120	42	1142	0.422	483	615	1.0	0.7	5.475	A
B - B1122 Middleton Road	129	32	415	1521	0.085	129	110	0.1	0.1	2.585	A
C - A12 South	575	144	80	1115	0.516	578	464	1.7	1.1	6.727	A

Junctions 9
PICADY 9 - Priority Intersection Module
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 Report generation date: 16/03/2020 11:54:26

- »A1094 / B1069 (Church Road) - Base Year, 6-7 AM
- »A1094 / B1069 (Church Road) - Base Year, 7-8 AM
- »A1094 / B1069 (Church Road) - Base Year, 8-9 AM
- »A1094 / B1069 (Church Road) - Base Year, 3-4 PM
- »A1094 / B1069 (Church Road) - Base Year, 5-6 PM
- »A1094 / B1069 (Church Road) - 2023 Reference Case , 6-7 AM
- »A1094 / B1069 (Church Road) - 2023 Reference Case , 7-8 AM
- »A1094 / B1069 (Church Road) - 2023 Reference Case , 8-9 AM
- »A1094 / B1069 (Church Road) - 2023 Reference Case , 3-4 PM
- »A1094 / B1069 (Church Road) - 2023 Reference Case , 5-6 PM
- »A1094 / B1069 (Church Road) - 2023 Early Years , 6-7 AM
- »A1094 / B1069 (Church Road) - 2023 Early Years , 7-8 AM
- »A1094 / B1069 (Church Road) - 2023 Early Years , 8-9 AM
- »A1094 / B1069 (Church Road) - 2023 Early Years , 3-4 PM
- »A1094 / B1069 (Church Road) - 2023 Early Years , 5-6 PM
- »A1094 / B1069 (Church Road) - 2028 Reference Case , 6-7 AM
- »A1094 / B1069 (Church Road) - 2028 Reference Case , 7-8 AM
- »A1094 / B1069 (Church Road) - 2028 Reference Case , 8-9 AM
- »A1094 / B1069 (Church Road) - 2028 Reference Case , 3-4 PM
- »A1094 / B1069 (Church Road) - 2028 Reference Case , 5-6 PM
- »A1094 / B1069 (Church Road) - 2028 Peak Construction, 6-7 AM
- »A1094 / B1069 (Church Road) - 2028 Peak Construction, 7-8 AM
- »A1094 / B1069 (Church Road) - 2028 Peak Construction, 8-9 AM
- »A1094 / B1069 (Church Road) - 2028 Peak Construction, 3-4 PM
- »A1094 / B1069 (Church Road) - 2028 Peak Construction, 5-6 PM
- »A1094 / B1069 (Church Road) - 2034 Reference Case , 6-7 AM
- »A1094 / B1069 (Church Road) - 2034 Reference Case , 7-8 AM
- »A1094 / B1069 (Church Road) - 2034 Reference Case , 8-9 AM
- »A1094 / B1069 (Church Road) - 2034 Reference Case , 3-4 PM
- »A1094 / B1069 (Church Road) - 2034 Reference Case , 5-6 PM
- »A1094 / B1069 (Church Road) - 2034 Operational Led, 6-7 AM
- »A1094 / B1069 (Church Road) - 2034 Operational Led, 7-8 AM
- »A1094 / B1069 (Church Road) - 2034 Operational Led, 8-9 AM
- »A1094 / B1069 (Church Road) - 2034 Operational Led, 3-4 PM
- »A1094 / B1069 (Church Road) - 2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
A1094 / B1069 (Church Road) - Base Year																									
Stream B-ACD	D1	0.2	8.64	0.13	A	D2	0.6	12.83	0.37	B	D3	1.0	17.04	0.51	C	D4	1.3	19.40	0.56	C	D5	1.1	16.85	0.53	C
Stream A-BCD		0.0	6.50	0.01	A		0.0	7.22	0.01	A		0.0	8.53	0.04	A		0.0	7.54	0.03	A		0.0	7.47	0.03	A
Stream D-ABC		0.0	7.57	0.02	A		0.1	9.74	0.12	A		0.2	10.52	0.16	B		0.2	10.51	0.18	B		0.2	10.49	0.16	B
Stream C-ABD		0.0	7.19	0.02	A		0.1	8.36	0.11	A		0.2	8.65	0.14	A		0.2	8.41	0.14	A		0.1	8.21	0.11	A
A1094 / B1069 (Church Road) - 2023 Reference Case																									
Stream B-ACD	D6	0.4	10.99	0.30	B	D7	0.7	15.29	0.43	C	D8	1.6	23.40	0.63	C	D9	2.5	31.10	0.72	D	D10	2.2	28.07	0.70	D
Stream A-BCD		0.0	7.01	0.01	A		0.0	7.43	0.01	A		0.0	9.19	0.05	A		0.0	7.82	0.04	A		0.0	7.71	0.03	A
Stream D-ABC		0.0	8.38	0.02	A		0.2	10.66	0.14	B		0.2	12.17	0.19	B		0.3	11.70	0.21	B		0.2	12.13	0.19	B
Stream C-ABD		0.0	7.30	0.02	A		0.2	8.73	0.13	A		0.2	8.68	0.16	A		0.2	8.88	0.18	A		0.2	9.00	0.13	A
A1094 / B1069 (Church Road) - 2023 Early Years																									
Stream B-ACD	D11	0.5	11.64	0.32	B	D12	1.2	18.93	0.55	C	D13	1.8	24.74	0.65	C	D14	2.5	31.75	0.73	D	D15	2.7	34.02	0.74	D
Stream A-BCD		0.0	7.23	0.01	A		0.0	7.73	0.01	A		0.0	9.19	0.05	A		0.0	7.83	0.04	A		0.0	7.76	0.03	A
Stream D-ABC		0.0	8.73	0.03	A		0.2	11.41	0.15	B		0.3	12.25	0.19	B		0.3	11.80	0.21	B		0.2	12.62	0.20	B
Stream C-ABD		0.0	7.33	0.02	A		0.2	8.70	0.13	A		0.2	8.74	0.17	A		0.2	8.95	0.18	A		0.3	9.60	0.19	A
A1094 / B1069 (Church Road) - 2028 Reference Case																									
Stream B-ACD	D16	0.4	11.18	0.30	B	D17	0.8	15.90	0.45	C	D18	1.9	25.43	0.66	D	D19	2.8	34.59	0.75	D	D20	2.7	32.32	0.74	D
Stream A-BCD		0.0	7.06	0.01	A		0.0	7.50	0.01	A		0.0	9.25	0.05	A		0.0	7.85	0.04	A		0.0	7.71	0.03	A
Stream D-ABC		0.0	8.48	0.03	A		0.2	10.85	0.15	B		0.3	12.31	0.20	B		0.3	11.94	0.23	B		0.3	12.24	0.20	B
Stream C-ABD		0.0	7.28	0.03	A		0.2	8.69	0.14	A		0.2	8.65	0.18	A		0.2	8.97	0.18	A		0.2	9.08	0.15	A
A1094 / B1069 (Church Road) - 2028 Peak Construction																									
Stream B-ACD	D21	0.8	13.79	0.44	B	D22	1.9	26.02	0.66	D	D23	2.3	30.47	0.71	D	D24	3.1	38.17	0.77	E	D25	3.2	38.73	0.78	E
Stream A-BCD		0.0	7.23	0.01	A		0.0	7.76	0.01	A		0.1	9.41	0.05	A		0.0	7.92	0.04	A		0.0	7.82	0.04	A
Stream D-ABC		0.0	8.74	0.03	A		0.2	11.60	0.16	B		0.3	12.84	0.21	B		0.3	12.36	0.23	B		0.3	13.00	0.21	B
Stream C-ABD		0.0	7.30	0.03	A		0.2	8.79	0.14	A		0.2	8.74	0.18	A		0.2	9.15	0.19	A		0.2	9.41	0.15	A
A1094 / B1069 (Church Road) - 2034 Reference Case																									

Stream B-ACD	0.5	11.34	0.31	B	1.1	17.74	0.52	C	2.5	30.81	0.72	D	4.4	50.80	0.84	F	3.2	36.51	0.78	E
Stream A-BCD	0.0	7.06	0.01	A	0.0	7.56	0.01	A	0.1	9.17	0.05	A	0.0	8.02	0.04	A	0.0	7.81	0.04	A
Stream D-ABC	0.0	8.49	0.03	A	0.2	11.09	0.16	B	0.3	12.28	0.21	B	0.3	12.65	0.24	B	0.3	12.31	0.21	B
Stream C-ABD	0.0	7.25	0.03	A	0.2	8.88	0.16	A	0.3	8.86	0.20	A	0.3	9.26	0.21	A	0.2	9.00	0.17	A
A1094 / B1069 (Church Road) - 2034 Operational Led																				
Stream B-ACD	0.4	11.31	0.31	B	3.0	36.67	0.76	E	5.3	57.99	0.87	F	4.4	50.21	0.83	F	3.2	35.70	0.77	E
Stream A-BCD	0.0	7.06	0.01	A	0.0	7.94	0.01	A	0.1	9.47	0.05	A	0.0	8.02	0.04	A	0.0	7.80	0.04	A
Stream D-ABC	0.0	8.49	0.03	A	0.2	11.98	0.17	B	0.3	12.99	0.22	B	0.3	12.63	0.24	B	0.3	12.30	0.21	B
Stream C-ABD	0.0	7.24	0.03	A	0.2	8.84	0.16	A	0.3	8.87	0.20	A	0.3	9.23	0.21	A	0.2	9.00	0.17	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

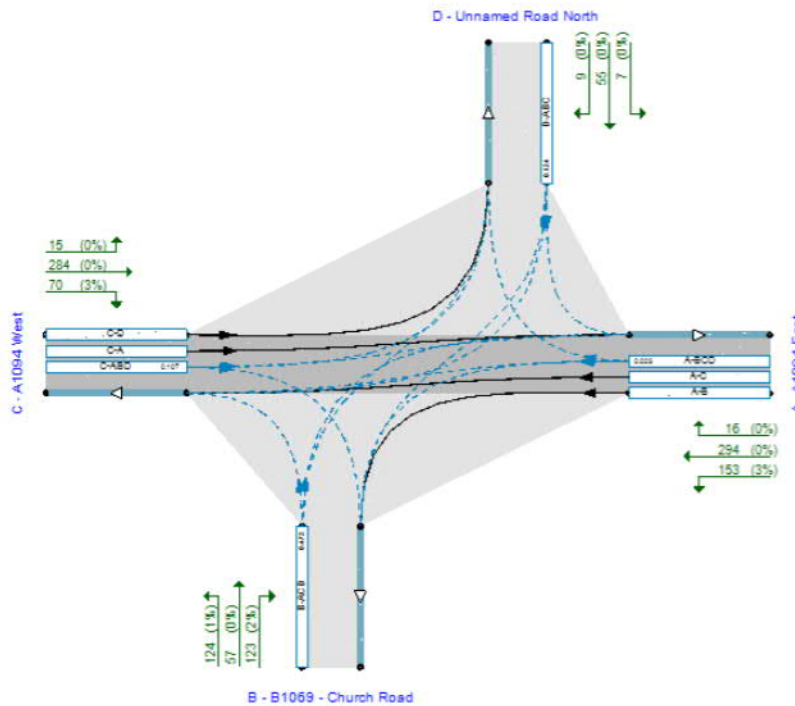
File summary

File Description

Title	A1094 / B1069 (Church Road)
Location	52.179898°, 1.502522°
Site number	14
Date	16/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKWSPGROUP\ukjgm001
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (left) Streams (downstream end) and RFC (right)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
AJ14	A1094 / B1069 (Church Road)	✓	100.000	100.000

A1094 / B1069 (Church Road) - Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		2.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A1094 East		Major
B	B1069 - Church Road		Minor
C	A1094 West		Major
D	Unnamed Road North		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - A1094 East	8.30		✓	2.20	26.7	✓	2.60
C - A1094 West	7.75		✓	2.20	26.2	✓	1.50

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - B1069 - Church Road	One lane	3.90	22	32
D - Unnamed Road North	One lane	3.34	93	35

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
A-D	589	-	-	-	0.206	0.206	0.206	-	0.206	-	-
B-AD	546	0.092	0.232	-	-	-	0.146	0.331	0.146	0.092	0.232
B-C	702	0.099	0.251	-	-	-	-	-	-	0.099	0.251
C-B	589	0.211	0.211	-	-	-	-	-	-	0.211	0.211
D-A	668	-	-	-	0.233	0.092	0.233	-	0.092	-	-
D-BC	543	0.141	0.141	0.321	0.225	0.089	0.225	-	0.089	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	111	100.000
B - B1069 - Church Road		ONE HOUR	✓	59	100.000
C - A1094 West		ONE HOUR	✓	97	100.000
D - Unnamed Road North		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	25	83	3
	B - B1069 - Church Road	32	0	17	10
	C - A1094 West	84	10	0	3
	D - Unnamed Road North				

D - Unnamed Road North	4	3	2	0
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Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	4	2	0
	B - B1069 - Church Road	16	0	6	10
	C - A1094 West	8	10	0	33
	D - Unnamed Road North	0	0	50	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.13	8.64	0.2	A	54	81
A-BCD	0.01	6.50	0.0	A	3	4
A-B					23	34
A-C					76	114
D-ABC	0.02	7.57	0.0	A	8	12
C-ABD	0.02	7.19	0.0	A	9	14
C-D					3	4
C-A					77	116

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	44	11	494	0.090	44	0.0	0.1	8.003	A
A-BCD	2	0.56	567	0.004	2	0.0	0.0	6.370	A
A-B	19	5			19				
A-C	62	16			62				
D-ABC	7	2	499	0.014	7	0.0	0.0	7.310	A
C-ABD	8	2	519	0.015	7	0.0	0.0	7.039	A
C-D	2	0.56			2				
C-A	63	16			63				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	53	13	488	0.109	53	0.1	0.1	8.264	A
A-BCD	3	0.67	563	0.005	3	0.0	0.0	6.425	A
A-B	22	6			22				
A-C	75	19			75				
D-ABC	8	2	493	0.016	8	0.0	0.0	7.415	A
C-ABD	9	2	516	0.017	9	0.0	0.0	7.103	A
C-D	3	0.67			3				
C-A	76	19			76				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	65	16	482	0.135	65	0.1	0.2	8.636	A
A-BCD	3	0.83	557	0.006	3	0.0	0.0	6.501	A
A-B	28	7			28				
A-C	91	23			91				
D-ABC	10	2	486	0.020	10	0.0	0.0	7.565	A
C-ABD	11	3	511	0.022	11	0.0	0.0	7.193	A
C-D	3	1			3				
C-A	92	23			92				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	65	16	482	0.135	65	0.2	0.2	8.642	A
A-BCD	3	0.83	557	0.006	3	0.0	0.0	6.501	A
A-B	28	7			28				
A-C	91	23			91				
D-ABC	10	2	486	0.020	10	0.0	0.0	7.566	A
C-ABD	11	3	511	0.022	11	0.0	0.0	7.193	A
C-D	3	1			3				
C-A	92	23			92				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	53	13	488	0.109	53	0.2	0.1	8.272	A
A-BCD	3	0.67	563	0.005	3	0.0	0.0	6.425	A

A-B	22	6			22				
A-C	75	19			75				
D-ABC	8	2	493	0.016	8	0.0	0.0	7.419	A
C-ABD	9	2	516	0.017	9	0.0	0.0	7.104	A
C-D	3	0.67			3				
C-A	76	19			76				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	44	11	493	0.090	45	0.1	0.1	8.019	A
A-BCD	2	0.56	567	0.004	2	0.0	0.0	6.373	A
A-B	19	5			19				
A-C	62	16			62				
D-ABC	7	2	499	0.014	7	0.0	0.0	7.314	A
C-ABD	8	2	519	0.015	8	0.0	0.0	7.042	A
C-D	2	0.56			2				
C-A	63	16			63				

A1094 / B1069 (Church Road) - Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		3.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	297	100.000
B - B1069 - Church Road		ONE HOUR	✓	147	100.000
C - A1094 West		ONE HOUR	✓	307	100.000
D - Unnamed Road North		ONE HOUR	✓	45	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	87	206	4
	B - B1069 - Church Road	79	0	45	23
	C - A1094 West	257	48	0	2
	D - Unnamed Road North	8	31	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	7	0	0
	B - B1069 - Church Road	6	0	4	0
	C - A1094 West	6	8	0	0
	D - Unnamed Road North	13	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.37	12.83	0.6	B	135	202
A-BCD	0.01	7.22	0.0	A	4	6
A-B					80	120
A-C					189	284
D-ABC	0.12	9.74	0.1	A	41	62
C-ABD	0.11	8.36	0.1	A	45	67
C-D					2	3
C-A					235	352

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	111	28	480	0.231	109	0.0	0.3	9.691	A

A-BCD	3	0.75	530	0.006	3	0.0	0.0	6.826	A
A-B	65	16			65				
A-C	155	39			155				
D-ABC	34	8	461	0.073	34	0.0	0.1	8.410	A
C-ABD	37	9	500	0.073	36	0.0	0.1	7.763	A
C-D	2	0.38			2				
C-A	193	48			193				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	132	33	464	0.285	132	0.3	0.4	10.820	B
A-BCD	4	0.90	519	0.007	4	0.0	0.0	6.988	A
A-B	78	20			78				
A-C	185	46			185				
D-ABC	40	10	444	0.091	40	0.1	0.1	8.927	A
C-ABD	44	11	493	0.089	44	0.1	0.1	8.014	A
C-D	2	0.45			2				
C-A	230	58			230				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	162	40	442	0.366	161	0.4	0.6	12.772	B
A-BCD	4	1	503	0.009	4	0.0	0.0	7.222	A
A-B	96	24			96				
A-C	227	57			227				
D-ABC	50	12	419	0.118	49	0.1	0.1	9.735	A
C-ABD	54	14	485	0.112	54	0.1	0.1	8.350	A
C-D	2	0.55			2				
C-A	281	70			281				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	162	40	442	0.366	162	0.6	0.6	12.834	B
A-BCD	4	1	503	0.009	4	0.0	0.0	7.224	A
A-B	96	24			96				
A-C	227	57			227				
D-ABC	50	12	419	0.118	50	0.1	0.1	9.744	A
C-ABD	54	14	485	0.112	54	0.1	0.1	8.356	A
C-D	2	0.55			2				
C-A	281	70			281				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	132	33	464	0.285	133	0.6	0.4	10.894	B
A-BCD	4	0.90	519	0.007	4	0.0	0.0	6.990	A
A-B	78	20			78				
A-C	185	46			185				
D-ABC	40	10	443	0.091	41	0.1	0.1	8.941	A
C-ABD	44	11	493	0.089	44	0.1	0.1	8.022	A
C-D	2	0.45			2				
C-A	230	58			230				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	111	28	480	0.231	111	0.4	0.3	9.780	A
A-BCD	3	0.75	530	0.006	3	0.0	0.0	6.832	A
A-B	65	16			65				
A-C	155	39			155				
D-ABC	34	8	461	0.073	34	0.1	0.1	8.432	A
C-ABD	37	9	500	0.073	37	0.1	0.1	7.776	A
C-D	2	0.38			2				
C-A	193	48			193				

A1094 / B1069 (Church Road) - Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		5.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	288	100.000
B - B1069 - Church Road		ONE HOUR	✓	199	100.000
C - A1094 West		ONE HOUR	✓	309	100.000
D - Unnamed Road North		ONE HOUR	✓	58	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	76	196	16
	B - B1069 - Church Road	103	0	47	49
	C - A1094 West	240	58	0	11
	D - Unnamed Road North	7	41	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	3	3	13
	B - B1069 - Church Road	3	0	15	2
	C - A1094 West	4	10	0	0
	D - Unnamed Road North	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.51	17.04	1.0	C	183	274
A-BCD	0.04	8.53	0.0	A	15	22
A-B					70	105
A-C					180	270
D-ABC	0.16	10.52	0.2	B	53	80
C-ABD	0.14	8.65	0.2	A	55	82
C-D					10	15
C-A					219	328

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	150	37	468	0.320	148	0.0	0.5	11.181	B

A-BCD	12	3	467	0.026	12	0.0	0.0	7.913	A
A-B	57	14			57				
A-C	148	37			148				
D-ABC	44	11	451	0.097	43	0.0	0.1	8.823	A
C-ABD	44	11	493	0.090	44	0.0	0.1	8.005	A
C-D	8	2			8				
C-A	180	45			180				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	179	45	452	0.396	178	0.5	0.6	13.101	B
A-BCD	14	4	455	0.032	14	0.0	0.0	8.162	A
A-B	68	17			68				
A-C	176	44			176				
D-ABC	52	13	432	0.121	52	0.1	0.1	9.470	A
C-ABD	53	13	488	0.109	53	0.1	0.1	8.280	A
C-D	10	2			10				
C-A	215	54			215				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	219	55	430	0.509	218	0.6	1.0	16.821	C
A-BCD	18	4	440	0.040	18	0.0	0.0	8.521	A
A-B	84	21			84				
A-C	216	54			216				
D-ABC	64	16	406	0.157	64	0.1	0.2	10.504	B
C-ABD	66	17	483	0.138	66	0.1	0.2	8.644	A
C-D	12	3			12				
C-A	262	65			262				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	219	55	430	0.509	219	1.0	1.0	17.040	C
A-BCD	18	4	440	0.040	18	0.0	0.0	8.525	A
A-B	84	21			84				
A-C	216	54			216				
D-ABC	64	16	406	0.157	64	0.2	0.2	10.520	B
C-ABD	66	17	483	0.138	66	0.2	0.2	8.652	A
C-D	12	3			12				
C-A	262	65			262				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	179	45	452	0.396	180	1.0	0.7	13.314	B
A-BCD	14	4	455	0.032	14	0.0	0.0	8.171	A
A-B	68	17			68				
A-C	176	44			176				
D-ABC	52	13	432	0.121	52	0.2	0.1	9.495	A
C-ABD	53	13	488	0.109	54	0.2	0.1	8.291	A
C-D	10	2			10				
C-A	215	54			215				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	150	37	468	0.320	151	0.7	0.5	11.369	B
A-BCD	12	3	466	0.026	12	0.0	0.0	7.925	A
A-B	57	14			57				
A-C	148	37			148				
D-ABC	44	11	450	0.097	44	0.1	0.1	8.857	A
C-ABD	44	11	493	0.090	44	0.1	0.1	8.023	A
C-D	8	2			8				
C-A	180	45			180				

A1094 / B1069 (Church Road) - Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		5.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	376	100.000
B - B1069 - Church Road		ONE HOUR	✓	218	100.000
C - A1094 West		ONE HOUR	✓	318	100.000
D - Unnamed Road North		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	112	250	14
	B - B1069 - Church Road	104	0	60	54
	C - A1094 West	238	62	0	18
	D - Unnamed Road North	16	38	14	0
	Total	376	218	318	68

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	3	3	0
	B - B1069 - Church Road	3	0	5	2
	C - A1094 West	2	2	0	6
	D - Unnamed Road North	0	0	0	0
	Total	5	5	8	8

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.56	19.40	1.3	C	200	300
A-BCD	0.03	7.54	0.0	A	13	19
A-B					103	154
A-C					229	344
D-ABC	0.18	10.51	0.2	B	62	94
C-ABD	0.14	8.41	0.2	A	58	87
C-D					16	25
C-A					217	326

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	164	41	470	0.349	162	0.0	0.5	11.620	B

A-BCD	11	3	524	0.020	10	0.0	0.0	7.010	A
A-B	84	21			84				
A-C	188	47			188				
D-ABC	51	13	466	0.110	51	0.0	0.1	8.663	A
C-ABD	47	12	519	0.091	47	0.0	0.1	7.615	A
C-D	14	3			14				
C-A	179	45			179				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	196	49	451	0.434	195	0.5	0.7	14.011	B
A-BCD	13	3	511	0.025	13	0.0	0.0	7.222	A
A-B	101	25			101				
A-C	225	56			225				
D-ABC	61	15	446	0.137	61	0.1	0.2	9.357	A
C-ABD	57	14	510	0.111	57	0.1	0.1	7.945	A
C-D	16	4			16				
C-A	213	53			213				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	240	60	425	0.564	238	0.7	1.2	19.020	C
A-BCD	15	4	493	0.031	15	0.0	0.0	7.532	A
A-B	123	31			123				
A-C	275	69			275				
D-ABC	75	19	418	0.179	75	0.2	0.2	10.489	B
C-ABD	70	18	498	0.141	70	0.1	0.2	8.405	A
C-D	20	5			20				
C-A	260	65			260				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	240	60	425	0.565	240	1.2	1.3	19.400	C
A-BCD	15	4	493	0.031	15	0.0	0.0	7.537	A
A-B	123	31			123				
A-C	275	69			275				
D-ABC	75	19	417	0.179	75	0.2	0.2	10.512	B
C-ABD	70	18	498	0.141	70	0.2	0.2	8.411	A
C-D	20	5			20				
C-A	260	65			260				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	196	49	451	0.435	198	1.3	0.8	14.331	B
A-BCD	13	3	511	0.025	13	0.0	0.0	7.229	A
A-B	101	25			101				
A-C	225	56			225				
D-ABC	61	15	445	0.137	61	0.2	0.2	9.386	A
C-ABD	57	14	510	0.111	57	0.2	0.1	7.957	A
C-D	16	4			16				
C-A	213	53			213				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	164	41	470	0.350	165	0.8	0.5	11.862	B
A-BCD	11	3	524	0.020	11	0.0	0.0	7.017	A
A-B	84	21			84				
A-C	188	47			188				
D-ABC	51	13	465	0.110	51	0.2	0.1	8.695	A
C-ABD	47	12	519	0.091	47	0.1	0.1	7.635	A
C-D	14	3			14				
C-A	179	45			179				

A1094 / B1069 (Church Road) - Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		5.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	337	100.000
B - B1069 - Church Road		ONE HOUR	✓	216	100.000
C - A1094 West		ONE HOUR	✓	299	100.000
D - Unnamed Road North		ONE HOUR	✓	58	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	113	211	13
	B - B1069 - Church Road	106	0	63	47
	C - A1094 West	240	47	0	12
	D - Unnamed Road North	6	45	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	4	0	0
	B - B1069 - Church Road	3	0	2	0
	C - A1094 West	0	4	0	0
	D - Unnamed Road North	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.53	16.85	1.1	C	198	297
A-BCD	0.03	7.47	0.0	A	12	18
A-B					104	156
A-C					194	290
D-ABC	0.16	10.49	0.2	B	53	80
C-ABD	0.11	8.21	0.1	A	44	66
C-D					11	16
C-A					220	329

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	163	41	490	0.332	161	0.0	0.5	10.860	B

A-BCD	10	2	526	0.019	10	0.0	0.0	6.970	A
A-B	85	21			85				
A-C	159	40			159				
D-ABC	44	11	454	0.096	43	0.0	0.1	8.755	A
C-ABD	36	9	511	0.070	35	0.0	0.1	7.558	A
C-D	9	2			9				
C-A	180	45			180				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	194	49	474	0.410	193	0.5	0.7	12.800	B
A-BCD	12	3	514	0.023	12	0.0	0.0	7.171	A
A-B	102	25			102				
A-C	190	47			190				
D-ABC	52	13	434	0.120	52	0.1	0.1	9.413	A
C-ABD	43	11	503	0.085	43	0.1	0.1	7.830	A
C-D	11	3			11				
C-A	215	54			215				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	238	59	451	0.527	236	0.7	1.1	16.619	C
A-BCD	14	4	497	0.029	14	0.0	0.0	7.464	A
A-B	124	31			124				
A-C	232	58			232				
D-ABC	64	16	407	0.157	64	0.1	0.2	10.471	B
C-ABD	53	13	492	0.108	53	0.1	0.1	8.203	A
C-D	13	3			13				
C-A	263	66			263				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	238	59	451	0.527	238	1.1	1.1	16.850	C
A-BCD	14	4	496	0.029	14	0.0	0.0	7.468	A
A-B	124	31			124				
A-C	232	58			232				
D-ABC	64	16	407	0.157	64	0.2	0.2	10.487	B
C-ABD	53	13	492	0.108	53	0.1	0.1	8.209	A
C-D	13	3			13				
C-A	263	66			263				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	194	49	474	0.410	196	1.1	0.7	13.016	B
A-BCD	12	3	513	0.023	12	0.0	0.0	7.180	A
A-B	102	25			102				
A-C	190	47			190				
D-ABC	52	13	434	0.120	52	0.2	0.1	9.438	A
C-ABD	43	11	502	0.085	43	0.1	0.1	7.838	A
C-D	11	3			11				
C-A	215	54			215				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	163	41	490	0.332	163	0.7	0.5	11.050	B
A-BCD	10	2	526	0.019	10	0.0	0.0	6.977	A
A-B	85	21			85				
A-C	159	40			159				
D-ABC	44	11	454	0.096	44	0.1	0.1	8.786	A
C-ABD	36	9	511	0.070	36	0.1	0.1	7.574	A
C-D	9	2			9				
C-A	180	45			180				

A1094 / B1069 (Church Road) - 2023 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		3.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	162	100.000
B - B1069 - Church Road		ONE HOUR	✓	125	100.000
C - A1094 West		ONE HOUR	✓	209	100.000
D - Unnamed Road North		ONE HOUR	✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	42	117	3
	B - B1069 - Church Road	94	0	20	11
	C - A1094 West	195	11	0	3
	D - Unnamed Road North	4	3	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	2	0
	B - B1069 - Church Road	5	0	10	10
	C - A1094 West	4	9	0	33
	D - Unnamed Road North	0	0	50	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.30	10.99	0.4	B	115	172
A-BCD	0.01	7.01	0.0	A	3	5
A-B					39	58
A-C					107	161
D-ABC	0.02	8.38	0.0	A	9	14
C-ABD	0.02	7.30	0.0	A	10	15
C-D					3	5
C-A					179	268

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	94	24	487	0.194	93	0.0	0.2	9.131	A

A-BCD	3	0.63	540	0.005	2	0.0	0.0	6.693	A
A-B	32	8			32				
A-C	88	22			88				
D-ABC	8	2	468	0.016	7	0.0	0.0	7.807	A
C-ABD	8	2	516	0.016	8	0.0	0.0	7.089	A
C-D	3	0.63			3				
C-A	147	37			147				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	112	28	478	0.235	112	0.2	0.3	9.843	A
A-BCD	3	0.75	531	0.006	3	0.0	0.0	6.822	A
A-B	38	9			38				
A-C	105	26			105				
D-ABC	9	2	457	0.020	9	0.0	0.0	8.040	A
C-ABD	10	2	512	0.019	10	0.0	0.0	7.176	A
C-D	3	0.75			3				
C-A	175	44			175				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	138	34	465	0.296	137	0.3	0.4	10.954	B
A-BCD	4	0.92	517	0.007	4	0.0	0.0	7.007	A
A-B	46	12			46				
A-C	129	32			129				
D-ABC	11	3	440	0.025	11	0.0	0.0	8.381	A
C-ABD	12	3	505	0.024	12	0.0	0.0	7.297	A
C-D	4	1			4				
C-A	215	54			215				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	138	34	465	0.296	138	0.4	0.4	10.986	B
A-BCD	4	0.92	517	0.007	4	0.0	0.0	7.008	A
A-B	46	12			46				
A-C	129	32			129				
D-ABC	11	3	440	0.025	11	0.0	0.0	8.383	A
C-ABD	12	3	505	0.024	12	0.0	0.0	7.297	A
C-D	4	1			4				
C-A	215	54			215				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	112	28	478	0.235	113	0.4	0.3	9.881	A
A-BCD	3	0.75	530	0.006	3	0.0	0.0	6.824	A
A-B	38	9			38				
A-C	105	26			105				
D-ABC	9	2	457	0.020	9	0.0	0.0	8.045	A
C-ABD	10	2	511	0.019	10	0.0	0.0	7.179	A
C-D	3	0.75			3				
C-A	175	44			175				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	94	24	487	0.194	94	0.3	0.2	9.188	A
A-BCD	3	0.63	540	0.005	3	0.0	0.0	6.699	A
A-B	32	8			32				
A-C	88	22			88				
D-ABC	8	2	468	0.016	8	0.0	0.0	7.813	A
C-ABD	8	2	516	0.016	8	0.0	0.0	7.090	A
C-D	3	0.63			3				
C-A	147	37			147				

A1094 / B1069 (Church Road) - 2023 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		3.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	374	100.000
B - B1069 - Church Road		ONE HOUR	✓	163	100.000
C - A1094 West		ONE HOUR	✓	351	100.000
D - Unnamed Road North		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	112	258	4
	B - B1069 - Church Road	87	0	50	26
	C - A1094 West	294	55	0	2
	D - Unnamed Road North	9	34	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	5	5	0
	B - B1069 - Church Road	7	0	4	0
	C - A1094 West	9	7	0	0
	D - Unnamed Road North	13	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.43	15.29	0.7	C	149	224
A-BCD	0.01	7.43	0.0	A	4	6
A-B					103	154
A-C					237	355
D-ABC	0.14	10.66	0.2	B	46	69
C-ABD	0.13	8.73	0.2	A	52	78
C-D					2	3
C-A					268	403

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	122	31	461	0.266	121	0.0	0.4	10.552	B

A-BCD	3	0.84	521	0.006	3	0.0	0.0	6.948	A
A-B	84	21			84				
A-C	194	49			194				
D-ABC	38	9	444	0.085	37	0.0	0.1	8.852	A
C-ABD	42	11	493	0.085	42	0.0	0.1	7.972	A
C-D	2	0.42			2				
C-A	221	55			221				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	146	37	441	0.331	146	0.4	0.5	12.153	B
A-BCD	4	1.00	508	0.008	4	0.0	0.0	7.142	A
A-B	101	25			101				
A-C	232	58			232				
D-ABC	45	11	422	0.106	45	0.1	0.1	9.537	A
C-ABD	51	13	485	0.104	51	0.1	0.1	8.291	A
C-D	2	0.50			2				
C-A	263	66			263				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	179	45	414	0.432	178	0.5	0.7	15.164	C
A-BCD	5	1	490	0.010	5	0.0	0.0	7.425	A
A-B	123	31			123				
A-C	284	71			284				
D-ABC	55	14	393	0.140	55	0.1	0.2	10.647	B
C-ABD	63	16	476	0.133	63	0.1	0.2	8.722	A
C-D	2	0.61			2				
C-A	321	80			321				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	179	45	414	0.432	179	0.7	0.7	15.290	C
A-BCD	5	1	489	0.010	5	0.0	0.0	7.428	A
A-B	123	31			123				
A-C	284	71			284				
D-ABC	55	14	393	0.140	55	0.2	0.2	10.662	B
C-ABD	63	16	476	0.133	63	0.2	0.2	8.730	A
C-D	2	0.61			2				
C-A	321	80			321				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	146	37	441	0.331	147	0.7	0.5	12.282	B
A-BCD	4	1.00	508	0.008	4	0.0	0.0	7.148	A
A-B	101	25			101				
A-C	232	58			232				
D-ABC	45	11	422	0.106	45	0.2	0.1	9.557	A
C-ABD	51	13	485	0.104	51	0.2	0.1	8.303	A
C-D	2	0.50			2				
C-A	263	66			263				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	122	31	461	0.266	123	0.5	0.4	10.683	B
A-BCD	3	0.84	521	0.006	3	0.0	0.0	6.955	A
A-B	84	21			84				
A-C	194	49			194				
D-ABC	38	9	443	0.085	38	0.1	0.1	8.879	A
C-ABD	42	11	493	0.085	42	0.1	0.1	7.992	A
C-D	2	0.42			2				
C-A	221	55			221				

A1094 / B1069 (Church Road) - 2023 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		6.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	312	100.000
B - B1069 - Church Road		ONE HOUR	✓	235	100.000
C - A1094 West		ONE HOUR	✓	433	100.000
D - Unnamed Road North		ONE HOUR	✓	64	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	82	212	18
	B - B1069 - Church Road	114	0	67	54
	C - A1094 West	352	69	0	12
	D - Unnamed Road North	8	46	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	8	13
	B - B1069 - Church Road	3	0	10	2
	C - A1094 West	6	9	0	0
	D - Unnamed Road North	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.63	23.40	1.6	C	216	324
A-BCD	0.05	9.19	0.0	A	16	24
A-B					75	113
A-C					195	292
D-ABC	0.19	12.17	0.2	B	59	89
C-ABD	0.16	8.68	0.2	A	66	100
C-D					11	17
C-A					320	480

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	177	44	460	0.386	175	0.0	0.6	12.530	B

A-BCD	13	3	447	0.030	13	0.0	0.0	8.290	A
A-B	62	15			62				
A-C	160	40			160				
D-ABC	48	12	424	0.114	48	0.0	0.1	9.555	A
C-ABD	53	13	500	0.106	53	0.0	0.1	8.034	A
C-D	9	2			9				
C-A	264	66			264				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	212	53	440	0.481	210	0.6	0.9	15.610	C
A-BCD	16	4	432	0.037	16	0.0	0.0	8.646	A
A-B	74	18			74				
A-C	191	48			191				
D-ABC	58	14	400	0.145	58	0.1	0.2	10.509	B
C-ABD	65	16	497	0.130	64	0.1	0.2	8.321	A
C-D	11	3			11				
C-A	314	78			314				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	259	65	412	0.629	256	0.9	1.6	22.675	C
A-BCD	20	5	412	0.048	20	0.0	0.0	9.177	A
A-B	90	23			90				
A-C	233	58			233				
D-ABC	71	18	367	0.193	71	0.2	0.2	12.131	B
C-ABD	81	20	496	0.164	81	0.2	0.2	8.675	A
C-D	13	3			13				
C-A	382	96			382				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	259	65	412	0.629	259	1.6	1.6	23.405	C
A-BCD	20	5	411	0.048	20	0.0	0.0	9.188	A
A-B	90	23			90				
A-C	233	58			233				
D-ABC	71	18	367	0.193	71	0.2	0.2	12.168	B
C-ABD	81	20	496	0.164	81	0.2	0.2	8.685	A
C-D	13	3			13				
C-A	382	96			382				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	212	53	440	0.481	214	1.6	1.0	16.158	C
A-BCD	16	4	432	0.037	16	0.0	0.0	8.660	A
A-B	74	18			74				
A-C	191	48			191				
D-ABC	58	14	400	0.145	58	0.2	0.2	10.553	B
C-ABD	65	16	497	0.130	65	0.2	0.2	8.334	A
C-D	11	3			11				
C-A	314	78			314				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	177	44	459	0.386	178	1.0	0.6	12.871	B
A-BCD	13	3	447	0.030	13	0.0	0.0	8.306	A
A-B	62	15			62				
A-C	160	40			160				
D-ABC	48	12	424	0.114	49	0.2	0.1	9.604	A
C-ABD	53	13	500	0.107	53	0.2	0.1	8.057	A
C-D	9	2			9				
C-A	264	66			264				

A1094 / B1069 (Church Road) - 2023 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		8.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	435	100.000
B - B1069 - Church Road		ONE HOUR	✓	272	100.000
C - A1094 West		ONE HOUR	✓	373	100.000
D - Unnamed Road North		ONE HOUR	✓	76	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	123	296	16
	B - B1069 - Church Road	115	0	97	60
	C - A1094 West	278	75	0	20
	D - Unnamed Road North	18	42	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	6	0
	B - B1069 - Church Road	3	0	3	2
	C - A1094 West	4	1	0	6
	D - Unnamed Road North	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.72	31.10	2.5	D	250	375
A-BCD	0.04	7.82	0.0	A	14	21
A-B					113	169
A-C					272	407
D-ABC	0.21	11.70	0.3	B	69	104
C-ABD	0.18	8.88	0.2	A	71	107
C-D					18	27
C-A					253	379

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	205	51	467	0.439	202	0.0	0.8	13.431	B

A-BCD	12	3	514	0.023	12	0.0	0.0	7.172	A
A-B	93	23			93				
A-C	223	56			223				
D-ABC	57	14	449	0.127	56	0.0	0.1	9.167	A
C-ABD	57	14	512	0.112	57	0.0	0.1	7.896	A
C-D	15	4			15				
C-A	208	52			208				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	245	61	445	0.550	243	0.8	1.2	17.693	C
A-BCD	14	4	498	0.028	14	0.0	0.0	7.430	A
A-B	111	28			111				
A-C	266	67			266				
D-ABC	68	17	425	0.160	68	0.1	0.2	10.084	B
C-ABD	69	17	503	0.138	69	0.1	0.2	8.304	A
C-D	18	4			18				
C-A	248	62			248				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	300	75	414	0.724	295	1.2	2.4	29.134	D
A-BCD	17	4	478	0.036	17	0.0	0.0	7.813	A
A-B	135	34			135				
A-C	326	81			326				
D-ABC	83	21	392	0.213	83	0.2	0.3	11.652	B
C-ABD	87	22	492	0.177	87	0.2	0.2	8.866	A
C-D	22	5			22				
C-A	302	75			302				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	300	75	414	0.724	299	2.4	2.5	31.095	D
A-BCD	17	4	477	0.036	17	0.0	0.0	7.824	A
A-B	135	34			135				
A-C	326	81			326				
D-ABC	83	21	391	0.213	83	0.3	0.3	11.697	B
C-ABD	87	22	493	0.177	87	0.2	0.2	8.877	A
C-D	22	5			22				
C-A	302	75			302				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	245	61	445	0.550	249	2.5	1.3	18.874	C
A-BCD	14	4	498	0.028	14	0.0	0.0	7.445	A
A-B	111	28			111				
A-C	266	67			266				
D-ABC	68	17	424	0.161	68	0.3	0.2	10.135	B
C-ABD	69	17	503	0.138	70	0.2	0.2	8.322	A
C-D	18	4			18				
C-A	248	62			248				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	205	51	467	0.439	207	1.3	0.8	13.949	B
A-BCD	12	3	513	0.023	12	0.0	0.0	7.186	A
A-B	93	23			93				
A-C	223	56			223				
D-ABC	57	14	448	0.127	57	0.2	0.1	9.218	A
C-ABD	57	14	512	0.112	58	0.2	0.1	7.921	A
C-D	15	4			15				
C-A	208	52			208				

A1094 / B1069 (Church Road) - 2023 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		7.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	494	100.000
B - B1069 - Church Road		ONE HOUR	✓	263	100.000
C - A1094 West		ONE HOUR	✓	337	100.000
D - Unnamed Road North		ONE HOUR	✓	65	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	139	341	14
	B - B1069 - Church Road	115	0	96	52
	C - A1094 West	271	53	0	13
	D - Unnamed Road North	7	50	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	3	3	0
	B - B1069 - Church Road	3	0	1	0
	C - A1094 West	4	4	0	0
	D - Unnamed Road North	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.70	28.07	2.2	D	242	362
A-BCD	0.03	7.71	0.0	A	13	20
A-B					128	191
A-C					313	469
D-ABC	0.19	12.13	0.2	B	59	89
C-ABD	0.13	9.00	0.2	A	50	75
C-D					12	18
C-A					248	371

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	198	50	471	0.421	195	0.0	0.7	12.931	B

A-BCD	11	3	517	0.021	11	0.0	0.0	7.108	A
A-B	105	26			105				
A-C	257	64			257				
D-ABC	49	12	428	0.114	48	0.0	0.1	9.471	A
C-ABD	40	10	489	0.083	40	0.0	0.1	8.004	A
C-D	10	3			10				
C-A	204	51			204				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	237	59	448	0.528	235	0.7	1.1	16.763	C
A-BCD	13	3	503	0.026	13	0.0	0.0	7.348	A
A-B	125	31			125				
A-C	307	77			307				
D-ABC	58	15	403	0.144	58	0.1	0.2	10.435	B
C-ABD	49	12	476	0.102	49	0.1	0.1	8.414	A
C-D	12	3			12				
C-A	243	61			243				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	290	72	417	0.695	286	1.1	2.1	26.648	D
A-BCD	16	4	483	0.033	16	0.0	0.0	7.701	A
A-B	153	38			153				
A-C	375	94			375				
D-ABC	71	18	368	0.193	71	0.2	0.2	12.088	B
C-ABD	61	15	461	0.131	60	0.1	0.2	8.989	A
C-D	15	4			15				
C-A	296	74			296				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	290	72	417	0.695	290	2.1	2.2	28.072	D
A-BCD	16	4	483	0.033	16	0.0	0.0	7.710	A
A-B	153	38			153				
A-C	375	94			375				
D-ABC	71	18	368	0.193	71	0.2	0.2	12.129	B
C-ABD	61	15	461	0.131	61	0.2	0.2	8.997	A
C-D	15	4			15				
C-A	296	74			296				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	237	59	448	0.528	241	2.2	1.2	17.664	C
A-BCD	13	3	502	0.026	13	0.0	0.0	7.363	A
A-B	125	31			125				
A-C	307	77			307				
D-ABC	58	15	402	0.144	58	0.2	0.2	10.484	B
C-ABD	49	12	476	0.102	49	0.2	0.1	8.426	A
C-D	12	3			12				
C-A	243	61			243				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	198	50	471	0.421	200	1.2	0.7	13.365	B
A-BCD	11	3	517	0.021	11	0.0	0.0	7.120	A
A-B	105	26			105				
A-C	257	64			257				
D-ABC	49	12	427	0.114	49	0.2	0.1	9.518	A
C-ABD	40	10	489	0.083	40	0.1	0.1	8.028	A
C-D	10	3			10				
C-A	204	51			204				

A1094 / B1069 (Church Road) - 2023 Early Years , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		3.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	173	100.000
B - B1069 - Church Road		ONE HOUR	✓	134	100.000
C - A1094 West		ONE HOUR	✓	271	100.000
D - Unnamed Road North		ONE HOUR	✓	10	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	45	125	3
	B - B1069 - Church Road	101	0	22	11
	C - A1094 West	257	11	0	3
	D - Unnamed Road North	4	3	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	2	0
	B - B1069 - Church Road	5	0	9	10
	C - A1094 West	3	9	0	33
	D - Unnamed Road North	0	0	50	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.32	11.64	0.5	B	123	185
A-BCD	0.01	7.23	0.0	A	3	5
A-B					41	62
A-C					115	172
D-ABC	0.03	8.73	0.0	A	9	14
C-ABD	0.02	7.33	0.0	A	10	15
C-D					3	5
C-A					236	354

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	101	25	482	0.210	100	0.0	0.3	9.406	A

A-BCD	3	0.63	530	0.005	2	0.0	0.0	6.829	A
A-B	34	8			34				
A-C	94	24			94				
D-ABC	8	2	457	0.016	7	0.0	0.0	8.008	A
C-ABD	8	2	515	0.016	8	0.0	0.0	7.109	A
C-D	3	0.63			3				
C-A	193	48			193				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	121	30	471	0.256	120	0.3	0.3	10.246	B
A-BCD	3	0.75	518	0.006	3	0.0	0.0	6.992	A
A-B	40	10			40				
A-C	112	28			112				
D-ABC	9	2	443	0.020	9	0.0	0.0	8.297	A
C-ABD	10	2	510	0.019	10	0.0	0.0	7.199	A
C-D	3	0.75			3				
C-A	231	58			231				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	148	37	457	0.323	147	0.3	0.5	11.600	B
A-BCD	4	0.92	502	0.007	4	0.0	0.0	7.227	A
A-B	50	12			50				
A-C	138	34			138				
D-ABC	11	3	423	0.026	11	0.0	0.0	8.727	A
C-ABD	12	3	504	0.024	12	0.0	0.0	7.325	A
C-D	4	1			4				
C-A	283	71			283				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	148	37	457	0.323	148	0.5	0.5	11.637	B
A-BCD	4	0.92	502	0.007	4	0.0	0.0	7.229	A
A-B	50	12			50				
A-C	138	34			138				
D-ABC	11	3	423	0.026	11	0.0	0.0	8.729	A
C-ABD	12	3	503	0.024	12	0.0	0.0	7.325	A
C-D	4	1			4				
C-A	283	71			283				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	121	30	471	0.256	121	0.5	0.3	10.296	B
A-BCD	3	0.75	518	0.006	3	0.0	0.0	6.994	A
A-B	40	10			40				
A-C	112	28			112				
D-ABC	9	2	443	0.020	9	0.0	0.0	8.301	A
C-ABD	10	2	510	0.019	10	0.0	0.0	7.200	A
C-D	3	0.75			3				
C-A	231	58			231				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	101	25	482	0.210	101	0.3	0.3	9.473	A
A-BCD	3	0.63	529	0.005	3	0.0	0.0	6.832	A
A-B	34	8			34				
A-C	94	24			94				
D-ABC	8	2	457	0.016	8	0.0	0.0	8.016	A
C-ABD	8	2	515	0.016	8	0.0	0.0	7.110	A
C-D	3	0.63			3				
C-A	193	48			193				

A1094 / B1069 (Church Road) - 2023 Early Years , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		4.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	386	100.000
B - B1069 - Church Road		ONE HOUR	✓	214	100.000
C - A1094 West		ONE HOUR	✓	419	100.000
D - Unnamed Road North		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	116	266	4
	B - B1069 - Church Road	101	0	87	26
	C - A1094 West	362	55	0	2
	D - Unnamed Road North	9	34	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	5	5	0
	B - B1069 - Church Road	6	0	2	0
	C - A1094 West	7	7	0	0
	D - Unnamed Road North	13	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.55	18.93	1.2	C	196	294
A-BCD	0.01	7.73	0.0	A	4	6
A-B					106	160
A-C					244	366
D-ABC	0.15	11.41	0.2	B	46	69
C-ABD	0.13	8.70	0.2	A	52	78
C-D					2	3
C-A					330	496

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	161	40	475	0.339	159	0.0	0.5	11.326	B

A-BCD	3	0.84	509	0.007	3	0.0	0.0	7.122	A
A-B	87	22			87				
A-C	200	50			200				
D-ABC	38	9	429	0.088	37	0.0	0.1	9.191	A
C-ABD	42	11	493	0.086	42	0.0	0.1	7.977	A
C-D	2	0.42			2				
C-A	272	68			272				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	192	48	454	0.423	191	0.5	0.7	13.653	B
A-BCD	4	1.00	493	0.008	4	0.0	0.0	7.364	A
A-B	104	26			104				
A-C	239	60			239				
D-ABC	45	11	404	0.111	45	0.1	0.1	10.011	B
C-ABD	51	13	485	0.105	51	0.1	0.1	8.286	A
C-D	2	0.50			2				
C-A	324	81			324				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	235	59	425	0.553	233	0.7	1.2	18.583	C
A-BCD	5	1	471	0.010	5	0.0	0.0	7.723	A
A-B	128	32			128				
A-C	293	73			293				
D-ABC	55	14	371	0.148	55	0.1	0.2	11.390	B
C-ABD	64	16	478	0.133	64	0.1	0.2	8.692	A
C-D	2	0.61			2				
C-A	395	99			395				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	235	59	425	0.553	235	1.2	1.2	18.927	C
A-BCD	5	1	471	0.010	5	0.0	0.0	7.727	A
A-B	128	32			128				
A-C	293	73			293				
D-ABC	55	14	370	0.149	55	0.2	0.2	11.412	B
C-ABD	64	16	478	0.134	64	0.2	0.2	8.699	A
C-D	2	0.61			2				
C-A	395	99			395				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	192	48	454	0.423	194	1.2	0.8	13.941	B
A-BCD	4	1.00	492	0.008	4	0.0	0.0	7.370	A
A-B	104	26			104				
A-C	239	60			239				
D-ABC	45	11	404	0.111	45	0.2	0.1	10.040	B
C-ABD	51	13	485	0.105	51	0.2	0.1	8.298	A
C-D	2	0.50			2				
C-A	324	81			324				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	161	40	475	0.339	162	0.8	0.5	11.541	B
A-BCD	3	0.84	508	0.007	3	0.0	0.0	7.131	A
A-B	87	22			87				
A-C	200	50			200				
D-ABC	38	9	428	0.088	38	0.1	0.1	9.223	A
C-ABD	42	11	493	0.086	42	0.1	0.1	7.996	A
C-D	2	0.42			2				
C-A	272	68			272				

A1094 / B1069 (Church Road) - 2023 Early Years , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		7.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	324	100.000
B - B1069 - Church Road		ONE HOUR	✓	243	100.000
C - A1094 West		ONE HOUR	✓	432	100.000
D - Unnamed Road North		ONE HOUR	✓	64	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	83	223	18
	B - B1069 - Church Road	116	0	73	54
	C - A1094 West	351	69	0	12
	D - Unnamed Road North	8	46	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	7	13
	B - B1069 - Church Road	3	0	10	2
	C - A1094 West	6	9	0	0
	D - Unnamed Road North	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.65	24.74	1.8	C	223	335
A-BCD	0.05	9.19	0.0	A	16	24
A-B					76	114
A-C					205	307
D-ABC	0.19	12.25	0.2	B	59	89
C-ABD	0.17	8.74	0.2	A	66	100
C-D					11	17
C-A					319	479

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	183	46	461	0.398	181	0.0	0.6	12.734	B

A-BCD	13	3	447	0.030	13	0.0	0.0	8.292	A
A-B	62	16			62				
A-C	168	42			168				
D-ABC	48	12	423	0.115	48	0.0	0.1	9.590	A
C-ABD	53	13	499	0.107	53	0.0	0.1	8.065	A
C-D	9	2			9				
C-A	263	66			263				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	219	55	441	0.496	218	0.6	1.0	16.037	C
A-BCD	16	4	432	0.037	16	0.0	0.0	8.650	A
A-B	75	19			75				
A-C	200	50			200				
D-ABC	58	14	399	0.145	58	0.1	0.2	10.559	B
C-ABD	65	16	495	0.130	64	0.1	0.2	8.360	A
C-D	11	3			11				
C-A	313	78			313				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	268	67	413	0.649	265	1.0	1.7	23.843	C
A-BCD	20	5	412	0.048	20	0.0	0.0	9.182	A
A-B	91	23			91				
A-C	246	61			246				
D-ABC	71	18	365	0.194	71	0.2	0.2	12.214	B
C-ABD	81	20	494	0.165	81	0.2	0.2	8.727	A
C-D	13	3			13				
C-A	381	95			381				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	268	67	413	0.649	268	1.7	1.8	24.740	C
A-BCD	20	5	411	0.048	20	0.0	0.0	9.193	A
A-B	91	23			91				
A-C	246	61			246				
D-ABC	71	18	365	0.194	71	0.2	0.2	12.254	B
C-ABD	81	20	494	0.165	81	0.2	0.2	8.738	A
C-D	13	3			13				
C-A	381	95			381				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	219	55	441	0.497	222	1.8	1.0	16.679	C
A-BCD	16	4	432	0.037	16	0.0	0.0	8.666	A
A-B	75	19			75				
A-C	200	50			200				
D-ABC	58	14	398	0.146	58	0.2	0.2	10.604	B
C-ABD	65	16	495	0.131	65	0.2	0.2	8.376	A
C-D	11	3			11				
C-A	313	78			313				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	183	46	461	0.398	185	1.0	0.7	13.106	B
A-BCD	13	3	447	0.030	13	0.0	0.0	8.307	A
A-B	62	16			62				
A-C	168	42			168				
D-ABC	48	12	422	0.115	49	0.2	0.1	9.640	A
C-ABD	53	13	499	0.107	53	0.2	0.1	8.090	A
C-D	9	2			9				
C-A	263	66			263				

A1094 / B1069 (Church Road) - 2023 Early Years , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		8.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	451	100.000
B - B1069 - Church Road		ONE HOUR	✓	271	100.000
C - A1094 West		ONE HOUR	✓	374	100.000
D - Unnamed Road North		ONE HOUR	✓	76	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	131	304	16
	B - B1069 - Church Road	115	0	96	60
	C - A1094 West	279	75	0	20
	D - Unnamed Road North	18	42	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	6	0
	B - B1069 - Church Road	3	0	3	2
	C - A1094 West	4	1	0	6
	D - Unnamed Road North	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.73	31.75	2.5	D	249	373
A-BCD	0.04	7.83	0.0	A	14	21
A-B					120	180
A-C					279	418
D-ABC	0.21	11.80	0.3	B	69	104
C-ABD	0.18	8.95	0.2	A	71	107
C-D					18	27
C-A					254	380

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	204	51	464	0.439	201	0.0	0.8	13.519	B

A-BCD	12	3	513	0.023	12	0.0	0.0	7.174	A
A-B	99	25			99				
A-C	229	57			229				
D-ABC	57	14	447	0.127	56	0.0	0.1	9.207	A
C-ABD	57	14	510	0.113	57	0.0	0.1	7.939	A
C-D	15	4			15				
C-A	209	52			209				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	244	61	442	0.552	242	0.8	1.2	17.869	C
A-BCD	14	4	498	0.028	14	0.0	0.0	7.433	A
A-B	118	29			118				
A-C	273	68			273				
D-ABC	68	17	423	0.161	68	0.1	0.2	10.142	B
C-ABD	69	17	500	0.139	69	0.1	0.2	8.359	A
C-D	18	4			18				
C-A	249	62			249				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	298	75	410	0.728	294	1.2	2.4	29.674	D
A-BCD	17	4	478	0.036	17	0.0	0.0	7.816	A
A-B	144	36			144				
A-C	335	84			335				
D-ABC	83	21	389	0.214	83	0.2	0.3	11.749	B
C-ABD	87	22	489	0.178	87	0.2	0.2	8.941	A
C-D	22	5			22				
C-A	303	76			303				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	298	75	410	0.728	298	2.4	2.5	31.748	D
A-BCD	17	4	477	0.036	17	0.0	0.0	7.828	A
A-B	144	36			144				
A-C	335	84			335				
D-ABC	83	21	388	0.214	83	0.3	0.3	11.795	B
C-ABD	87	22	489	0.178	87	0.2	0.2	8.954	A
C-D	22	5			22				
C-A	303	76			303				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	244	61	442	0.552	249	2.5	1.3	19.102	C
A-BCD	14	4	497	0.028	14	0.0	0.0	7.448	A
A-B	118	29			118				
A-C	273	68			273				
D-ABC	68	17	422	0.161	68	0.3	0.2	10.195	B
C-ABD	69	17	500	0.139	70	0.2	0.2	8.377	A
C-D	18	4			18				
C-A	249	62			249				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	204	51	464	0.440	206	1.3	0.8	14.048	B
A-BCD	12	3	513	0.023	12	0.0	0.0	7.185	A
A-B	99	25			99				
A-C	229	57			229				
D-ABC	57	14	446	0.128	57	0.2	0.1	9.258	A
C-ABD	57	14	510	0.113	58	0.2	0.1	7.965	A
C-D	15	4			15				
C-A	209	52			209				

A1094 / B1069 (Church Road) - 2023 Early Years , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		8.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	551	100.000
B - B1069 - Church Road		ONE HOUR	✓	271	100.000
C - A1094 West		ONE HOUR	✓	371	100.000
D - Unnamed Road North		ONE HOUR	✓	65	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	181	356	14
	B - B1069 - Church Road	116	0	103	52
	C - A1094 West	281	77	0	13
	D - Unnamed Road North	7	50	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	3	0
	B - B1069 - Church Road	3	0	1	0
	C - A1094 West	4	3	0	0
	D - Unnamed Road North	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.74	34.02	2.7	D	249	373
A-BCD	0.03	7.76	0.0	A	13	20
A-B					166	249
A-C					327	490
D-ABC	0.20	12.62	0.2	B	59	89
C-ABD	0.19	9.60	0.3	A	74	111
C-D					12	18
C-A					255	382

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	204	51	462	0.442	201	0.0	0.8	13.624	B

A-BCD	11	3	516	0.021	11	0.0	0.0	7.132	A
A-B	136	34			136				
A-C	268	67			268				
D-ABC	49	12	420	0.116	48	0.0	0.1	9.664	A
C-ABD	59	15	490	0.121	59	0.0	0.1	8.334	A
C-D	10	2			10				
C-A	210	53			210				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	244	61	437	0.558	242	0.8	1.2	18.262	C
A-BCD	13	3	501	0.026	13	0.0	0.0	7.379	A
A-B	163	41			163				
A-C	320	80			320				
D-ABC	58	15	393	0.147	58	0.1	0.2	10.721	B
C-ABD	72	18	478	0.150	72	0.1	0.2	8.851	A
C-D	12	3			12				
C-A	250	63			250				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	299	75	403	0.742	293	1.2	2.5	31.485	D
A-BCD	16	4	481	0.033	16	0.0	0.0	7.743	A
A-B	199	50			199				
A-C	392	98			392				
D-ABC	71	18	357	0.199	71	0.2	0.2	12.569	B
C-ABD	91	23	466	0.194	90	0.2	0.3	9.579	A
C-D	14	4			14				
C-A	304	76			304				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	299	75	402	0.742	298	2.5	2.7	34.025	D
A-BCD	16	4	480	0.033	16	0.0	0.0	7.755	A
A-B	199	50			199				
A-C	392	98			392				
D-ABC	71	18	356	0.199	71	0.2	0.2	12.622	B
C-ABD	91	23	466	0.194	91	0.3	0.3	9.596	A
C-D	14	4			14				
C-A	304	76			304				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	244	61	437	0.558	249	2.7	1.3	19.678	C
A-BCD	13	3	500	0.026	13	0.0	0.0	7.395	A
A-B	163	41			163				
A-C	320	80			320				
D-ABC	58	15	393	0.148	58	0.2	0.2	10.782	B
C-ABD	72	18	478	0.150	72	0.3	0.2	8.872	A
C-D	12	3			12				
C-A	250	63			250				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	204	51	462	0.442	206	1.3	0.8	14.173	B
A-BCD	11	3	515	0.021	11	0.0	0.0	7.145	A
A-B	136	34			136				
A-C	268	67			268				
D-ABC	49	12	419	0.116	49	0.2	0.1	9.718	A
C-ABD	59	15	490	0.121	59	0.2	0.1	8.364	A
C-D	10	2			10				
C-A	210	53			210				

A1094 / B1069 (Church Road) - 2028 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		3.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	170	100.000
B - B1069 - Church Road		ONE HOUR	✓	128	100.000
C - A1094 West		ONE HOUR	✓	219	100.000
D - Unnamed Road North		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	44	122	4
	B - B1069 - Church Road	95	0	21	12
	C - A1094 West	203	12	0	4
	D - Unnamed Road North	5	4	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	2	0
	B - B1069 - Church Road	5	0	10	10
	C - A1094 West	6	8	0	33
	D - Unnamed Road North	0	0	50	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.30	11.18	0.4	B	117	176
A-BCD	0.01	7.06	0.0	A	3	5
A-B					40	61
A-C					112	168
D-ABC	0.03	8.48	0.0	A	10	14
C-ABD	0.03	7.28	0.0	A	11	17
C-D					3	5
C-A					186	279

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	96	24	485	0.198	95	0.0	0.2	9.214	A

A-BCD	3	0.66	538	0.005	3	0.0	0.0	6.723	A
A-B	33	8			33				
A-C	92	23			92				
D-ABC	8	2	466	0.017	8	0.0	0.0	7.862	A
C-ABD	9	2	518	0.017	9	0.0	0.0	7.066	A
C-D	3	0.66			3				
C-A	153	38			153				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	115	29	475	0.241	114	0.2	0.3	9.963	A
A-BCD	3	0.79	528	0.006	3	0.0	0.0	6.860	A
A-B	40	10			40				
A-C	110	27			110				
D-ABC	9	2	453	0.021	9	0.0	0.0	8.110	A
C-ABD	11	3	514	0.021	11	0.0	0.0	7.157	A
C-D	3	1			3				
C-A	182	46			182				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	141	35	463	0.304	140	0.3	0.4	11.148	B
A-BCD	4	0.96	514	0.008	4	0.0	0.0	7.056	A
A-B	48	12			48				
A-C	134	34			134				
D-ABC	12	3	436	0.027	12	0.0	0.0	8.475	A
C-ABD	13	3	507	0.026	13	0.0	0.0	7.285	A
C-D	4	1			4				
C-A	223	56			223				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	141	35	463	0.304	141	0.4	0.4	11.181	B
A-BCD	4	0.96	514	0.008	4	0.0	0.0	7.057	A
A-B	48	12			48				
A-C	134	34			134				
D-ABC	12	3	436	0.027	12	0.0	0.0	8.476	A
C-ABD	13	3	507	0.026	13	0.0	0.0	7.285	A
C-D	4	1			4				
C-A	223	56			223				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	115	29	475	0.241	115	0.4	0.3	10.006	B
A-BCD	3	0.79	528	0.006	3	0.0	0.0	6.865	A
A-B	40	10			40				
A-C	110	27			110				
D-ABC	9	2	453	0.021	9	0.0	0.0	8.115	A
C-ABD	11	3	514	0.021	11	0.0	0.0	7.158	A
C-D	3	1			3				
C-A	182	46			182				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	96	24	485	0.198	96	0.3	0.3	9.276	A
A-BCD	3	0.66	538	0.005	3	0.0	0.0	6.726	A
A-B	33	8			33				
A-C	92	23			92				
D-ABC	8	2	465	0.017	8	0.0	0.0	7.870	A
C-ABD	9	2	518	0.017	9	0.0	0.0	7.069	A
C-D	3	0.66			3				
C-A	153	38			153				

A1094 / B1069 (Church Road) - 2028 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		3.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	372	100.000
B - B1069 - Church Road		ONE HOUR	✓	171	100.000
C - A1094 West		ONE HOUR	✓	371	100.000
D - Unnamed Road North		ONE HOUR	✓	53	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	113	254	5
	B - B1069 - Church Road	92	0	52	27
	C - A1094 West	309	60	0	2
	D - Unnamed Road North	9	36	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	5	1	0
	B - B1069 - Church Road	7	0	4	0
	C - A1094 West	8	7	0	0
	D - Unnamed Road North	13	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.45	15.90	0.8	C	157	235
A-BCD	0.01	7.50	0.0	A	4	6
A-B					104	156
A-C					233	350
D-ABC	0.15	10.85	0.2	B	48	72
C-ABD	0.14	8.69	0.2	A	57	85
C-D					2	3
C-A					282	423

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	129	32	461	0.279	127	0.0	0.4	10.734	B

A-BCD	4	0.88	518	0.007	3	0.0	0.0	6.993	A
A-B	85	21			85				
A-C	191	48			191				
D-ABC	40	10	441	0.090	39	0.0	0.1	8.941	A
C-ABD	46	11	498	0.092	46	0.0	0.1	7.944	A
C-D	2	0.44			2				
C-A	232	58			232				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	154	38	441	0.348	153	0.4	0.5	12.455	B
A-BCD	4	1	504	0.008	4	0.0	0.0	7.199	A
A-B	102	25			102				
A-C	228	57			228				
D-ABC	47	12	420	0.112	47	0.1	0.1	9.659	A
C-ABD	55	14	491	0.113	55	0.1	0.1	8.262	A
C-D	2	0.52			2				
C-A	276	69			276				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	188	47	414	0.454	187	0.5	0.8	15.755	C
A-BCD	5	1	485	0.011	5	0.0	0.0	7.501	A
A-B	124	31			124				
A-C	280	70			280				
D-ABC	58	14	390	0.148	58	0.1	0.2	10.837	B
C-ABD	69	17	483	0.143	69	0.1	0.2	8.685	A
C-D	3	0.64			3				
C-A	337	84			337				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	188	47	414	0.454	188	0.8	0.8	15.902	C
A-BCD	5	1	485	0.011	5	0.0	0.0	7.504	A
A-B	124	31			124				
A-C	280	70			280				
D-ABC	58	14	389	0.148	58	0.2	0.2	10.853	B
C-ABD	69	17	483	0.143	69	0.2	0.2	8.691	A
C-D	3	0.64			3				
C-A	337	84			337				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	154	38	441	0.348	155	0.8	0.5	12.607	B
A-BCD	4	1	504	0.008	4	0.0	0.0	7.206	A
A-B	102	25			102				
A-C	228	57			228				
D-ABC	47	12	419	0.113	47	0.2	0.1	9.683	A
C-ABD	55	14	491	0.113	56	0.2	0.1	8.273	A
C-D	2	0.52			2				
C-A	276	69			276				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	129	32	461	0.279	129	0.5	0.4	10.876	B
A-BCD	4	0.88	518	0.007	4	0.0	0.0	7.000	A
A-B	85	21			85				
A-C	191	48			191				
D-ABC	40	10	441	0.090	40	0.1	0.1	8.969	A
C-ABD	46	11	498	0.092	46	0.1	0.1	7.965	A
C-D	2	0.44			2				
C-A	232	58			232				

A1094 / B1069 (Church Road) - 2028 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		7.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	307	100.000
B - B1069 - Church Road		ONE HOUR	✓	249	100.000
C - A1094 West		ONE HOUR	✓	449	100.000
D - Unnamed Road North		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	83	205	19
	B - B1069 - Church Road	121	0	71	57
	C - A1094 West	360	76	0	13
	D - Unnamed Road North	8	48	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	3	13
	B - B1069 - Church Road	2	0	10	2
	C - A1094 West	3	8	0	0
	D - Unnamed Road North	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.66	25.43	1.9	D	229	343
A-BCD	0.05	9.25	0.1	A	17	26
A-B					76	114
A-C					188	262
D-ABC	0.20	12.31	0.3	B	62	93
C-ABD	0.18	8.65	0.2	A	74	110
C-D					12	17
C-A					327	490

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	188	47	462	0.406	185	0.0	0.7	12.875	B

A-BCD	14	4	446	0.032	14	0.0	0.0	8.323	A
A-B	62	16			62				
A-C	154	39			154				
D-ABC	51	13	425	0.120	50	0.0	0.1	9.609	A
C-ABD	59	15	508	0.116	58	0.0	0.1	8.005	A
C-D	10	2			10				
C-A	269	67			269				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	224	56	442	0.506	223	0.7	1.0	16.290	C
A-BCD	17	4	431	0.039	17	0.0	0.0	8.693	A
A-B	75	19			75				
A-C	184	46			184				
D-ABC	61	15	400	0.152	61	0.1	0.2	10.588	B
C-ABD	71	18	506	0.141	71	0.1	0.2	8.293	A
C-D	11	3			11				
C-A	321	80			321				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	274	69	415	0.661	271	1.0	1.8	24.435	C
A-BCD	21	5	410	0.050	21	0.0	0.1	9.241	A
A-B	91	23			91				
A-C	226	56			226				
D-ABC	75	19	367	0.203	74	0.2	0.3	12.262	B
C-ABD	90	23	507	0.178	90	0.2	0.2	8.643	A
C-D	14	3			14				
C-A	390	97			390				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	274	69	415	0.661	274	1.8	1.9	25.430	D
A-BCD	21	5	410	0.050	21	0.1	0.1	9.253	A
A-B	91	23			91				
A-C	226	56			226				
D-ABC	75	19	367	0.203	75	0.3	0.3	12.306	B
C-ABD	90	23	506	0.178	90	0.2	0.2	8.653	A
C-D	14	3			14				
C-A	390	97			390				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	224	56	442	0.507	227	1.9	1.1	16.993	C
A-BCD	17	4	430	0.039	17	0.1	0.0	8.710	A
A-B	75	19			75				
A-C	184	46			184				
D-ABC	61	15	400	0.152	61	0.3	0.2	10.640	B
C-ABD	71	18	505	0.142	72	0.2	0.2	8.309	A
C-D	11	3			11				
C-A	321	80			321				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	188	47	462	0.406	189	1.1	0.7	13.271	B
A-BCD	14	4	446	0.032	14	0.0	0.0	8.341	A
A-B	62	16			62				
A-C	154	39			154				
D-ABC	51	13	424	0.120	51	0.2	0.1	9.661	A
C-ABD	59	15	507	0.116	59	0.2	0.1	8.032	A
C-D	10	2			10				
C-A	269	67			269				

A1094 / B1069 (Church Road) - 2028 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		9.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	447	100.000
B - B1069 - Church Road		ONE HOUR	✓	280	100.000
C - A1094 West		ONE HOUR	✓	376	100.000
D - Unnamed Road North		ONE HOUR	✓	80	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	128	303	16
	B - B1069 - Church Road	119	0	98	63
	C - A1094 West	278	77	0	21
	D - Unnamed Road North	19	45	16	0
	Total	416	250	417	100

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	5	0
	B - B1069 - Church Road	3	0	3	2
	C - A1094 West	2	1	0	6
	D - Unnamed Road North	0	0	0	0
	Total	5	3	8	8

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.75	34.59	2.8	D	257	386
A-BCD	0.04	7.85	0.0	A	15	23
A-B					117	176
A-C					278	417
D-ABC	0.23	11.94	0.3	B	73	110
C-ABD	0.18	8.97	0.2	A	73	110
C-D					19	29
C-A					253	379

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	211	53	465	0.454	208	0.0	0.8	13.853	B

A-BCD	12	3	513	0.024	12	0.0	0.0	7.186	A
A-B	96	24			96				
A-C	228	57			228				
D-ABC	60	15	447	0.134	59	0.0	0.2	9.275	A
C-ABD	59	15	511	0.116	59	0.0	0.1	7.949	A
C-D	16	4			16				
C-A	208	52			208				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	252	63	442	0.570	250	0.8	1.3	18.580	C
A-BCD	15	4	498	0.030	15	0.0	0.0	7.448	A
A-B	115	29			115				
A-C	272	68			272				
D-ABC	72	18	423	0.169	71	0.2	0.2	10.224	B
C-ABD	71	18	501	0.142	71	0.1	0.2	8.372	A
C-D	19	5			19				
C-A	248	62			248				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	309	77	410	0.752	303	1.3	2.7	31.891	D
A-BCD	18	5	477	0.038	18	0.0	0.0	7.837	A
A-B	141	35			141				
A-C	334	83			334				
D-ABC	88	22	390	0.225	87	0.2	0.3	11.882	B
C-ABD	90	22	491	0.183	89	0.2	0.2	8.957	A
C-D	23	6			23				
C-A	302	75			302				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	309	77	410	0.752	308	2.7	2.8	34.593	D
A-BCD	18	5	477	0.038	18	0.0	0.0	7.851	A
A-B	141	35			141				
A-C	334	83			334				
D-ABC	88	22	389	0.225	88	0.3	0.3	11.935	B
C-ABD	90	22	491	0.183	90	0.2	0.2	8.969	A
C-D	23	6			23				
C-A	302	75			302				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	252	63	442	0.570	258	2.8	1.4	20.115	C
A-BCD	15	4	497	0.030	15	0.0	0.0	7.466	A
A-B	115	29			115				
A-C	272	68			272				
D-ABC	72	18	422	0.170	72	0.3	0.2	10.283	B
C-ABD	71	18	501	0.142	72	0.2	0.2	8.389	A
C-D	19	5			19				
C-A	248	62			248				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	211	53	464	0.454	213	1.4	0.9	14.452	B
A-BCD	12	3	512	0.024	12	0.0	0.0	7.198	A
A-B	96	24			96				
A-C	228	57			228				
D-ABC	60	15	447	0.134	60	0.2	0.2	9.315	A
C-ABD	59	15	511	0.116	59	0.2	0.1	7.976	A
C-D	16	4			16				
C-A	208	52			208				

A1094 / B1069 (Church Road) - 2028 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		8.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	503	100.000
B - B1069 - Church Road		ONE HOUR	✓	284	100.000
C - A1094 West		ONE HOUR	✓	343	100.000
D - Unnamed Road North		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	143	345	15
	B - B1069 - Church Road	117	0	112	55
	C - A1094 West	270	59	0	14
	D - Unnamed Road North	7	53	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	3	1	0
	B - B1069 - Church Road	3	0	1	0
	C - A1094 West	1	3	0	0
	D - Unnamed Road North	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.74	32.32	2.7	D	261	391
A-BCD	0.03	7.71	0.0	A	14	21
A-B					131	197
A-C					317	475
D-ABC	0.20	12.24	0.3	B	62	93
C-ABD	0.15	9.08	0.2	A	56	84
C-D					13	19
C-A					246	369

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	214	53	476	0.449	211	0.0	0.8	13.398	B

A-BCD	11	3	518	0.022	11	0.0	0.0	7.109	A
A-B	108	27			108				
A-C	260	65			260				
D-ABC	51	13	428	0.119	51	0.0	0.1	9.513	A
C-ABD	45	11	491	0.092	45	0.0	0.1	8.052	A
C-D	11	3			11				
C-A	203	51			203				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	255	64	454	0.563	254	0.8	1.2	17.822	C
A-BCD	14	3	503	0.027	14	0.0	0.0	7.348	A
A-B	129	32			129				
A-C	310	78			310				
D-ABC	61	15	404	0.151	61	0.1	0.2	10.498	B
C-ABD	54	14	479	0.113	54	0.1	0.1	8.475	A
C-D	13	3			13				
C-A	242	60			242				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	313	78	422	0.741	307	1.2	2.5	30.045	D
A-BCD	17	4	484	0.035	17	0.0	0.0	7.703	A
A-B	157	39			157				
A-C	380	95			380				
D-ABC	75	19	369	0.202	74	0.2	0.2	12.192	B
C-ABD	68	17	464	0.146	68	0.1	0.2	9.072	A
C-D	15	4			15				
C-A	295	74			295				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	313	78	422	0.741	312	2.5	2.7	32.321	D
A-BCD	17	4	483	0.035	17	0.0	0.0	7.714	A
A-B	157	39			157				
A-C	380	95			380				
D-ABC	75	19	369	0.203	75	0.2	0.3	12.242	B
C-ABD	68	17	464	0.146	68	0.2	0.2	9.083	A
C-D	15	4			15				
C-A	295	74			295				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	255	64	454	0.563	261	2.7	1.3	19.140	C
A-BCD	14	3	503	0.027	14	0.0	0.0	7.364	A
A-B	129	32			129				
A-C	310	78			310				
D-ABC	61	15	403	0.152	61	0.3	0.2	10.553	B
C-ABD	54	14	479	0.113	54	0.2	0.1	8.488	A
C-D	13	3			13				
C-A	242	60			242				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	214	53	476	0.449	216	1.3	0.8	13.938	B
A-BCD	11	3	517	0.022	11	0.0	0.0	7.119	A
A-B	108	27			108				
A-C	260	65			260				
D-ABC	51	13	428	0.120	51	0.2	0.1	9.567	A
C-ABD	45	11	491	0.092	45	0.1	0.1	8.075	A
C-D	11	3			11				
C-A	203	51			203				

A1094 / B1069 (Church Road) - 2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		4.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	176	100.000
B - B1069 - Church Road		ONE HOUR	✓	185	100.000
C - A1094 West		ONE HOUR	✓	219	100.000
D - Unnamed Road North		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	49	123	4
	B - B1069 - Church Road	152	0	21	12
	C - A1094 West	203	12	0	4
	D - Unnamed Road North	5	4	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	2	0
	B - B1069 - Church Road	3	0	10	10
	C - A1094 West	3	8	0	33
	D - Unnamed Road North	0	0	50	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.44	13.79	0.8	B	169	254
A-BCD	0.01	7.23	0.0	A	3	5
A-B					45	67
A-C					113	169
D-ABC	0.03	8.74	0.0	A	10	14
C-ABD	0.03	7.30	0.0	A	11	17
C-D					3	5
C-A					186	279

Main Results for each time segment

05:45 - 06:00

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD						
A-BCD						
A-B						
A-C						
D-ABC						
C-ABD						
C-D						
C-A						

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	139	35	487	0.285	137	0.0	0.4	10.244	B
A-BCD	3	0.66	530	0.005	3	0.0	0.0	6.826	A
A-B	37	9			37				
A-C	93	23			93				
D-ABC	8	2	457	0.017	8	0.0	0.0	8.011	A
C-ABD	9	2	518	0.017	9	0.0	0.0	7.076	A
C-D	3	0.66			3				
C-A	153	38			153				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	166	42	478	0.348	165	0.4	0.5	11.512	B
A-BCD	3	0.79	518	0.006	3	0.0	0.0	6.990	A
A-B	44	11			44				
A-C	111	28			111				
D-ABC	9	2	443	0.021	9	0.0	0.0	8.302	A
C-ABD	11	3	513	0.021	11	0.0	0.0	7.169	A
C-D	3	1			3				
C-A	182	46			182				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	203	51	464	0.438	202	0.5	0.8	13.691	B
A-BCD	4	0.96	502	0.008	4	0.0	0.0	7.225	A
A-B	54	13			54				
A-C	135	34			135				
D-ABC	12	3	424	0.027	12	0.0	0.0	8.734	A
C-ABD	13	3	506	0.026	13	0.0	0.0	7.301	A
C-D	4	1			4				
C-A	223	56			223				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	203	51	464	0.438	203	0.8	0.8	13.786	B
A-BCD	4	0.96	502	0.008	4	0.0	0.0	7.228	A
A-B	54	13			54				
A-C	135	34			135				
D-ABC	12	3	424	0.027	12	0.0	0.0	8.738	A
C-ABD	13	3	506	0.026	13	0.0	0.0	7.301	A
C-D	4	1			4				
C-A	223	56			223				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	166	42	478	0.348	167	0.8	0.5	11.621	B
A-BCD	3	0.79	518	0.006	3	0.0	0.0	6.997	A
A-B	44	11			44				
A-C	111	28			111				
D-ABC	9	2	443	0.021	9	0.0	0.0	8.310	A
C-ABD	11	3	513	0.021	11	0.0	0.0	7.170	A
C-D	3	1			3				
C-A	182	46			182				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	139	35	487	0.285	140	0.5	0.4	10.369	B
A-BCD	3	0.66	530	0.005	3	0.0	0.0	6.834	A
A-B	37	9			37				
A-C	93	23			93				
D-ABC	8	2	457	0.017	8	0.0	0.0	8.021	A
C-ABD	9	2	518	0.017	9	0.0	0.0	7.076	A
C-D	3	0.66			3				
C-A	153	38			153				

A1094 / B1069 (Church Road) - 2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		7.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	390	100.000
B - B1069 - Church Road		ONE HOUR	✓	247	100.000
C - A1094 West		ONE HOUR	✓	376	100.000
D - Unnamed Road North		ONE HOUR	✓	53	100.000

Origin-Destination Data

Demand (Veh/hr)

	From	To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
	A - A1094 East	0	121	264	5
	B - B1069 - Church Road	152	0	68	27
	C - A1094 West	316	58	0	2
	D - Unnamed Road North	9	36	7	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
	A - A1094 East	0	5	4	0
	B - B1069 - Church Road	4	0	3	0
	C - A1094 West	8	7	0	0
	D - Unnamed Road North	13	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.66	26.02	1.9	D	227	340
A-BCD	0.01	7.76	0.0	A	4	6
A-B					111	167
A-C					242	363
D-ABC	0.16	11.60	0.2	B	48	72
C-ABD	0.14	8.79	0.2	A	55	82
C-D					2	3
C-A					288	432

Main Results for each time segment

06:45 - 07:00

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Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	186	46	459	0.405	183	0.0	0.7	12.944	B
A-BCD	4	0.88	508	0.007	3	0.0	0.0	7.139	A
A-B	91	23			91				
A-C	199	50			199				
D-ABC	40	10	427	0.092	39	0.0	0.1	9.262	A
C-ABD	44	11	493	0.090	44	0.0	0.1	8.008	A
C-D	2	0.44			2				
C-A	237	59			237				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	222	55	438	0.507	221	0.7	1.0	16.453	C
A-BCD	4	1	491	0.009	4	0.0	0.0	7.387	A
A-B	109	27			109				
A-C	237	59			237				
D-ABC	47	12	403	0.117	47	0.1	0.1	10.120	B
C-ABD	54	13	485	0.110	53	0.1	0.1	8.338	A
C-D	2	0.52			2				
C-A	283	71			283				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	272	68	409	0.664	268	1.0	1.8	24.967	C
A-BCD	5	1	469	0.011	5	0.0	0.0	7.755	A
A-B	133	33			133				
A-C	291	73			291				
D-ABC	58	14	369	0.157	58	0.1	0.2	11.566	B
C-ABD	67	17	477	0.141	67	0.1	0.2	8.781	A
C-D	3	0.64			3				
C-A	345	86			345				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	272	68	409	0.664	272	1.8	1.9	26.024	D
A-BCD	5	1	469	0.011	5	0.0	0.0	7.764	A
A-B	133	33			133				
A-C	291	73			291				
D-ABC	58	14	368	0.157	58	0.2	0.2	11.599	B
C-ABD	67	17	477	0.141	67	0.2	0.2	8.790	A
C-D	3	0.64			3				
C-A	345	86			345				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	222	55	438	0.507	225	1.9	1.1	17.184	C
A-BCD	4	1	491	0.009	4	0.0	0.0	7.399	A
A-B	109	27			109				
A-C	237	59			237				
D-ABC	47	12	402	0.117	47	0.2	0.1	10.161	B
C-ABD	54	13	485	0.110	54	0.2	0.1	8.351	A
C-D	2	0.52			2				
C-A	283	71			283				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	186	46	459	0.405	187	1.1	0.7	13.344	B
A-BCD	4	0.88	507	0.007	4	0.0	0.0	7.151	A
A-B	91	23			91				
A-C	199	50			199				
D-ABC	40	10	427	0.093	40	0.1	0.1	9.304	A
C-ABD	44	11	493	0.090	45	0.1	0.1	8.028	A
C-D	2	0.44			2				
C-A	237	59			237				

A1094 / B1069 (Church Road) - 2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		8.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	325	100.000
B - B1069 - Church Road		ONE HOUR	✓	261	100.000
C - A1094 West		ONE HOUR	✓	457	100.000
D - Unnamed Road North		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	84	222	19
	B - B1069 - Church Road	133	0	71	57
	C - A1094 West	370	74	0	13
	D - Unnamed Road North	8	48	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	7	13
	B - B1069 - Church Road	2	0	10	2
	C - A1094 West	5	8	0	0
	D - Unnamed Road North	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.71	30.47	2.3	D	240	359
A-BCD	0.05	9.41	0.1	A	17	26
A-B					77	116
A-C					204	306
D-ABC	0.21	12.84	0.3	B	62	93
C-ABD	0.18	8.74	0.2	A	72	108
C-D					12	17
C-A					336	504

Main Results for each time segment

07:45 - 08:00

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Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	197	49	454	0.433	194	0.0	0.7	13.655	B
A-BCD	14	4	442	0.032	14	0.0	0.0	8.409	A
A-B	63	16			63				
A-C	167	42			167				
D-ABC	51	13	416	0.122	50	0.0	0.1	9.822	A
C-ABD	57	14	503	0.114	57	0.0	0.1	8.066	A
C-D	10	2			10				
C-A	277	69			277				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	235	59	433	0.542	233	0.7	1.1	17.830	C
A-BCD	17	4	426	0.039	17	0.0	0.0	8.805	A
A-B	76	19			76				
A-C	200	50			200				
D-ABC	61	15	391	0.156	61	0.1	0.2	10.903	B
C-ABD	70	17	500	0.139	69	0.1	0.2	8.366	A
C-D	11	3			11				
C-A	330	82			330				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	288	72	404	0.711	283	1.1	2.2	28.703	D
A-BCD	21	5	404	0.051	21	0.0	0.1	9.398	A
A-B	92	23			92				
A-C	244	61			244				
D-ABC	75	19	355	0.210	74	0.2	0.3	12.788	B
C-ABD	88	22	500	0.176	88	0.2	0.2	8.731	A
C-D	14	3			14				
C-A	401	100			401				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	288	72	404	0.711	287	2.2	2.3	30.472	D
A-BCD	21	5	403	0.051	21	0.1	0.1	9.414	A
A-B	92	23			92				
A-C	244	61			244				
D-ABC	75	19	355	0.210	75	0.3	0.3	12.844	B
C-ABD	88	22	500	0.176	88	0.2	0.2	8.741	A
C-D	14	3			14				
C-A	401	100			401				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	235	59	433	0.542	239	2.3	1.2	18.943	C
A-BCD	17	4	425	0.040	17	0.1	0.0	8.826	A
A-B	76	19			76				
A-C	200	50			200				
D-ABC	61	15	390	0.156	61	0.3	0.2	10.966	B
C-ABD	70	17	499	0.139	70	0.2	0.2	8.383	A
C-D	11	3			11				
C-A	330	82			330				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	197	49	454	0.433	198	1.2	0.8	14.171	B
A-BCD	14	4	441	0.032	14	0.0	0.0	8.430	A
A-B	63	16			63				
A-C	167	42			167				
D-ABC	51	13	416	0.123	51	0.2	0.1	9.880	A
C-ABD	57	14	502	0.114	57	0.2	0.1	8.092	A
C-D	10	2			10				
C-A	277	69			277				

A1094 / B1069 (Church Road) - 2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		10.13	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	484	100.000
B - B1069 - Church Road		ONE HOUR	✓	282	100.000
C - A1094 West		ONE HOUR	✓	386	100.000
D - Unnamed Road North		ONE HOUR	✓	80	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	158	310	16
	B - B1069 - Church Road	121	0	98	63
	C - A1094 West	288	77	0	21
	D - Unnamed Road North	19	45	16	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	5	0
	B - B1069 - Church Road	2	0	3	2
	C - A1094 West	4	1	0	6
	D - Unnamed Road North	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.77	38.17	3.1	E	259	388
A-BCD	0.04	7.92	0.0	A	15	23
A-B					145	217
A-C					284	427
D-ABC	0.23	12.36	0.3	B	73	110
C-ABD	0.19	9.15	0.2	A	74	110
C-D					19	29
C-A					262	392

Main Results for each time segment

14:45 - 15:00

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Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	212	53	459	0.463	209	0.0	0.8	14.226	B
A-BCD	12	3	510	0.024	12	0.0	0.0	7.223	A
A-B	119	30			119				
A-C	233	58			233				
D-ABC	60	15	441	0.136	59	0.0	0.2	9.425	A
C-ABD	59	15	505	0.117	59	0.0	0.1	8.051	A
C-D	16	4			16				
C-A	216	54			216				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	254	63	435	0.583	252	0.8	1.3	19.356	C
A-BCD	15	4	495	0.030	15	0.0	0.0	7.500	A
A-B	142	36			142				
A-C	279	70			279				
D-ABC	72	18	415	0.172	71	0.2	0.2	10.466	B
C-ABD	72	18	495	0.145	71	0.1	0.2	8.503	A
C-D	19	5			19				
C-A	257	64			257				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	311	78	402	0.772	304	1.3	2.9	34.621	D
A-BCD	18	5	473	0.038	18	0.0	0.0	7.908	A
A-B	174	43			174				
A-C	341	85			341				
D-ABC	88	22	380	0.231	87	0.2	0.3	12.294	B
C-ABD	90	23	484	0.186	90	0.2	0.2	9.131	A
C-D	23	6			23				
C-A	312	78			312				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	311	78	402	0.772	310	2.9	3.1	38.165	E
A-BCD	18	5	472	0.038	18	0.0	0.0	7.923	A
A-B	174	43			174				
A-C	341	85			341				
D-ABC	88	22	379	0.231	88	0.3	0.3	12.357	B
C-ABD	90	23	484	0.186	90	0.2	0.2	9.145	A
C-D	23	6			23				
C-A	312	78			312				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	254	63	435	0.583	260	3.1	1.5	21.292	C
A-BCD	15	4	493	0.030	15	0.0	0.0	7.524	A
A-B	142	36			142				
A-C	279	70			279				
D-ABC	72	18	414	0.173	72	0.3	0.2	10.535	B
C-ABD	72	18	495	0.145	72	0.2	0.2	8.521	A
C-D	19	5			19				
C-A	257	64			257				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	212	53	459	0.463	215	1.5	0.9	14.892	B
A-BCD	12	3	510	0.024	12	0.0	0.0	7.239	A
A-B	119	30			119				
A-C	233	58			233				
D-ABC	60	15	440	0.136	60	0.2	0.2	9.485	A
C-ABD	59	15	505	0.117	59	0.2	0.1	8.077	A
C-D	16	4			16				
C-A	216	54			216				

A1094 / B1069 (Church Road) - 2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		9.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	561	100.000
B - B1069 - Church Road		ONE HOUR	✓	288	100.000
C - A1094 West		ONE HOUR	✓	360	100.000
D - Unnamed Road North		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	187	359	15
	B - B1069 - Church Road	121	0	112	55
	C - A1094 West	286	60	0	14
	D - Unnamed Road North	7	53	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	3	0
	B - B1069 - Church Road	2	0	1	0
	C - A1094 West	4	3	0	0
	D - Unnamed Road North	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.78	38.73	3.2	E	264	396
A-BCD	0.04	7.82	0.0	A	14	21
A-B					172	257
A-C					329	494
D-ABC	0.21	13.00	0.3	B	62	93
C-ABD	0.15	9.41	0.2	A	57	85
C-D					13	19
C-A					261	391

Main Results for each time segment

16:45 - 17:00

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Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	217	54	466	0.465	213	0.0	0.8	14.072	B
A-BCD	11	3	513	0.022	11	0.0	0.0	7.170	A
A-B	141	35			141				
A-C	270	68			270				
D-ABC	51	13	417	0.123	51	0.0	0.1	9.811	A
C-ABD	46	11	482	0.095	45	0.0	0.1	8.236	A
C-D	11	3			11				
C-A	215	54			215				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	259	65	442	0.586	257	0.8	1.4	19.283	C
A-BCD	14	3	498	0.027	14	0.0	0.0	7.427	A
A-B	168	42			168				
A-C	323	81			323				
D-ABC	61	15	390	0.157	61	0.1	0.2	10.940	B
C-ABD	55	14	468	0.118	55	0.1	0.1	8.714	A
C-D	13	3			13				
C-A	256	64			256				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	317	79	407	0.779	310	1.4	3.0	34.969	D
A-BCD	17	4	478	0.035	17	0.0	0.0	7.809	A
A-B	206	51			206				
A-C	395	99			395				
D-ABC	75	19	352	0.212	74	0.2	0.3	12.938	B
C-ABD	69	17	452	0.153	69	0.1	0.2	9.395	A
C-D	15	4			15				
C-A	312	78			312				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	317	79	407	0.779	316	3.0	3.2	38.727	E
A-BCD	17	4	477	0.035	17	0.0	0.0	7.824	A
A-B	206	51			206				
A-C	395	99			395				
D-ABC	75	19	352	0.213	75	0.3	0.3	13.005	B
C-ABD	69	17	452	0.153	69	0.2	0.2	9.407	A
C-D	15	4			15				
C-A	312	78			312				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	259	65	441	0.587	266	3.2	1.5	21.245	C
A-BCD	14	3	497	0.028	14	0.0	0.0	7.450	A
A-B	168	42			168				
A-C	323	81			323				
D-ABC	61	15	389	0.157	61	0.3	0.2	11.009	B
C-ABD	55	14	468	0.118	56	0.2	0.1	8.729	A
C-D	13	3			13				
C-A	256	64			256				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	217	54	466	0.465	219	1.5	0.9	14.734	B
A-BCD	11	3	513	0.022	11	0.0	0.0	7.182	A
A-B	141	35			141				
A-C	270	68			270				
D-ABC	51	13	416	0.123	51	0.2	0.1	9.871	A
C-ABD	46	11	482	0.095	46	0.1	0.1	8.258	A
C-D	11	3			11				
C-A	215	54			215				

A1094 / B1069 (Church Road) - 2034 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		3.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	176	100.000
B - B1069 - Church Road		ONE HOUR	✓	131	100.000
C - A1094 West		ONE HOUR	✓	223	100.000
D - Unnamed Road North		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	45	127	4
	B - B1069 - Church Road	97	0	22	12
	C - A1094 West	205	14	0	4
	D - Unnamed Road North	5	4	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	2	0
	B - B1069 - Church Road	5	0	9	10
	C - A1094 West	3	7	0	33
	D - Unnamed Road North	0	0	50	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.31	11.34	0.5	B	120	180
A-BCD	0.01	7.06	0.0	A	3	5
A-B					41	62
A-C					117	175
D-ABC	0.03	8.49	0.0	A	10	15
C-ABD	0.03	7.25	0.0	A	13	19
C-D					3	5
C-A					188	282

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	99	25	485	0.204	98	0.0	0.3	9.276	A

A-BCD	3	0.68	538	0.005	3	0.0	0.0	6.724	A
A-B	34	8			34				
A-C	96	24			96				
D-ABC	8	2	465	0.018	8	0.0	0.0	7.873	A
C-ABD	11	3	523	0.020	10	0.0	0.0	7.019	A
C-D	3	0.68			3				
C-A	154	39			154				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	118	29	475	0.248	118	0.3	0.3	10.058	B
A-BCD	3	0.82	528	0.006	3	0.0	0.0	6.861	A
A-B	40	10			40				
A-C	114	29			114				
D-ABC	10	2	453	0.022	10	0.0	0.0	8.124	A
C-ABD	13	3	518	0.024	13	0.0	0.0	7.115	A
C-D	3	1			3				
C-A	184	46			184				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	144	36	462	0.313	144	0.3	0.4	11.284	B
A-BCD	4	1.00	514	0.008	4	0.0	0.0	7.057	A
A-B	50	12			50				
A-C	140	35			140				
D-ABC	12	3	436	0.028	12	0.0	0.0	8.493	A
C-ABD	15	4	512	0.030	15	0.0	0.0	7.251	A
C-D	4	1			4				
C-A	226	56			226				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	144	36	462	0.313	144	0.4	0.5	11.336	B
A-BCD	4	1.00	514	0.008	4	0.0	0.0	7.058	A
A-B	50	12			50				
A-C	140	35			140				
D-ABC	12	3	436	0.028	12	0.0	0.0	8.495	A
C-ABD	15	4	512	0.030	15	0.0	0.0	7.251	A
C-D	4	1			4				
C-A	226	56			226				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	118	29	475	0.248	118	0.5	0.3	10.101	B
A-BCD	3	0.82	528	0.006	3	0.0	0.0	6.866	A
A-B	40	10			40				
A-C	114	29			114				
D-ABC	10	2	453	0.022	10	0.0	0.0	8.129	A
C-ABD	13	3	518	0.024	13	0.0	0.0	7.119	A
C-D	3	1			3				
C-A	184	46			184				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	99	25	485	0.204	99	0.3	0.3	9.341	A
A-BCD	3	0.68	538	0.005	3	0.0	0.0	6.730	A
A-B	34	8			34				
A-C	96	24			96				
D-ABC	8	2	465	0.018	8	0.0	0.0	7.879	A
C-ABD	11	3	523	0.020	11	0.0	0.0	7.019	A
C-D	3	0.68			3				
C-A	154	39			154				

A1094 / B1069 (Church Road) - 2034 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		4.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	381	100.000
B - B1069 - Church Road		ONE HOUR	✓	201	100.000
C - A1094 West		ONE HOUR	✓	393	100.000
D - Unnamed Road North		ONE HOUR	✓	54	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	116	260	5
	B - B1069 - Church Road	98	0	75	28
	C - A1094 West	324	67	0	2
	D - Unnamed Road North	10	38	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	5	0	0
	B - B1069 - Church Road	6	0	3	0
	C - A1094 West	5	7	0	0
	D - Unnamed Road North	13	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.52	17.74	1.1	C	184	276
A-BCD	0.01	7.56	0.0	A	4	7
A-B					106	160
A-C					239	358
D-ABC	0.16	11.09	0.2	B	50	75
C-ABD	0.16	8.88	0.2	A	64	96
C-D					2	3
C-A					295	442

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	151	38	472	0.320	149	0.0	0.5	11.102	B

A-BCD	4	0.91	516	0.007	4	0.0	0.0	7.027	A
A-B	87	22			87				
A-C	196	49			196				
D-ABC	41	10	438	0.094	41	0.0	0.1	9.045	A
C-ABD	52	13	495	0.104	51	0.0	0.1	8.093	A
C-D	2	0.45			2				
C-A	243	61			243				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	452	0.400	180	0.5	0.7	13.198	B
A-BCD	4	1	501	0.009	4	0.0	0.0	7.242	A
A-B	104	26			104				
A-C	234	58			234				
D-ABC	49	12	416	0.118	49	0.1	0.1	9.808	A
C-ABD	62	16	489	0.127	62	0.1	0.1	8.429	A
C-D	2	0.54			2				
C-A	289	72			289				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	221	55	424	0.522	220	0.7	1.1	17.479	C
A-BCD	5	1	482	0.011	5	0.0	0.0	7.558	A
A-B	128	32			128				
A-C	286	72			286				
D-ABC	60	15	385	0.156	60	0.1	0.2	11.067	B
C-ABD	78	20	484	0.162	78	0.1	0.2	8.867	A
C-D	3	0.66			3				
C-A	352	88			352				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	221	55	424	0.522	221	1.1	1.1	17.742	C
A-BCD	5	1	481	0.011	5	0.0	0.0	7.562	A
A-B	128	32			128				
A-C	286	72			286				
D-ABC	60	15	385	0.156	60	0.2	0.2	11.087	B
C-ABD	78	20	484	0.162	78	0.2	0.2	8.878	A
C-D	3	0.66			3				
C-A	352	88			352				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	452	0.400	182	1.1	0.7	13.434	B
A-BCD	4	1	501	0.009	4	0.0	0.0	7.250	A
A-B	104	26			104				
A-C	234	58			234				
D-ABC	49	12	415	0.118	49	0.2	0.1	9.833	A
C-ABD	62	16	489	0.127	63	0.2	0.2	8.442	A
C-D	2	0.54			2				
C-A	289	72			289				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	151	38	472	0.321	152	0.7	0.5	11.292	B
A-BCD	4	0.91	516	0.007	4	0.0	0.0	7.032	A
A-B	87	22			87				
A-C	196	49			196				
D-ABC	41	10	438	0.094	41	0.1	0.1	9.077	A
C-ABD	52	13	495	0.104	52	0.2	0.1	8.117	A
C-D	2	0.45			2				
C-A	243	61			243				

A1094 / B1069 (Church Road) - 2034 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		9.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	319	100.000
B - B1069 - Church Road		ONE HOUR	✓	274	100.000
C - A1094 West		ONE HOUR	✓	421	100.000
D - Unnamed Road North		ONE HOUR	✓	70	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	88	212	19
	B - B1069 - Church Road	134	0	81	59
	C - A1094 West	322	86	0	13
	D - Unnamed Road North	8	50	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	3	13
	B - B1069 - Church Road	2	0	9	2
	C - A1094 West	3	7	0	0
	D - Unnamed Road North	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.72	30.81	2.5	D	252	378
A-BCD	0.05	9.17	0.1	A	18	27
A-B					81	121
A-C					195	292
D-ABC	0.21	12.28	0.3	B	64	97
C-ABD	0.20	8.86	0.3	A	83	125
C-D					12	18
C-A					291	437

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	207	52	465	0.445	203	0.0	0.8	13.629	B

A-BCD	15	4	449	0.032	14	0.0	0.0	8.275	A
A-B	66	17			66				
A-C	160	40			160				
D-ABC	53	13	427	0.124	52	0.0	0.1	9.591	A
C-ABD	67	17	510	0.131	66	0.0	0.2	8.097	A
C-D	10	2			10				
C-A	241	60			241				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	247	62	445	0.554	245	0.8	1.2	17.857	C
A-BCD	17	4	435	0.040	17	0.0	0.0	8.630	A
A-B	79	20			79				
A-C	191	48			191				
D-ABC	63	16	403	0.156	63	0.1	0.2	10.566	B
C-ABD	81	20	508	0.159	81	0.2	0.2	8.431	A
C-D	12	3			12				
C-A	286	71			286				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	302	76	417	0.724	297	1.2	2.4	28.903	D
A-BCD	21	5	414	0.052	21	0.0	0.1	9.155	A
A-B	97	24			97				
A-C	233	58			233				
D-ABC	77	19	371	0.208	77	0.2	0.3	12.227	B
C-ABD	103	26	509	0.201	102	0.2	0.3	8.850	A
C-D	14	4			14				
C-A	347	87			347				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	302	76	417	0.724	302	2.4	2.5	30.806	D
A-BCD	21	5	414	0.052	21	0.1	0.1	9.171	A
A-B	97	24			97				
A-C	233	58			233				
D-ABC	77	19	370	0.209	77	0.3	0.3	12.278	B
C-ABD	103	26	509	0.202	103	0.3	0.3	8.864	A
C-D	14	4			14				
C-A	347	87			347				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	247	62	445	0.555	251	2.5	1.3	19.046	C
A-BCD	17	4	434	0.040	17	0.1	0.0	8.653	A
A-B	79	20			79				
A-C	191	48			191				
D-ABC	63	16	403	0.157	63	0.3	0.2	10.624	B
C-ABD	81	20	507	0.160	81	0.3	0.2	8.452	A
C-D	12	3			12				
C-A	286	71			286				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	207	52	464	0.445	208	1.3	0.8	14.174	B
A-BCD	15	4	449	0.033	15	0.0	0.0	8.296	A
A-B	66	17			66				
A-C	160	40			160				
D-ABC	53	13	426	0.124	53	0.2	0.1	9.649	A
C-ABD	67	17	510	0.131	67	0.2	0.2	8.128	A
C-D	10	2			10				
C-A	241	60			241				

A1094 / B1069 (Church Road) - 2034 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		13.65	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	484	100.000
B - B1069 - Church Road		ONE HOUR	✓	305	100.000
C - A1094 West		ONE HOUR	✓	415	100.000
D - Unnamed Road North		ONE HOUR	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	140	327	17
	B - B1069 - Church Road	127	0	112	66
	C - A1094 West	304	89	0	22
	D - Unnamed Road North	19	46	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	2	0
	B - B1069 - Church Road	2	0	3	2
	C - A1094 West	2	1	0	6
	D - Unnamed Road North	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.84	50.80	4.4	F	280	419
A-BCD	0.04	8.02	0.0	A	16	23
A-B					128	193
A-C					300	450
D-ABC	0.24	12.65	0.3	B	76	114
C-ABD	0.21	9.26	0.3	A	86	129
C-D					20	30
C-A					275	412

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	229	57	460	0.499	226	0.0	1.0	15.149	C

A-BCD	13	3	508	0.025	13	0.0	0.0	7.272	A
A-B	105	26			105				
A-C	246	62			246				
D-ABC	62	16	439	0.142	62	0.0	0.2	9.531	A
C-ABD	69	17	510	0.135	68	0.0	0.2	8.132	A
C-D	16	4			16				
C-A	227	57			227				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	274	68	435	0.630	271	1.0	1.6	21.632	C
A-BCD	15	4	491	0.031	15	0.0	0.0	7.563	A
A-B	126	31			126				
A-C	294	73			294				
D-ABC	74	19	413	0.180	74	0.2	0.2	10.628	B
C-ABD	83	21	501	0.166	83	0.2	0.2	8.601	A
C-D	19	5			19				
C-A	270	68			270				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	335	84	401	0.836	326	1.6	4.0	43.214	E
A-BCD	19	5	469	0.040	19	0.0	0.0	7.995	A
A-B	154	39			154				
A-C	360	90			360				
D-ABC	91	23	377	0.242	91	0.2	0.3	12.566	B
C-ABD	106	26	495	0.214	105	0.2	0.3	9.247	A
C-D	24	6			24				
C-A	327	82			327				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	335	84	401	0.837	334	4.0	4.4	50.798	F
A-BCD	19	5	468	0.040	19	0.0	0.0	8.018	A
A-B	154	39			154				
A-C	360	90			360				
D-ABC	91	23	376	0.242	91	0.3	0.3	12.653	B
C-ABD	106	26	495	0.214	106	0.3	0.3	9.264	A
C-D	24	6			24				
C-A	327	82			327				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	274	68	435	0.630	284	4.4	1.8	25.322	D
A-BCD	15	4	489	0.031	15	0.0	0.0	7.597	A
A-B	126	31			126				
A-C	294	73			294				
D-ABC	74	19	411	0.181	75	0.3	0.2	10.717	B
C-ABD	83	21	501	0.166	84	0.3	0.2	8.628	A
C-D	19	5			19				
C-A	270	68			270				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	229	57	459	0.499	232	1.8	1.0	16.086	C
A-BCD	13	3	507	0.025	13	0.0	0.0	7.290	A
A-B	105	26			105				
A-C	246	62			246				
D-ABC	62	16	438	0.142	62	0.2	0.2	9.598	A
C-ABD	69	17	510	0.135	69	0.2	0.2	8.166	A
C-D	16	4			16				
C-A	227	57			227				

A1094 / B1069 (Church Road) - 2034 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		10.66	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	462	100.000
B - B1069 - Church Road		ONE HOUR	✓	306	100.000
C - A1094 West		ONE HOUR	✓	369	100.000
D - Unnamed Road North		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	153	293	16
	B - B1069 - Church Road	125	0	124	57
	C - A1094 West	284	70	0	15
	D - Unnamed Road North	7	55	9	0
	Total	462	306	369	71

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	3	0	0
	B - B1069 - Church Road	2	0	1	0
	C - A1094 West	0	3	0	0
	D - Unnamed Road North	0	0	0	0
	Total	2	6	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.78	36.51	3.2	E	281	421
A-BCD	0.04	7.81	0.0	A	15	22
A-B					140	211
A-C					269	403
D-ABC	0.21	12.31	0.3	B	65	97
C-ABD	0.17	9.00	0.2	A	67	100
C-D					13	20
C-A					258	388

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	230	58	484	0.476	227	0.0	0.9	13.802	B

A-BCD	12	3	514	0.023	12	0.0	0.0	7.162	A
A-B	115	29			115				
A-C	221	55			221				
D-ABC	53	13	429	0.124	53	0.0	0.1	9.540	A
C-ABD	54	13	502	0.107	53	0.0	0.1	8.010	A
C-D	11	3			11				
C-A	213	53			213				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	275	69	463	0.595	273	0.9	1.4	18.757	C
A-BCD	14	4	499	0.028	14	0.0	0.0	7.418	A
A-B	138	34			138				
A-C	263	66			263				
D-ABC	63	16	405	0.157	63	0.1	0.2	10.537	B
C-ABD	65	16	492	0.132	65	0.1	0.2	8.422	A
C-D	13	3			13				
C-A	254	63			254				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	337	84	433	0.779	331	1.4	3.0	33.160	D
A-BCD	17	4	479	0.036	17	0.0	0.0	7.796	A
A-B	168	42			168				
A-C	323	81			323				
D-ABC	78	19	371	0.209	77	0.2	0.3	12.255	B
C-ABD	81	20	481	0.169	81	0.2	0.2	8.990	A
C-D	16	4			16				
C-A	309	77			309				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	337	84	433	0.779	336	3.0	3.2	36.514	E
A-BCD	17	4	478	0.036	17	0.0	0.0	7.810	A
A-B	168	42			168				
A-C	323	81			323				
D-ABC	78	19	370	0.210	78	0.3	0.3	12.313	B
C-ABD	81	20	481	0.169	81	0.2	0.2	9.001	A
C-D	16	4			16				
C-A	309	77			309				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	275	69	463	0.595	282	3.2	1.5	20.597	C
A-BCD	14	4	498	0.029	14	0.0	0.0	7.437	A
A-B	138	34			138				
A-C	263	66			263				
D-ABC	63	16	404	0.157	64	0.3	0.2	10.600	B
C-ABD	65	16	492	0.132	65	0.2	0.2	8.438	A
C-D	13	3			13				
C-A	254	63			254				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	230	58	484	0.476	233	1.5	0.9	14.458	B
A-BCD	12	3	514	0.023	12	0.0	0.0	7.174	A
A-B	115	29			115				
A-C	221	55			221				
D-ABC	53	13	429	0.124	53	0.2	0.1	9.596	A
C-ABD	54	13	502	0.107	54	0.2	0.1	8.035	A
C-D	11	3			11				
C-A	213	53			213				

A1094 / B1069 (Church Road) - 2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	175	100.000
B - B1069 - Church Road		ONE HOUR	✓	131	100.000
C - A1094 West		ONE HOUR	✓	222	100.000
D - Unnamed Road North		ONE HOUR	✓	11	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	45	126	4
	B - B1069 - Church Road	97	0	22	12
	C - A1094 West	204	14	0	4
	D - Unnamed Road North	5	4	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	2	0
	B - B1069 - Church Road	5	0	9	10
	C - A1094 West	3	7	0	33
	D - Unnamed Road North	0	0	50	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.31	11.31	0.4	B	120	180
A-BCD	0.01	7.06	0.0	A	3	5
A-B					41	62
A-C					116	173
D-ABC	0.03	8.49	0.0	A	10	15
C-ABD	0.03	7.24	0.0	A	13	19
C-D					3	5
C-A					187	281

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	99	25	485	0.203	98	0.0	0.3	9.265	A

A-BCD	3	0.68	538	0.005	3	0.0	0.0	6.722	A
A-B	34	8			34				
A-C	95	24			95				
D-ABC	8	2	466	0.018	8	0.0	0.0	7.868	A
C-ABD	11	3	524	0.020	10	0.0	0.0	7.015	A
C-D	3	0.68			3				
C-A	154	38			154				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	118	29	476	0.248	118	0.3	0.3	10.044	B
A-BCD	3	0.82	528	0.006	3	0.0	0.0	6.859	A
A-B	40	10			40				
A-C	113	28			113				
D-ABC	10	2	453	0.022	10	0.0	0.0	8.117	A
C-ABD	13	3	519	0.024	13	0.0	0.0	7.111	A
C-D	3	1			3				
C-A	183	46			183				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	144	36	463	0.312	144	0.3	0.4	11.297	B
A-BCD	4	1.00	514	0.008	4	0.0	0.0	7.054	A
A-B	50	12			50				
A-C	139	35			139				
D-ABC	12	3	436	0.028	12	0.0	0.0	8.484	A
C-ABD	15	4	512	0.030	15	0.0	0.0	7.245	A
C-D	4	1			4				
C-A	225	56			225				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	144	36	463	0.312	144	0.4	0.4	11.314	B
A-BCD	4	1.00	514	0.008	4	0.0	0.0	7.055	A
A-B	50	12			50				
A-C	139	35			139				
D-ABC	12	3	436	0.028	12	0.0	0.0	8.486	A
C-ABD	15	4	512	0.030	15	0.0	0.0	7.245	A
C-D	4	1			4				
C-A	225	56			225				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	118	29	476	0.248	118	0.4	0.3	10.088	B
A-BCD	3	0.82	528	0.006	3	0.0	0.0	6.861	A
A-B	40	10			40				
A-C	113	28			113				
D-ABC	10	2	453	0.022	10	0.0	0.0	8.121	A
C-ABD	13	3	519	0.024	13	0.0	0.0	7.111	A
C-D	3	1			3				
C-A	183	46			183				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	99	25	485	0.203	99	0.3	0.3	9.328	A
A-BCD	3	0.68	538	0.005	3	0.0	0.0	6.728	A
A-B	34	8			34				
A-C	95	24			95				
D-ABC	8	2	465	0.018	8	0.0	0.0	7.874	A
C-ABD	11	3	524	0.020	11	0.0	0.0	7.018	A
C-D	3	0.68			3				
C-A	154	38			154				

A1094 / B1069 (Church Road) - 2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		10.41	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	376	100.000
B - B1069 - Church Road		ONE HOUR	✓	278	100.000
C - A1094 West		ONE HOUR	✓	391	100.000
D - Unnamed Road North		ONE HOUR	✓	54	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	114	257	5
	B - B1069 - Church Road	193	0	57	28
	C - A1094 West	324	65	0	2
	D - Unnamed Road North	10	38	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	5	0	0
	B - B1069 - Church Road	3	0	4	0
	C - A1094 West	5	8	0	0
	D - Unnamed Road North	13	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.76	36.67	3.0	E	255	382
A-BCD	0.01	7.94	0.0	A	4	7
A-B					105	157
A-C					236	354
D-ABC	0.17	11.98	0.2	B	50	75
C-ABD	0.16	8.84	0.2	A	62	93
C-D					2	3
C-A					295	442

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	209	52	451	0.464	206	0.0	0.8	14.480	B

A-BCD	4	0.91	501	0.007	4	0.0	0.0	7.234	A
A-B	86	21			86				
A-C	193	48			193				
D-ABC	41	10	423	0.097	41	0.0	0.1	9.410	A
C-ABD	50	12	495	0.101	49	0.0	0.1	8.073	A
C-D	2	0.45			2				
C-A	243	61			243				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	250	62	430	0.580	248	0.8	1.3	19.500	C
A-BCD	4	1	483	0.009	4	0.0	0.0	7.512	A
A-B	102	26			102				
A-C	231	58			231				
D-ABC	49	12	397	0.123	49	0.1	0.1	10.341	B
C-ABD	60	15	489	0.124	60	0.1	0.1	8.402	A
C-D	2	0.54			2				
C-A	289	72			289				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	306	76	402	0.762	300	1.3	2.8	33.580	D
A-BCD	5	1	459	0.012	5	0.0	0.0	7.926	A
A-B	126	31			126				
A-C	283	71			283				
D-ABC	60	15	362	0.166	60	0.1	0.2	11.919	B
C-ABD	76	19	483	0.157	76	0.1	0.2	8.828	A
C-D	3	0.66			3				
C-A	352	88			352				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	306	76	402	0.762	305	2.8	3.0	36.673	E
A-BCD	5	1	459	0.012	5	0.0	0.0	7.943	A
A-B	126	31			126				
A-C	283	71			283				
D-ABC	60	15	361	0.166	60	0.2	0.2	11.975	B
C-ABD	76	19	483	0.157	76	0.2	0.2	8.837	A
C-D	3	0.66			3				
C-A	352	88			352				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	250	62	430	0.580	256	3.0	1.5	21.273	C
A-BCD	4	1	482	0.009	4	0.0	0.0	7.538	A
A-B	102	26			102				
A-C	231	58			231				
D-ABC	49	12	396	0.124	49	0.2	0.1	10.401	B
C-ABD	60	15	488	0.124	61	0.2	0.1	8.416	A
C-D	2	0.54			2				
C-A	289	72			289				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	209	52	451	0.464	211	1.5	0.9	15.161	C
A-BCD	4	0.91	500	0.007	4	0.0	0.0	7.249	A
A-B	86	21			86				
A-C	193	48			193				
D-ABC	41	10	422	0.097	41	0.1	0.1	9.462	A
C-ABD	50	12	495	0.101	50	0.1	0.1	8.097	A
C-D	2	0.45			2				
C-A	243	61			243				

A1094 / B1069 (Church Road) - 2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		18.04	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	327	100.000
B - B1069 - Church Road		ONE HOUR	✓	323	100.000
C - A1094 West		ONE HOUR	✓	425	100.000
D - Unnamed Road North		ONE HOUR	✓	70	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	95	213	19
	B - B1069 - Church Road	183	0	81	59
	C - A1094 West	328	84	0	13
	D - Unnamed Road North	8	50	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	3	13
	B - B1069 - Church Road	2	0	9	2
	C - A1094 West	3	7	0	0
	D - Unnamed Road North	0	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.87	57.99	5.3	F	297	445
A-BCD	0.05	9.47	0.1	A	18	27
A-B					87	131
A-C					195	293
D-ABC	0.22	12.99	0.3	B	64	97
C-ABD	0.20	8.87	0.3	A	81	122
C-D					12	18
C-A					297	445

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	243	61	459	0.530	239	0.0	1.1	16.062	C

A-BCD	15	4	442	0.033	14	0.0	0.0	8.421	A
A-B	72	18			72				
A-C	160	40			160				
D-ABC	53	13	417	0.127	52	0.0	0.1	9.852	A
C-ABD	65	16	508	0.128	64	0.0	0.1	8.104	A
C-D	10	2			10				
C-A	245	61			245				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	291	73	439	0.662	288	1.1	1.8	23.335	C
A-BCD	17	4	425	0.041	17	0.0	0.0	8.825	A
A-B	85	21			85				
A-C	191	48			191				
D-ABC	63	16	391	0.161	63	0.1	0.2	10.957	B
C-ABD	79	20	506	0.156	79	0.1	0.2	8.436	A
C-D	12	3			12				
C-A	291	73			291				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	356	89	411	0.867	345	1.8	4.7	47.606	E
A-BCD	21	5	403	0.053	21	0.0	0.1	9.429	A
A-B	105	26			105				
A-C	235	59			235				
D-ABC	77	19	356	0.217	77	0.2	0.3	12.882	B
C-ABD	100	25	507	0.198	100	0.2	0.3	8.851	A
C-D	14	4			14				
C-A	354	88			354				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	356	89	411	0.867	353	4.7	5.3	57.992	F
A-BCD	21	5	401	0.053	21	0.1	0.1	9.471	A
A-B	105	26			105				
A-C	235	59			235				
D-ABC	77	19	354	0.218	77	0.3	0.3	12.991	B
C-ABD	100	25	506	0.198	100	0.3	0.3	8.865	A
C-D	14	4			14				
C-A	354	88			354				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	291	73	439	0.663	304	5.3	2.1	28.702	D
A-BCD	17	4	423	0.041	17	0.1	0.0	8.881	A
A-B	85	21			85				
A-C	191	48			191				
D-ABC	63	16	389	0.162	63	0.3	0.2	11.075	B
C-ABD	79	20	505	0.157	79	0.3	0.2	8.455	A
C-D	12	3			12				
C-A	291	73			291				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	243	61	459	0.531	247	2.1	1.2	17.295	C
A-BCD	15	4	441	0.033	15	0.0	0.0	8.452	A
A-B	72	18			72				
A-C	160	40			160				
D-ABC	53	13	416	0.127	53	0.2	0.1	9.927	A
C-ABD	65	16	508	0.128	65	0.2	0.2	8.134	A
C-D	10	2			10				
C-A	245	61			245				

A1094 / B1069 (Church Road) - 2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		13.54	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	482	100.000
B - B1069 - Church Road		ONE HOUR	✓	305	100.000
C - A1094 West		ONE HOUR	✓	414	100.000
D - Unnamed Road North		ONE HOUR	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	139	326	17
	B - B1069 - Church Road	127	0	112	66
	C - A1094 West	304	88	0	22
	D - Unnamed Road North	19	46	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	2	2	0
	B - B1069 - Church Road	2	0	3	2
	C - A1094 West	2	1	0	6
	D - Unnamed Road North	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.83	50.21	4.4	F	280	419
A-BCD	0.04	8.02	0.0	A	16	23
A-B					128	191
A-C					299	449
D-ABC	0.24	12.63	0.3	B	76	114
C-ABD	0.21	9.23	0.3	A	85	127
C-D					20	30
C-A					275	413

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	229	57	460	0.498	226	0.0	1.0	15.109	C

A-BCD	13	3	508	0.025	13	0.0	0.0	7.272	A
A-B	105	26			105				
A-C	245	61			245				
D-ABC	62	16	439	0.142	62	0.0	0.2	9.524	A
C-ABD	68	17	510	0.133	67	0.0	0.2	8.115	A
C-D	16	4			16				
C-A	227	57			227				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	274	68	436	0.628	271	1.0	1.6	21.539	C
A-BCD	15	4	491	0.031	15	0.0	0.0	7.563	A
A-B	125	31			125				
A-C	293	73			293				
D-ABC	74	19	413	0.180	74	0.2	0.2	10.617	B
C-ABD	82	21	502	0.164	82	0.2	0.2	8.584	A
C-D	19	5			19				
C-A	270	68			270				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	335	84	402	0.834	326	1.6	3.9	42.826	E
A-BCD	19	5	469	0.040	19	0.0	0.0	7.995	A
A-B	153	38			153				
A-C	359	90			359				
D-ABC	91	23	377	0.241	91	0.2	0.3	12.547	B
C-ABD	104	26	495	0.211	104	0.2	0.3	9.216	A
C-D	24	6			24				
C-A	328	82			328				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	335	84	402	0.835	334	3.9	4.4	50.207	F
A-BCD	19	5	468	0.040	19	0.0	0.0	8.018	A
A-B	153	38			153				
A-C	359	90			359				
D-ABC	91	23	376	0.242	91	0.3	0.3	12.633	B
C-ABD	104	26	495	0.211	104	0.3	0.3	9.231	A
C-D	24	6			24				
C-A	328	82			328				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	274	68	436	0.629	284	4.4	1.8	25.143	D
A-BCD	15	4	489	0.031	15	0.0	0.0	7.593	A
A-B	125	31			125				
A-C	293	73			293				
D-ABC	74	19	411	0.181	75	0.3	0.2	10.705	B
C-ABD	82	21	502	0.164	83	0.3	0.2	8.603	A
C-D	19	5			19				
C-A	270	68			270				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	229	57	460	0.499	232	1.8	1.0	16.037	C
A-BCD	13	3	507	0.025	13	0.0	0.0	7.290	A
A-B	105	26			105				
A-C	245	61			245				
D-ABC	62	16	438	0.142	62	0.2	0.2	9.590	A
C-ABD	68	17	510	0.133	68	0.2	0.2	8.146	A
C-D	16	4			16				
C-A	227	57			227				

A1094 / B1069 (Church Road) - 2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J14	A1094 / B1069 (Church Road)	Right-Left Stagger	Two-way		10.40	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1094 East		ONE HOUR	✓	463	100.000
B - B1069 - Church Road		ONE HOUR	✓	304	100.000
C - A1094 West		ONE HOUR	✓	369	100.000
D - Unnamed Road North		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	153	294	16
	B - B1069 - Church Road	123	0	124	57
	C - A1094 West	284	70	0	15
	D - Unnamed Road North	7	55	9	0
	Total	463	304	369	71

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A1094 East	B - B1069 - Church Road	C - A1094 West	D - Unnamed Road North
From	A - A1094 East	0	3	0	0
	B - B1069 - Church Road	2	0	1	0
	C - A1094 West	0	3	0	0
	D - Unnamed Road North	0	0	0	0
	Total	2	6	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.77	35.70	3.2	E	279	419
A-BCD	0.04	7.80	0.0	A	15	22
A-B					140	211
A-C					270	405
D-ABC	0.21	12.30	0.3	B	65	97
C-ABD	0.17	9.00	0.2	A	67	100
C-D					13	20
C-A					258	388

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	229	57	485	0.472	226	0.0	0.9	13.713	B

A-BCD	12	3	515	0.023	12	0.0	0.0	7.158	A
A-B	115	29			115				
A-C	221	55			221				
D-ABC	53	13	430	0.124	53	0.0	0.1	9.534	A
C-ABD	54	13	502	0.107	53	0.0	0.1	8.012	A
C-D	11	3			11				
C-A	213	53			213				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	273	68	463	0.590	271	0.9	1.4	18.570	C
A-BCD	14	4	500	0.028	14	0.0	0.0	7.412	A
A-B	138	34			138				
A-C	264	66			264				
D-ABC	63	16	405	0.157	63	0.1	0.2	10.528	B
C-ABD	65	16	492	0.132	65	0.1	0.2	8.425	A
C-D	13	3			13				
C-A	254	63			254				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	335	84	433	0.773	329	1.4	3.0	32.555	D
A-BCD	17	4	480	0.036	17	0.0	0.0	7.788	A
A-B	168	42			168				
A-C	324	81			324				
D-ABC	78	19	371	0.209	77	0.2	0.3	12.242	B
C-ABD	81	20	481	0.169	81	0.2	0.2	8.995	A
C-D	16	4			16				
C-A	309	77			309				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	335	84	433	0.773	334	3.0	3.2	35.701	E
A-BCD	17	4	479	0.036	17	0.0	0.0	7.802	A
A-B	168	42			168				
A-C	324	81			324				
D-ABC	78	19	370	0.210	78	0.3	0.3	12.296	B
C-ABD	81	20	481	0.169	81	0.2	0.2	9.004	A
C-D	16	4			16				
C-A	309	77			309				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	273	68	463	0.591	280	3.2	1.5	20.310	C
A-BCD	14	4	499	0.029	14	0.0	0.0	7.430	A
A-B	138	34			138				
A-C	264	66			264				
D-ABC	63	16	404	0.157	64	0.3	0.2	10.591	B
C-ABD	65	16	492	0.132	65	0.2	0.2	8.441	A
C-D	13	3			13				
C-A	254	63			254				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	229	57	484	0.473	231	1.5	0.9	14.353	B
A-BCD	12	3	514	0.023	12	0.0	0.0	7.172	A
A-B	115	29			115				
A-C	221	55			221				
D-ABC	53	13	429	0.124	53	0.2	0.1	9.588	A
C-ABD	54	13	502	0.107	54	0.2	0.1	8.036	A
C-D	11	3			11				
C-A	213	53			213				

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: 2019.08.22 J17_Model_Miti_Adjusted_PC_v11.j9

Path: \\user01cam1uk.uk.wspgroup.com\projects\50400326 - Sizewell C transport planning\Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\For Issue\Scoped In\11 Mitigation Models\J17\Model

Report generation date: 13/03/2020 13:33:56

»A12 / B1122 - 2028 Peak Construction, 6-7 AM

»A12 / B1122 - 2028 Peak Construction, 7-8 AM

»A12 / B1122 - 2028 Peak Construction, 8-9 AM

»A12 / B1122 - 2028 Peak Construction, 3-4 PM

»A12 / B1122 - 2028 Peak Construction, 5-6 PM

Summary of junction performance

	6-7 AM				7-8 AM				8-9 AM				3-4 PM				5-6 PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
A12 / B1122 - 2028 Peak Construction																				
A - A12 North	1.7	8.60	0.63	A	2.9	12.99	0.75	B	1.7	8.86	0.63	A	1.5	8.32	0.60	A	1.1	6.85	0.53	A
B - A12 South	0.4	5.31	0.29	A	1.4	8.20	0.58	A	1.2	7.48	0.56	A	2.4	10.84	0.71	B	2.4	10.56	0.71	B
C - Park & Ride access	0.0	4.16	0.02	A	0.1	3.98	0.06	A	0.0	4.08	0.03	A	0.2	4.67	0.18	A	0.2	4.63	0.16	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

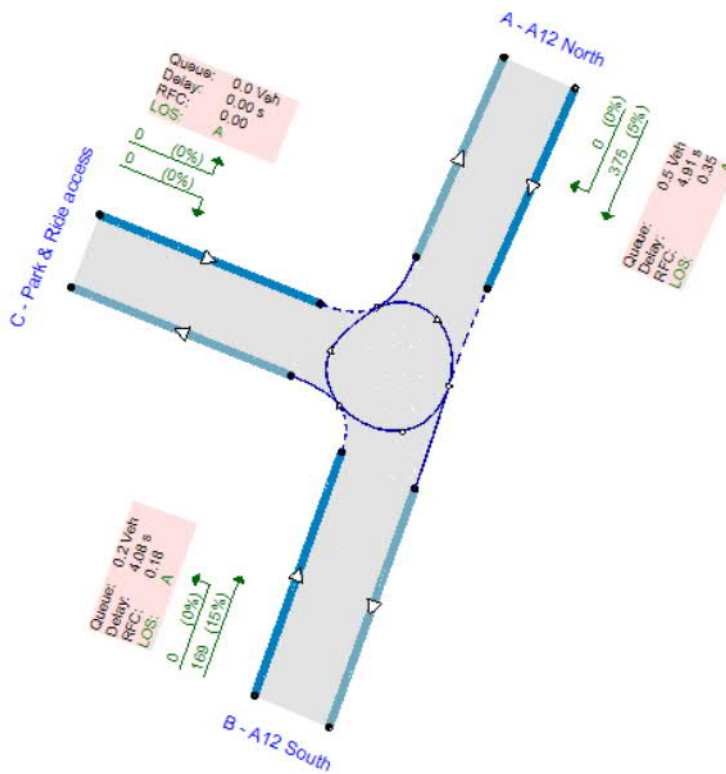
File summary

File Description

Title	Park and Ride (Darsham)
Location	52.281784°, 1.534037°
Site number	17
Date	21/03/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	UKWSPGROUP\ukcxm014
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



Flow show original traffic demand (veh/h)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

D29	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
AJ13	A12 / B1122	✓	✓	D16,D17,D18,D19,D20	100.000	100.000

A12 / B1122 - 2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J17	Park and Ride (Darsham)	Standard Roundabout		A, B, C	7.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	A12 South	
C	Park & Ride access	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	3.70	4.00	10.0	20.0	54.0	33.0	
B - A12 South	3.60	4.00	10.0	30.0	54.0	28.0	
C - Park & Ride access	3.60	5.40	10.0	32.5	54.0	32.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.493	1192
B - A12 South	0.509	1226
C - Park & Ride access	0.548	1454

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	656	100.000
B - A12 South		ONE HOUR	✓	248	100.000
C - Park & Ride access		ONE HOUR	✓	18	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South	C - Park & Ride access
From	A - A12 North	0	405	251
	B - A12 South	182	0	66
	C - Park & Ride access	7	11	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 South	C - Park & Ride access
A - A12 North	0	6	0
B - A12 South	15	0	12
C - Park & Ride access	0	82	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.63	8.60	1.7	A	602	903
B - A12 South	0.29	5.31	0.4	A	228	341
C - Park & Ride access	0.02	4.16	0.0	A	17	25

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	494	123	8	1144	0.432	491	142	0.0	0.8	5.487	A
B - A12 South	187	47	188	991	0.188	186	311	0.0	0.2	4.468	A
C - Park & Ride access	14	3	136	912	0.015	13	237	0.0	0.0	4.006	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	590	147	10	1143	0.516	589	170	0.8	1.1	6.482	A
B - A12 South	223	56	225	974	0.229	223	373	0.2	0.3	4.790	A
C - Park & Ride access	16	4	163	901	0.018	16	284	0.0	0.0	4.069	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	722	181	12	1141	0.633	720	208	1.1	1.7	8.499	A
B - A12 South	273	68	275	952	0.287	273	456	0.3	0.4	5.298	A
C - Park & Ride access	20	5	200	885	0.022	20	348	0.0	0.0	4.158	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	722	181	12	1141	0.633	722	208	1.7	1.7	8.599	A
B - A12 South	273	68	276	951	0.287	273	458	0.4	0.4	5.308	A
C - Park & Ride access	20	5	200	885	0.022	20	349	0.0	0.0	4.159	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	590	147	10	1143	0.516	592	170	1.7	1.1	6.572	A
B - A12 South	223	56	227	973	0.229	223	376	0.4	0.3	4.802	A
C - Park & Ride access	16	4	164	901	0.018	16	286	0.0	0.0	4.070	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	494	123	8	1144	0.432	495	142	1.1	0.8	5.560	A
B - A12 South	187	47	189	990	0.189	187	314	0.3	0.2	4.486	A
C - Park & Ride access	14	3	137	912	0.015	14	239	0.0	0.0	4.007	A

A12 / B1122 - 2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J17	Park and Ride (Darsham)	Standard Roundabout		A, B, C	10.68	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	756	100.000
B - A12 South		ONE HOUR	✓	550	100.000
C - Park & Ride access		ONE HOUR	✓	49	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South	C - Park & Ride access
From	A - A12 North	0	574	182
	B - A12 South	495	0	55
	C - Park & Ride access	32	17	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South	C - Park & Ride access
From	A - A12 North	0	8	0
	B - A12 South	7	0	16
	C - Park & Ride access	0	53	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	12.99	2.9	B	694	1041
B - A12 South	0.58	8.20	1.4	A	505	757
C - Park & Ride access	0.06	3.98	0.1	A	45	67

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand	Junction Arrivals	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of
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	(Veh/hr)	(Veh)					(Veh/hr)	(Veh)	(Veh)		service
A - A12 North	569	142	13	1113	0.512	565	394	0.0	1.0	6.526	A
B - A12 South	414	104	136	1075	0.385	412	442	0.0	0.6	5.409	A
C - Park & Ride access	37	9	370	1045	0.035	37	177	0.0	0.0	3.568	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	680	170	15	1111	0.612	678	473	1.0	1.5	8.268	A
B - A12 South	494	124	163	1062	0.466	493	530	0.6	0.9	6.322	A
C - Park & Ride access	44	11	444	1009	0.044	44	212	0.0	0.0	3.729	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	832	208	19	1108	0.751	827	578	1.5	2.9	12.556	B
B - A12 South	606	151	199	1045	0.580	604	647	0.9	1.4	8.121	A
C - Park & Ride access	54	13	543	960	0.056	54	259	0.0	0.1	3.972	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	832	208	19	1108	0.751	832	580	2.9	2.9	12.987	B
B - A12 South	606	151	200	1044	0.580	606	650	1.4	1.4	8.200	A
C - Park & Ride access	54	13	545	959	0.056	54	261	0.1	0.1	3.975	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	680	170	15	1111	0.612	685	476	2.9	1.6	8.552	A
B - A12 South	494	124	165	1061	0.466	496	535	1.4	0.9	6.395	A
C - Park & Ride access	44	11	447	1008	0.044	44	215	0.1	0.0	3.734	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	569	142	13	1113	0.512	571	398	1.6	1.1	6.676	A
B - A12 South	414	104	138	1074	0.386	415	447	0.9	0.6	5.472	A
C - Park & Ride access	37	9	374	1044	0.035	37	179	0.0	0.0	3.576	A

A12 / B1122 - 2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J17	Park and Ride (Darsham)	Standard Roundabout		A, B, C	8.11	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	631	100.000
B - A12 South		ONE HOUR	✓	550	100.000
C - Park & Ride access		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South	C - Park & Ride access
From	A - A12 North	0	615	16
	B - A12 South	539	0	11
	C - Park & Ride access	17	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South	C - Park & Ride access
From	A - A12 North	0	8	0
	B - A12 South	11	0	55
	C - Park & Ride access	0	63	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.63	8.86	1.7	A	579	869
B - A12 South	0.56	7.48	1.2	A	505	757
C - Park & Ride access	0.03	4.08	0.0	A	23	34

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand	Junction Arrivals	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of

	(Veh/hr)	(Veh)					(Veh/hr)	(Veh)	(Veh)		service
A - A12 North	475	119	6	1103	0.431	472	416	0.0	0.7	5.682	A
B - A12 South	414	104	12	1089	0.380	412	466	0.0	0.6	5.293	A
C - Park & Ride access	19	5	403	1007	0.019	19	20	0.0	0.0	3.642	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	567	142	7	1102	0.515	566	499	0.7	1.0	6.703	A
B - A12 South	494	124	14	1088	0.454	494	559	0.6	0.8	6.045	A
C - Park & Ride access	22	6	484	966	0.023	22	24	0.0	0.0	3.813	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	695	174	9	1101	0.631	692	611	1.0	1.7	8.758	A
B - A12 South	606	151	18	1087	0.557	604	683	0.8	1.2	7.430	A
C - Park & Ride access	28	7	592	911	0.030	27	30	0.0	0.0	4.072	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	695	174	9	1101	0.631	695	612	1.7	1.7	8.860	A
B - A12 South	606	151	18	1087	0.557	606	686	1.2	1.2	7.480	A
C - Park & Ride access	28	7	593	911	0.030	28	30	0.0	0.0	4.076	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	567	142	7	1102	0.515	570	501	1.7	1.1	6.797	A
B - A12 South	494	124	14	1088	0.454	496	562	1.2	0.8	6.098	A
C - Park & Ride access	22	6	486	965	0.023	23	24	0.0	0.0	3.821	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	475	119	6	1103	0.431	476	419	1.1	0.8	5.759	A
B - A12 South	414	104	12	1089	0.380	415	470	0.8	0.6	5.347	A
C - Park & Ride access	19	5	407	1005	0.019	19	20	0.0	0.0	3.648	A

A12 / B1122 - 2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J17	Park and Ride (Darsham)	Standard Roundabout		A, B, C	9.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	585	100.000
B - A12 South		ONE HOUR	✓	727	100.000
C - Park & Ride access		ONE HOUR	✓	156	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South	C - Park & Ride access
From	A - A12 North	0	578	7
	B - A12 South	717	0	10
	C - Park & Ride access	118	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South	C - Park & Ride access
From	A - A12 North	0	8	0
	B - A12 South	7	0	80
	C - Park & Ride access	0	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.60	8.32	1.5	A	537	805
B - A12 South	0.71	10.84	2.4	B	667	1001
C - Park & Ride access	0.18	4.67	0.2	A	143	215

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand	Junction Arrivals	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of
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	(Veh/hr)	(Veh)					(Veh/hr)	(Veh)	(Veh)		service
A - A12 North	440	110	28	1084	0.406	438	625	0.0	0.7	5.549	A
B - A12 South	547	137	5	1133	0.483	544	461	0.0	0.9	6.071	A
C - Park & Ride access	117	29	536	1084	0.108	117	13	0.0	0.1	3.719	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	526	131	34	1081	0.487	525	749	0.7	0.9	6.466	A
B - A12 South	654	163	6	1133	0.577	652	553	0.9	1.3	7.462	A
C - Park & Ride access	140	35	643	1025	0.137	140	15	0.1	0.2	4.070	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	644	161	42	1076	0.598	642	915	0.9	1.5	8.247	A
B - A12 South	800	200	8	1132	0.707	796	676	1.3	2.3	10.606	B
C - Park & Ride access	172	43	786	945	0.182	172	19	0.2	0.2	4.652	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	644	161	42	1076	0.598	644	919	1.5	1.5	8.324	A
B - A12 South	800	200	8	1132	0.707	800	678	2.3	2.4	10.840	B
C - Park & Ride access	172	43	789	943	0.182	172	19	0.2	0.2	4.666	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	526	131	34	1081	0.487	528	755	1.5	1.0	6.540	A
B - A12 South	654	163	6	1133	0.577	657	556	2.4	1.4	7.641	A
C - Park & Ride access	140	35	648	1022	0.137	140	15	0.2	0.2	4.088	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	440	110	29	1084	0.406	441	630	1.0	0.7	5.617	A
B - A12 South	547	137	5	1133	0.483	549	465	1.4	0.9	6.185	A
C - Park & Ride access	117	29	542	1081	0.109	118	13	0.2	0.1	3.738	A

A12 / B1122 - 2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J17	Park and Ride (Darsham)	Standard Roundabout		A, B, C	8.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	549	100.000
B - A12 South		ONE HOUR	✓	760	100.000
C - Park & Ride access		ONE HOUR	✓	135	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South	C - Park & Ride access
From	A - A12 North	0	547	2
	B - A12 South	751	0	9
	C - Park & Ride access	99	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South	C - Park & Ride access
From	A - A12 North	0	3	0
	B - A12 South	3	0	89
	C - Park & Ride access	0	25	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.53	6.85	1.1	A	504	756
B - A12 South	0.71	10.56	2.4	B	697	1046
C - Park & Ride access	0.16	4.63	0.2	A	124	186

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand	Junction Arrivals	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	Unsignalised level of
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	(Veh/hr)	(Veh)					(Veh/hr)	(Veh)	(Veh)		service
A - A12 North	413	103	27	1138	0.363	411	636	0.0	0.6	4.941	A
B - A12 South	572	143	1	1177	0.486	568	437	0.0	0.9	5.878	A
C - Park & Ride access	102	25	562	1066	0.095	101	8	0.0	0.1	3.729	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	494	123	32	1134	0.435	493	762	0.6	0.8	5.603	A
B - A12 South	683	171	2	1177	0.580	682	523	0.9	1.4	7.239	A
C - Park & Ride access	121	30	673	1007	0.121	121	10	0.1	0.1	4.066	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	604	151	40	1130	0.535	603	932	0.8	1.1	6.811	A
B - A12 South	837	209	2	1177	0.711	833	640	1.4	2.4	10.342	B
C - Park & Ride access	149	37	823	928	0.160	148	12	0.1	0.2	4.619	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	604	151	40	1130	0.535	604	936	1.1	1.1	6.849	A
B - A12 South	837	209	2	1177	0.711	837	642	2.4	2.4	10.561	B
C - Park & Ride access	149	37	827	926	0.161	149	12	0.2	0.2	4.633	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	494	123	32	1134	0.435	495	768	1.1	0.8	5.643	A
B - A12 South	683	171	2	1177	0.580	687	526	2.4	1.4	7.406	A
C - Park & Ride access	121	30	679	1004	0.121	122	10	0.2	0.1	4.083	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	413	103	27	1137	0.363	414	642	0.8	0.6	4.982	A
B - A12 South	572	143	2	1177	0.486	574	440	1.4	1.0	5.986	A
C - Park & Ride access	102	25	567	1063	0.096	102	8	0.1	0.1	3.747	A

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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 Report generation date: 16/03/2020 12:36:47

- »2019 Base Year, 6-7 AM
- »2019 Base Year, 7-8 AM
- »2019 Base Year, 8-9 AM
- »2019 Base Year, 3-4 PM
- »2019 Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
- »2023 Reference Case, 8-9 AM
- »2023 Reference Case, 3-4 PM
- »2023 Reference Case, 5-6 PM
- »2023 Early Years, 6-7 AM
- »2023 Early Years, 7-8 AM
- »2023 Early Years, 8-9 AM
- »2023 Early Years, 3-4 PM
- »2023 Early Years, 5-6 PM
- »2028 Reference Case, 6-7 AM
- »2028 Reference Case, 7-8 AM
- »2028 Reference Case, 8-9 AM
- »2028 Reference Case, 3-4 PM
- »2028 Reference Case, 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case, 6-7 AM
- »2034 Reference Case, 7-8 AM
- »2034 Reference Case, 8-9 AM
- »2034 Reference Case, 3-4 PM
- »2034 Reference Case, 5-6 PM
- »2034 Operational Forecast, 6-7 AM
- »2034 Operational Forecast, 7-8 AM
- »2034 Operational Forecast, 8-9 AM
- »2034 Operational Forecast, 3-4 PM
- »2034 Operational Forecast, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North		0.7	2.68	0.41	A		3.1	6.93	0.76	A		5.5	11.41	0.85	B		3.2	6.85	0.76	A		4.2	8.75	0.81	A
B - A14 North-West		0.0	3.82	0.02	A		0.1	4.28	0.10	A		0.2	4.59	0.14	A		0.1	4.58	0.10	A		0.1	4.46	0.13	A
C - A1156 South-West	D1	0.2	3.91	0.17	A	D2	3.5	33.70	0.79	D	D3	26.9	186.78	1.00	F	D4	11.0	74.00	0.96	F	D5	6.7	48.67	0.90	E
D - A14 South-East		0.2	3.37	0.19	A		6.2	39.95	0.88	E		29.6	187.87	1.00	F		5.1	34.08	0.85	D		14.2	76.24	0.98	F
E - Unnamed Road North-East		0.0	4.02	0.03	A		0.1	10.21	0.12	B		0.3	15.01	0.24	C		0.1	9.66	0.09	A		0.1	11.04	0.07	B
2023 Reference Case																									
A - A12 North		0.8	2.76	0.43	A		4.0	8.65	0.81	A		9.1	17.73	0.90	C		5.1	10.02	0.84	B		6.6	12.88	0.87	B
B - A14 North-West		0.0	3.74	0.02	A		0.1	4.31	0.11	A		0.2	4.42	0.14	A		0.1	5.01	0.10	A		0.1	4.71	0.13	A
C - A1156 South-West	D6	0.2	4.23	0.19	A	D7	10.2	88.98	0.96	F	D8	114.4	735.26	1.14	F	D9	40.1	219.30	1.13	F	D10	33.7	187.54	1.10	F
D - A14 South-East		0.3	3.63	0.21	A		13.5	84.44	0.98	F		133.0	835.47	1.16	F		47.4	228.49	1.14	F		57.4	248.59	1.17	F
E - Unnamed Road North-East		0.0	4.26	0.03	A		0.2	12.72	0.16	B		0.4	19.43	0.31	C		0.1	12.12	0.12	B		0.1	13.05	0.09	B
2023 Early Years																									
A - A12 North		0.8	2.79	0.44	A		5.0	10.33	0.84	B		10.3	20.16	0.92	C		6.2	12.19	0.87	B		8.5	16.47	0.90	C
B - A14 North-West		0.0	3.81	0.03	A		0.1	4.46	0.11	A		0.2	4.49	0.14	A		0.1	5.03	0.10	A		0.1	4.63	0.12	A
C - A1156 South-West	D11	0.2	4.31	0.19	A	D12	12.0	103.61	0.99	F	D13	129.7	853.40	1.17	F	D14	56.0	306.05	1.20	F	D15	58.9	311.30	1.21	F
D - A14 South-East		0.3	3.77	0.22	A		38.3	204.89	1.12	F		184.2	1207.49	1.24	F		68.0	327.33	1.24	F		93.6	408.46	1.31	F
E - Unnamed Road North-East		0.0	4.31	0.04	A		0.2	14.24	0.17	B		0.5	20.55	0.32	C		0.1	13.39	0.13	B		0.1	15.11	0.10	C
2028 Reference Case																									
A - A12 North		0.7	2.44	0.40	A		3.4	7.24	0.78	A		7.1	13.65	0.88	B		3.6	7.48	0.78	A		5.9	11.59	0.86	B
B - A14 North-West		0.0	3.44	0.02	A		0.1	4.13	0.11	A		0.2	4.20	0.13	A		0.1	4.78	0.11	A		0.2	4.59	0.13	A
C - A1156 South-West	D16	0.2	3.56	0.04	A	D17	3.0	33.99	0.77	D	D18	18.8	150.02	0.98	F	D19	9.3	64.67	0.94	F	D20	15.0	96.37	0.99	F
D - A14 South-East		0.3	3.61	0.21	A		16.9	99.30	1.00	F		200.7	1316.11	1.26	F		19.0	98.48	1.01	F		70.0	289.27	1.20	F
E - Unnamed Road North-East		0.0	3.79	0.03	A		0.2	10.93	0.14	B		0.4	17.51	0.30	C		0.1	9.86	0.10	A		0.1	12.26	0.09	B
2028 Peak Construction																									
A - A12 North		0.7	2.66	0.42	A		4.2	8.89	0.81	A		7.7	14.85	0.89	B		4.3	8.79	0.81	A		6.7	13.28	0.88	B
B - A14 North-West		0.1	5.06	0.10	A		0.3	6.16	0.21	A		0.2	5.32	0.19	A		0.2	6.17	0.15	A		0.2	5.06	0.14	A
C - A1156 South-West	D21	0.1	5.10	0.09	A	D22	9.3	90.87	0.95	F	D23	88.5	681.41	1.13	F	D24	43.3	238.46	1.15	F	D25	27.5	155.98	1.07	F
D - A14 South-East		0.3	4.07	0.24	A		43.7	227.16	1.14	F		246.4	1712.19	1.35	F		30.7	148.43	1.07	F		71.0	293.71	1.21	F
E - Unnamed Road North-East		0.0	4.10	0.04	A		0.2	12.52	0.16	B		0.4	17.99	0.30	C		0.1	10.51	0.11	B		0.1	12.70	0.09	B
2034 Reference Case																									
A - A12 North		0.7	2.49	0.42	A		4.4	9.13	0.82	A		21.2	38.35	0.96	E		6.3	12.23	0.87	B		15.0	27.45	0.95	D
B - A14 North-West		0.0	3.44	0.02	A		0.1	4.24	0.11	A		0.1	4.12	0.13	A		0.1	5.34	0.11	A		0.2	4.77	0.13	A
C - A1156 South-West	D26	0.0	3.70	0.04	A	D27	5.9	60.66	0.89	F	D28	65.1	466.63	1.08	F	D29	36.8	194.57	1.10	F	D30	48.3	252.73	1.16	F
D - A14 South-East		0.3	3.79	0.22	A		36.9	186.66	1.10	F		347.3	2630.77	1.54	F		101.3	434.83	1.33	F		145.3	634.67	1.52	F

E - Unnamed Road North-East	0.0	3.92	0.03	A	0.2	12.52	0.17	B	0.6	24.35	0.38	C	0.1	12.32	0.13	B	0.1	15.58	0.11	C
2034 Operational Forecast																				
A - A12 North	0.7	2.49	0.42	A	4.5	9.25	0.82	A	26.5	47.38	0.97	E	6.3	12.18	0.87	B	16.1	29.41	0.96	D
B - A14 North-West	0.0	3.44	0.02	A	0.1	4.25	0.11	A	0.1	4.09	0.13	A	0.1	5.36	0.11	A	0.1	4.75	0.13	A
C - A1156 South-West	0.0	3.70	0.04	A	6.2	62.41	0.89	F	65.4	467.91	1.08	F	36.2	191.08	1.10	F	47.0	249.12	1.15	F
D - A14 South-East	0.3	3.79	0.22	A	37.2	188.10	1.10	F	372.3	2932.14	1.61	F	100.0	428.32	1.33	F	146.5	642.72	1.52	F
E - Unnamed Road North-East	0.0	3.92	0.03	A	0.2	12.63	0.17	B	0.7	26.46	0.40	D	0.1	12.30	0.13	B	0.1	15.81	0.11	C

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / A14 / A1156 Seven Hills Interchange
Location	52.026165, 1.254641
Site number	21
Date	01/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	The entry to exit separation has been calculated for Arm C and Arm E, as it is the major arm with significant separation. Arm E (A14 North-West) has bypass for left turn movement. The circulating flow shall be added after receiving the flows.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D3	2019 Base Year	8-9 AM	FLAT	07:45	09:15	90	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D8	2023 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D13	2023 Early Years	8-9 AM	FLAT	07:45	09:15	90	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D18	2028 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D23	2028 Peak Construction	8-9 AM	FLAT	07:45	09:15	90	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D28	2034 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D31	2034 Operational Forecast	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D32	2034 Operational Forecast	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D33	2034 Operational Forecast	8-9 AM	FLAT	07:45	09:15	90	15	✓
D34	2034 Operational Forecast	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D35	2034 Operational Forecast	5-6 PM	ONE HOUR	16:45	18:15		15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	A14 North-West	
C	A1156 South-West	
D	A14 South-East	
E	Unnamed Road North-East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.40	9.60	5.5	24.5	160.0	41.0	
B - A14 North-West	2.80	4.80	5.1	40.4	160.0	36.0	
C - A1156 South-West	3.50	8.90	21.4	45.4	163.3	34.0	
D - A14 South-East	5.70	7.60	40.0	44.6	163.3	35.0	
E - Unnamed Road North-East	2.50	4.50	10.2	29.9	160.0	16.0	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	179	75.10
B - A14 North-West	362	128.00
C - A1156 South-West	844	80.70
D - A14 South-East	745	131.50
E - Unnamed Road North-East	1073	37.20

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
A - A12 North		
B - A14 North-West	✓	100
C - A1156 South-West		
D - A14 South-East		
E - Unnamed Road North-East		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-475
B - A14 North-West	None		
C - A1156 South-West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-550
D - A14 South-East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-515
E - Unnamed Road North-East	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	1.129	2652
B - A14 North-West	0.733	1626
C - A1156 South-West	0.888	1941
D - A14 South-East	0.971	2146
E - Unnamed Road North-East	0.675	1739

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	833	100.000
B - A14 North-West		ONE HOUR	✓	533	100.000

C - A1156 South-West	ONE HOUR	✓	170	100.000
D - A14 South-East	ONE HOUR	✓	228	100.000
E - Unnamed Road North-East	ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	577	65	190	1
	B - A14 North-West	513	8	3	0	9
	C - A1156 South-West	30	7	0	132	1
	D - A14 South-East	148	0	70	0	10
	E - Unnamed Road North-East	8	16	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	6	9	0
	B - A14 North-West	12	88	0	0	11
	C - A1156 South-West	0	0	0	2	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.41	2.68	0.7	A	764	1147
B - A14 North-West	0.02	3.82	0.0	A	395	28
C - A1156 South-West	0.17	3.91	0.2	A	156	234
D - A14 South-East	0.19	3.37	0.2	A	209	314
E - Unnamed Road North-East	0.03	4.02	0.0	A	23	34

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	627	627	157	0	386	122	2326	0.270	626	140	0.0	0.4	2.116	A
B - A14 North-West	324	15	4	386	0	247	1028	0.015	15	457	0.0	0.0	3.553	A
C - A1156 South-West	128	128	32	0	0	576	1359	0.094	128	104	0.0	0.1	2.924	A
D - A14 South-East	172	172	43	0	0	508	1559	0.110	171	243	0.0	0.1	2.595	A
E - Unnamed Road North-East	19	19	5	0	0	732	1161	0.016	19	16	0.0	0.0	3.150	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	749	749	187	0	461	146	2298	0.326	748	167	0.4	0.5	2.322	A
B - A14 North-West	387	18	4	461	0	296	1001	0.018	18	546	0.0	0.0	3.659	A
C - A1156 South-West	153	153	38	0	0	689	1253	0.122	153	124	0.1	0.1	3.270	A
D - A14 South-East	205	205	51	0	0	608	1457	0.141	205	290	0.1	0.2	2.873	A
E - Unnamed Road North-East	22	22	6	0	0	876	1061	0.021	22	19	0.0	0.0	3.465	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	917	917	229	0	585	179	2261	0.406	916	205	0.5	0.7	2.675	A
B - A14 North-West	473	22	6	565	0	362	965	0.023	22	669	0.0	0.0	3.814	A
C - A1156 South-West	187	187	47	0	0	844	1109	0.169	187	152	0.1	0.2	3.903	A
D - A14 South-East	251	251	63	0	0	745	1319	0.190	251	355	0.2	0.2	3.369	A
E - Unnamed Road North-East	28	28	7	0	0	1072	924	0.030	27	23	0.0	0.0	4.016	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	917	917	229	0	585	179	2261	0.406	917	205	0.7	0.7	2.677	A
B - A14 North-West	473	22	6	565	0	362	965	0.023	22	669	0.0	0.0	3.815	A
C - A1156 South-West	187	187	47	0	0	844	1108	0.169	187	152	0.2	0.2	3.908	A
D - A14 South-East	251	251	63	0	0	745	1319	0.190	251	356	0.2	0.2	3.371	A
E - Unnamed Road North-East	28	28	7	0	0	1073	923	0.030	28	23	0.0	0.0	4.019	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	749	749	187	0	461	147	2298	0.326	750	167	0.7	0.5	2.325	A
B - A14 North-West	387	18	4	461	0	296	1001	0.018	18	547	0.0	0.0	3.664	A
C - A1156 South-West	153	153	38	0	0	690	1252	0.122	153	124	0.2	0.1	3.275	A
D - A14 South-East	205	205	51	0	0	609	1456	0.141	205	291	0.2	0.2	2.879	A
E - Unnamed Road North-East	22	22	6	0	0	877	1060	0.021	23	19	0.0	0.0	3.469	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	749	749	187	0	461	147	2298	0.326	750	167	0.7	0.5	2.325	A
B - A14 North-West	387	18	4	461	0	296	1001	0.018	18	547	0.0	0.0	3.664	A
C - A1156 South-West	153	153	38	0	0	690	1252	0.122	153	124	0.2	0.1	3.275	A
D - A14 South-East	205	205	51	0	0	609	1456	0.141	205	291	0.2	0.2	2.879	A
E - Unnamed Road North-East	22	22	6	0	0	877	1060	0.021	23	19	0.0	0.0	3.469	A

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	627	627	157	0	386	123	2325	0.270	628	140	0.5	0.4	2.121	A
B - A14 North-West	324	15	4	386	0	248	1027	0.015	15	458	0.0	0.0	3.555	A
C - A1156 South-West	128	128	32	0	0	578	1357	0.094	128	104	0.1	0.1	2.929	A
D - A14 South-East	172	172	43	0	0	510	1557	0.110	172	243	0.2	0.1	2.600	A
E - Unnamed Road North-East	19	19	5	0	0	735	1160	0.016	19	16	0.0	0.0	3.157	A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	13.41	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	282	75.10
B - A14 North-West	705	128.00
C - A1156 South-West	1553	80.70
D - A14 South-East	1450	131.50
E - Unnamed Road North-East	1850	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1474	100.000
B - A14 North-West		ONE HOUR	✓	1201	100.000
C - A1156 South-West		ONE HOUR	✓	358	100.000
D - A14 South-East		ONE HOUR	✓	540	100.000
E - Unnamed Road North-East		ONE HOUR	✓	43	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1035	179	257	3
	B - A14 North-West	1112	2	60	0	27
	C - A1156 South-West	152	52	0	149	5
	D - A14 South-East	320	3	204	0	13
	E - Unnamed Road North-East	2	37	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	9	33
	B - A14 North-West	10	100	5	0	19
	C - A1156 South-West	3	12	0	3	100
	D - A14 South-East	4	33	1	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	6.93	3.1	A	1353	2029
B - A14 North-West	0.10	4.28	0.1	A	1090	123
C - A1156 South-West	0.79	33.70	3.5	D	329	493
D - A14 South-East	0.88	39.95	6.2	E	496	743
E - Unnamed Road North-East	0.12	10.21	0.1	B	39	59

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1110	1110	277	0	837	192	2242	0.495	1106	355	0.0	1.0	3.159	A
B - A14 North-West	894	67	17	837	0	480	1083	0.062	67	847	0.0	0.1	3.544	A
C - A1156 South-West	270	270	67	0	0	1059	874	0.308	268	334	0.0	0.4	5.924	A
D - A14 South-East	407	407	102	0	0	989	1073	0.379	404	305	0.0	0.6	5.364	A
E - Unnamed Road North-East	32	32	8	0	0	1261	708	0.046	32	36	0.0	0.0	5.323	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1325	1325	331	0	1000	229	2199	0.602	1323	424	1.0	1.5	4.097	A
B - A14 North-West	1068	80	20	1000	0	574	1022	0.078	80	1013	0.1	0.1	3.820	A
C - A1156 South-West	322	322	80	0	0	1266	715	0.450	320	400	0.4	0.8	9.090	A
D - A14 South-East	485	485	121	0	0	1183	906	0.536	483	365	0.6	1.1	8.478	A
E - Unnamed Road North-East	39	39	10	0	0	1509	579	0.067	39	43	0.0	0.1	6.665	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1623	1623	406	0	1224	277	2142	0.756	1617	508	1.5	3.0	6.729	A
B - A14 North-West	1308	98	24	1224	0	687	949	0.103	98	1237	0.1	0.1	4.230	A
C - A1156 South-West	394	394	99	0	0	1540	506	0.779	385	484	0.8	3.1	27.911	D
D - A14 South-East	595	595	149	0	0	1446	680	0.874	578	443	1.1	5.4	31.157	D
E - Unnamed Road North-East	47	47	12	0	0	1842	405	0.117	47	52	0.1	0.1	10.063	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1623	1623	406	0	1224	281	2142	0.758	1623	519	3.0	3.1	6.925	A
B - A14 North-West	1308	98	24	1224	0	702	939	0.104	98	1243	0.1	0.1	4.278	A
C - A1156 South-West	394	394	99	0	0	1553	496	0.794	393	490	3.1	3.5	33.700	D
D - A14 South-East	595	595	149	0	0	1451	676	0.880	591	447	5.4	6.2	39.953	E
E - Unnamed Road North-East	47	47	12	0	0	1851	400	0.118	47	53	0.1	0.1	10.208	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1325	1325	331	0	1000	235	2193	0.604	1331	442	3.1	1.5	4.205	A
B - A14 North-West	1068	80	20	1000	0	597	1007	0.079	80	1021	0.1	0.1	3.886	A
C - A1156 South-West	322	322	80	0	0	1286	700	0.460	332	409	3.5	0.9	10.053	B
D - A14 South-East	485	485	121	0	0	1190	900	0.540	505	371	6.2	1.2	9.571	A
E - Unnamed Road North-East	39	39	10	0	0	1523	572	0.068	39	44	0.1	0.1	6.757	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1110	1110	277	0	837	194	2239	0.496	1112	359	1.5	1.0	3.198	A
B - A14 North-West	894	67	17	837	0	485	1079	0.062	67	852	0.1	0.1	3.560	A
C - A1156 South-West	270	270	67	0	0	1066	868	0.310	271	337	0.9	0.5	6.046	A
D - A14 South-East	407	407	102	0	0	994	1068	0.381	409	307	1.2	0.6	5.481	A
E - Unnamed Road North-East	32	32	8	0	0	1269	704	0.046	32	36	0.1	0.0	5.359	A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	52.26	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	394	75.10
B - A14 North-West	910	128.00
C - A1156 South-West	1661	80.70
D - A14 South-East	1726	131.50
E - Unnamed Road North-East	2284	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1745	100.000
B - A14 North-West		FLAT	✓	1507	100.000
C - A1156 South-West		FLAT	✓	534	100.000
D - A14 South-East		FLAT	✓	583	100.000
E - Unnamed Road North-East		FLAT	✓	75	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1091	288	363	3
	B - A14 North-West	1379	6	113	0	9
	C - A1156 South-West	243	74	0	215	2
	D - A14 South-East	346	0	224	0	13
	E - Unnamed Road North-East	8	46	17	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	6	8	0
	B - A14 North-West	9	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	7	0	3	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	11.41	5.5	B	1745	2618
B - A14 North-West	0.14	4.59	0.2	A	1586	192
C - A1156 South-West	1.00	186.78	26.9	F	534	801
D - A14 South-East	1.00	187.87	29.6	F	583	874
E - Unnamed Road North-East	0.24	15.01	0.3	C	75	113

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1745	1745	436	0	1379	342	2071	0.843	1725	557	0.0	5.0	9.908	A
B - A14 North-West	1586	128	32	1379	0	772	938	0.136	127	1199	0.0	0.2	4.438	A
C - A1156 South-West	534	534	133	0	0	1471	556	0.960	499	622	0.0	8.7	48.437	E
D - A14 South-East	583	583	146	0	0	1552	595	0.980	542	564	0.0	10.2	50.620	F
E - Unnamed Road North-East	75	75	19	0	0	2041	328	0.229	74	26	0.0	0.3	14.103	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1745	1745	436	0	1379	349	2064	0.846	1744	575	5.0	5.2	11.184	B
B - A14 North-West	1586	128	32	1379	0	796	922	0.139	128	1214	0.2	0.2	4.535	A
C - A1156 South-West	534	534	133	0	0	1496	538	0.992	514	633	8.7	13.7	93.724	F
D - A14 South-East	583	583	146	0	0	1568	582	1.002	561	574	10.2	15.8	98.465	F
E - Unnamed Road North-East	75	75	19	0	0	2067	317	0.237	75	26	0.3	0.3	14.887	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1745	1745	436	0	1379	351	2062	0.846	1745	580	5.2	5.3	11.304	B
B - A14 North-West	1586	128	32	1379	0	803	917	0.140	128	1215	0.2	0.2	4.562	A
C - A1156 South-West	534	534	133	0	0	1499	535	0.998	518	635	13.7	17.6	122.405	F
D - A14 South-East	583	583	146	0	0	1569	582	1.003	566	576	15.8	20.0	127.068	F
E - Unnamed Road North-East	75	75	19	0	0	2069	316	0.238	75	27	0.3	0.3	14.955	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1745	1745	436	0	1379	352	2061	0.847	1745	582	5.3	5.4	11.356	B
B - A14 North-West	1586	128	32	1379	0	807	915	0.140	128	1215	0.2	0.2	4.575	A
C - A1156 South-West	534	534	133	0	0	1501	534	1.000	520	636	17.6	21.0	146.155	F
D - A14 South-East	583	583	146	0	0	1569	581	1.003	569	576	20.0	23.6	150.013	F
E - Unnamed Road North-East	75	75	19	0	0	2070	315	0.238	75	27	0.3	0.3	14.985	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1745	1745	436	0	1379	353	2060	0.847	1745	584	5.4	5.4	11.388	B
B - A14 North-West	1586	128	32	1379	0	809	913	0.140	128	1215	0.2	0.2	4.583	A
C - A1156 South-West	534	534	133	0	0	1502	533	1.002	522	637	21.0	24.0	167.315	F
D - A14 South-East	583	583	146	0	0	1569	581	1.003	570	577	23.6	26.7	169.939	F
E - Unnamed Road North-East	75	75	19	0	0	2071	315	0.238	75	27	0.3	0.3	15.001	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1745	1745	436	0	1379	353	2060	0.847	1745	585	5.4	5.5	11.409	B
B - A14 North-West	1586	128	32	1379	0	810	912	0.140	128	1215	0.2	0.2	4.589	A
C - A1156 South-West	534	534	133	0	0	1503	533	1.003	523	638	24.0	26.9	186.783	F
D - A14 South-East	583	583	146	0	0	1569	581	1.003	572	577	26.7	29.6	187.874	F
E - Unnamed Road North-East	75	75	19	0	0	2071	315	0.238	75	27	0.3	0.3	15.011	C

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	18.60	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	250	75.10
B - A14 North-West	845	128.00
C - A1156 South-West	1464	80.70
D - A14 South-East	1448	131.50
E - Unnamed Road North-East	1893	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1536	100.000
B - A14 North-West		ONE HOUR	✓	1167	100.000
C - A1156 South-West		ONE HOUR	✓	504	100.000
D - A14 South-East		ONE HOUR	✓	522	100.000
E - Unnamed Road North-East		ONE HOUR	✓	32	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	962	274	296	3
	B - A14 North-West	1087	4	42	0	34
	C - A1156 South-West	279	79	4	138	4
	D - A14 South-East	336	0	185	0	1
	E - Unnamed Road North-East	5	22	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	5	4	33
	B - A14 North-West	6	0	5	0	12
	C - A1156 South-West	3	3	0	1	0
	D - A14 South-East	6	0	2	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	6.85	3.2	A	1409	2114
B - A14 North-West	0.10	4.58	0.1	A	1060	110
C - A1156 South-West	0.96	74.00	11.0	F	462	694
D - A14 South-East	0.85	34.08	5.1	D	479	718
E - Unnamed Road North-East	0.09	9.66	0.1	A	29	44

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1156	1156	289	0	818	170	2299	0.503	1152	465	0.0	1.0	3.131	A
B - A14 North-West	870	60	15	818	0	574	1041	0.058	60	800	0.0	0.1	3.670	A
C - A1156 South-West	379	379	95	0	0	998	956	0.397	377	380	0.0	0.7	6.191	A
D - A14 South-East	393	393	98	0	0	987	1065	0.369	391	327	0.0	0.6	5.317	A
E - Unnamed Road North-East	24	24	6	0	0	1291	728	0.033	24	31	0.0	0.0	5.113	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1381	1381	345	0	977	203	2263	0.610	1379	556	1.0	1.5	4.063	A
B - A14 North-West	1039	72	18	977	0	687	969	0.074	72	957	0.1	0.1	4.013	A
C - A1156 South-West	453	453	113	0	0	1194	797	0.568	451	455	0.7	1.3	10.302	B
D - A14 South-East	469	469	117	0	0	1181	901	0.521	467	392	0.6	1.1	8.264	A
E - Unnamed Road North-East	29	29	7	0	0	1544	593	0.049	29	38	0.0	0.1	6.380	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	1691	423	0	1197	242	2216	0.762	1685	660	1.5	3.1	6.645	A
B - A14 North-West	1272	88	22	1197	0	814	888	0.099	88	1167	0.1	0.1	4.502	A
C - A1156 South-West	555	555	139	0	0	1452	588	0.943	528	552	1.3	8.1	46.954	E
D - A14 South-East	575	575	144	0	0	1444	678	0.847	561	473	1.1	4.6	27.890	D
E - Unnamed Road North-East	35	35	9	0	0	1881	413	0.085	35	46	0.1	0.1	9.517	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	1691	423	0	1197	247	2216	0.763	1691	676	3.1	3.2	6.851	A
B - A14 North-West	1272	88	22	1197	0	834	874	0.101	88	1173	0.1	0.1	4.578	A
C - A1156 South-West	555	555	139	0	0	1464	579	0.958	543	557	8.1	11.0	73.996	F
D - A14 South-East	575	575	144	0	0	1449	674	0.853	573	478	4.6	5.1	34.078	D
E - Unnamed Road North-East	35	35	9	0	0	1891	408	0.086	35	46	0.1	0.1	9.663	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1381	1381	345	0	977	215	2250	0.614	1387	590	3.2	1.6	4.203	A
B - A14 North-West	1039	72	18	977	0	733	940	0.077	72	969	0.1	0.1	4.150	A
C - A1156 South-West	453	453	113	0	0	1211	784	0.578	491	463	11.0	1.4	13.891	B
D - A14 South-East	469	469	117	0	0	1189	895	0.525	485	405	5.1	1.1	9.124	A
E - Unnamed Road North-East	29	29	7	0	0	1564	582	0.049	29	38	0.1	0.1	6.507	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1156	1156	289	0	818	172	2297	0.504	1159	471	1.6	1.0	3.169	A
B - A14 North-West	870	60	15	818	0	582	1036	0.058	60	805	0.1	0.1	3.692	A
C - A1156 South-West	379	379	95	0	0	1005	950	0.399	382	383	1.4	0.7	6.375	A
D - A14 South-East	393	393	98	0	0	993	1061	0.370	395	330	1.1	0.6	5.424	A
E - Unnamed Road North-East	24	24	6	0	0	1299	724	0.033	24	32	0.1	0.0	5.148	A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	22.17	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	348	75.10
B - A14 North-West	843	128.00
C - A1156 South-West	1518	80.70
D - A14 South-East	1476	131.50
E - Unnamed Road North-East	2068	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1607	100.000
B - A14 North-West		ONE HOUR	✓	1382	100.000
C - A1156 South-West		ONE HOUR	✓	484	100.000
D - A14 South-East		ONE HOUR	✓	625	100.000
E - Unnamed Road North-East		ONE HOUR	✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1002	226	377	1
	B - A14 North-West	1272	3	89	0	18
	C - A1156 South-West	201	77	0	182	24
	D - A14 South-East	358	0	267	0	0
	E - Unnamed Road North-East	0	16	5	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	3	3	1	0
	B - A14 North-West	3	33	0	0	11
	C - A1156 South-West	0	0	0	1	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	8.75	4.2	A	1475	2212
B - A14 North-West	0.13	4.46	0.1	A	1270	151
C - A1156 South-West	0.90	48.67	6.7	E	444	666
D - A14 South-East	0.98	76.24	14.2	F	574	860
E - Unnamed Road North-East	0.07	11.04	0.1	B	20	30

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1210	1210	302	0	958	237	2297	0.527	1205	419	0.0	1.1	3.284	A
B - A14 North-West	1042	83	21	958	0	573	1097	0.076	82	823	0.0	0.1	3.549	A
C - A1156 South-West	364	364	91	0	0	1034	968	0.377	362	440	0.0	0.6	5.921	A
D - A14 South-East	471	471	118	0	0	1007	1094	0.430	468	420	0.0	0.7	5.709	A
E - Unnamed Road North-East	17	17	4	0	0	1410	661	0.025	16	32	0.0	0.0	5.584	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1445	1445	361	0	1143	283	2247	0.643	1442	501	1.1	1.8	4.458	A
B - A14 North-West	1244	99	25	1143	0	685	1023	0.097	99	985	0.1	0.1	3.896	A
C - A1156 South-West	435	435	109	0	0	1237	808	0.538	433	526	0.6	1.1	9.535	A
D - A14 South-East	562	562	140	0	0	1204	931	0.604	559	502	0.7	1.5	9.608	A
E - Unnamed Road North-East	20	20	5	0	0	1686	530	0.037	20	39	0.0	0.0	7.050	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1769	1769	442	0	1400	341	2184	0.810	1760	589	1.8	4.1	8.310	A
B - A14 North-West	1524	121	30	1400	0	809	941	0.129	121	1200	0.1	0.1	4.387	A
C - A1156 South-West	533	533	133	0	0	1493	607	0.878	516	630	1.1	5.4	34.691	D
D - A14 South-East	688	688	172	0	0	1470	710	0.969	653	608	1.5	10.3	46.996	E
E - Unnamed Road North-East	24	24	6	0	0	2054	356	0.068	24	46	0.0	0.1	10.825	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1769	1769	442	0	1400	346	2179	0.812	1769	605	4.1	4.2	8.751	A
B - A14 North-West	1524	121	30	1400	0	830	927	0.131	121	1208	0.1	0.1	4.465	A
C - A1156 South-West	533	533	133	0	0	1510	594	0.898	528	640	5.4	6.7	48.667	E
D - A14 South-East	688	688	172	0	0	1477	705	0.976	673	614	10.3	14.2	76.241	F
E - Unnamed Road North-East	24	24	6	0	0	2067	350	0.069	24	47	0.1	0.1	11.038	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1445	1445	361	0	1143	293	2235	0.646	1454	541	4.2	1.9	4.662	A
B - A14 North-West	1244	99	25	1143	0	736	989	0.100	99	996	0.1	0.1	4.045	A
C - A1156 South-West	435	435	109	0	0	1275	778	0.559	457	551	6.7	1.3	11.921	B
D - A14 South-East	562	562	140	0	0	1214	923	0.609	612	514	14.2	1.6	13.486	B
E - Unnamed Road North-East	20	20	5	0	0	1708	520	0.038	20	40	0.1	0.0	7.194	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1210	1210	302	0	958	239	2294	0.527	1213	425	1.9	1.1	3.339	A
B - A14 North-West	1042	83	21	958	0	581	1092	0.076	83	829	0.1	0.1	3.568	A
C - A1156 South-West	364	364	91	0	0	1043	961	0.379	367	444	1.3	0.6	6.088	A
D - A14 South-East	471	471	118	0	0	1013	1089	0.432	474	423	1.6	0.8	5.883	A
E - Unnamed Road North-East	17	17	4	0	0	1419	657	0.025	17	33	0.0	0.0	5.627	A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	3.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	37	75.10
B - A14 North-West	222	128.00
C - A1156 South-West	857	80.70
D - A14 South-East	778	131.50
E - Unnamed Road North-East	968	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	902	100.000
B - A14 North-West		ONE HOUR	✓	559	100.000
C - A1156 South-West		ONE HOUR	✓	177	100.000
D - A14 South-East		ONE HOUR	✓	238	100.000
E - Unnamed Road North-East		ONE HOUR	✓	28	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	640	65	196	1
	B - A14 North-West	538	8	3	0	10
	C - A1156 South-West	30	7	0	139	1
	D - A14 South-East	153	0	75	0	11
	E - Unnamed Road North-East	9	18	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	6	9	0
	B - A14 North-West	11	88	0	0	11
	C - A1156 South-West	0	0	0	2	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.76	0.8	A	828	1242
B - A14 North-West	0.02	3.74	0.0	A	416	29
C - A1156 South-West	0.19	4.23	0.2	A	162	243
D - A14 South-East	0.21	3.63	0.3	A	219	328
E - Unnamed Road North-East	0.03	4.26	0.0	A	25	38

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	679	679	170	0	405	129	2367	0.287	678	144	0.0	0.4	2.129	A
B - A14 North-West	341	16	4	405	0	257	1052	0.015	16	505	0.0	0.0	3.472	A
C - A1156 South-West	133	133	33	0	0	630	1316	0.101	133	107	0.0	0.1	3.042	A
D - A14 South-East	179	179	45	0	0	558	1512	0.119	179	252	0.0	0.1	2.698	A
E - Unnamed Road North-East	21	21	5	0	0	789	1137	0.018	21	17	0.0	0.0	3.225	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	811	811	203	0	484	154	2338	0.347	811	172	0.4	0.5	2.358	A
B - A14 North-West	407	19	5	484	0	308	1024	0.018	19	604	0.0	0.0	3.581	A
C - A1156 South-West	159	159	40	0	0	753	1202	0.132	159	128	0.1	0.2	3.450	A
D - A14 South-East	214	214	54	0	0	667	1403	0.153	214	302	0.1	0.2	3.026	A
E - Unnamed Road North-East	25	25	6	0	0	944	1027	0.024	25	21	0.0	0.0	3.591	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	994	994	248	0	592	189	2297	0.432	993	211	0.5	0.8	2.758	A
B - A14 North-West	499	23	6	592	0	376	985	0.023	23	740	0.0	0.0	3.741	A
C - A1156 South-West	195	195	49	0	0	922	1046	0.186	194	157	0.2	0.2	4.227	A
D - A14 South-East	262	262	66	0	0	817	1254	0.209	262	369	0.2	0.3	3.628	A
E - Unnamed Road North-East	31	31	8	0	0	1156	877	0.035	31	26	0.0	0.0	4.251	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	994	994	248	0	592	189	2297	0.433	994	211	0.8	0.8	2.760	A
B - A14 North-West	499	23	6	592	0	377	985	0.023	23	741	0.0	0.0	3.742	A
C - A1156 South-West	195	195	49	0	0	923	1045	0.186	195	157	0.2	0.2	4.233	A
D - A14 South-East	262	262	66	0	0	818	1254	0.209	262	370	0.3	0.3	3.631	A
E - Unnamed Road North-East	31	31	8	0	0	1157	876	0.035	31	26	0.0	0.0	4.255	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	811	811	203	0	484	155	2337	0.347	812	172	0.8	0.5	2.361	A
B - A14 North-West	407	19	5	484	0	308	1023	0.018	19	606	0.0	0.0	3.585	A
C - A1156 South-West	159	159	40	0	0	755	1201	0.132	159	128	0.2	0.2	3.457	A
D - A14 South-East	214	214	54	0	0	668	1402	0.153	215	302	0.3	0.2	3.031	A
E - Unnamed Road North-East	25	25	6	0	0	946	1026	0.024	25	21	0.0	0.0	3.595	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	679	679	170	0	405	130	2366	0.287	680	144	0.5	0.4	2.134	A
B - A14 North-West	341	16	4	405	0	258	1052	0.015	16	507	0.0	0.0	3.477	A
C - A1156 South-West	133	133	33	0	0	632	1314	0.101	133	107	0.2	0.1	3.048	A
D - A14 South-East	179	179	45	0	0	560	1510	0.119	180	253	0.2	0.1	2.704	A
E - Unnamed Road North-East	21	21	5	0	0	792	1135	0.018	21	18	0.0	0.0	3.233	A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	25.50	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	123	75.10
B - A14 North-West	572	128.00
C - A1156 South-West	1637	80.70
D - A14 South-East	1563	131.50
E - Unnamed Road North-East	1813	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1559	100.000
B - A14 North-West		ONE HOUR	✓	1267	100.000
C - A1156 South-West		ONE HOUR	✓	387	100.000
D - A14 South-East		ONE HOUR	✓	534	100.000
E - Unnamed Road North-East		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1093	194	269	3
	B - A14 North-West	1175	2	60	0	30
	C - A1156 South-West	162	52	0	168	6
	D - A14 South-East	329	3	188	0	14
	E - Unnamed Road North-East	2	41	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	10	33
	B - A14 North-West	10	100	5	0	19
	C - A1156 South-West	2	12	0	3	100
	D - A14 South-East	5	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	8.65	4.0	A	1431	2147
B - A14 North-West	0.11	4.31	0.1	A	1147	127
C - A1156 South-West	0.96	88.98	10.2	F	355	533
D - A14 South-East	0.98	84.44	13.5	F	490	735
E - Unnamed Road North-East	0.16	12.72	0.2	B	44	66

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1174	1174	294	0	885	209	2237	0.525	1170	368	0.0	1.1	3.359	A
B - A14 North-West	941	69	17	885	0	509	1080	0.064	69	893	0.0	0.1	3.560	A
C - A1156 South-West	292	292	73	0	0	1113	830	0.351	289	334	0.0	0.5	6.632	A
D - A14 South-East	402	402	101	0	0	1047	1010	0.398	400	328	0.0	0.7	5.869	A
E - Unnamed Road North-East	36	36	9	0	0	1339	665	0.054	36	40	0.0	0.1	5.718	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1402	1402	350	0	1056	251	2190	0.640	1399	440	1.1	1.8	4.536	A
B - A14 North-West	1124	83	21	1056	0	608	1015	0.081	83	1068	0.1	0.1	3.862	A
C - A1156 South-West	348	348	87	0	0	1331	664	0.524	346	399	0.5	1.1	11.235	B
D - A14 South-East	480	480	120	0	0	1252	839	0.573	478	393	0.7	1.3	9.905	A
E - Unnamed Road North-East	43	43	11	0	0	1602	526	0.082	43	48	0.1	0.1	7.452	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1717	1717	429	0	1294	296	2132	0.803	1708	512	1.8	3.9	8.221	A
B - A14 North-West	1376	101	25	1294	0	707	950	0.107	101	1302	0.1	0.1	4.243	A
C - A1156 South-West	426	426	107	0	0	1606	455	0.937	402	477	1.1	7.1	53.931	F
D - A14 South-East	588	588	147	0	0	1529	607	0.969	555	471	1.3	9.7	51.488	F
E - Unnamed Road North-East	53	53	13	0	0	1948	342	0.154	52	57	0.1	0.2	12.396	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1717	1717	429	0	1294	302	2132	0.806	1717	528	3.9	4.0	8.648	A
B - A14 North-West	1376	101	25	1294	0	729	935	0.108	101	1309	0.1	0.1	4.315	A
C - A1156 South-West	426	426	107	0	0	1624	442	0.965	414	485	7.1	10.2	88.983	F
D - A14 South-East	588	588	147	0	0	1536	601	0.978	573	477	9.7	13.5	84.438	F
E - Unnamed Road North-East	53	53	13	0	0	1961	335	0.157	53	58	0.2	0.2	12.722	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1402	1402	350	0	1056	269	2169	0.646	1411	488	4.0	1.9	4.798	A
B - A14 North-West	1124	83	21	1056	0	674	971	0.085	83	1082	0.1	0.1	4.051	A
C - A1156 South-West	348	348	87	0	0	1372	634	0.550	384	419	10.2	1.3	16.469	C
D - A14 South-East	480	480	120	0	0	1262	830	0.579	529	411	13.5	1.4	13.872	B
E - Unnamed Road North-East	43	43	11	0	0	1630	511	0.084	43	50	0.2	0.1	7.698	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1174	1174	294	0	885	212	2234	0.526	1177	374	1.9	1.1	3.417	A
B - A14 North-West	941	69	17	885	0	517	1075	0.064	69	899	0.1	0.1	3.579	A
C - A1156 South-West	292	292	73	0	0	1122	823	0.354	294	337	1.3	0.6	6.849	A
D - A14 South-East	402	402	101	0	0	1053	1005	0.400	405	332	1.4	0.7	6.031	A
E - Unnamed Road North-East	36	36	9	0	0	1349	660	0.054	36	40	0.1	0.1	5.772	A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	203.44	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	161	75.10
B - A14 North-West	797	128.00
C - A1156 South-West	1897	80.70
D - A14 South-East	2135	131.50
E - Unnamed Road North-East	2473	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1882	100.000
B - A14 North-West		FLAT	✓	1604	100.000
C - A1156 South-West		FLAT	✓	596	100.000
D - A14 South-East		FLAT	✓	620	100.000
E - Unnamed Road North-East		FLAT	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1158	347	374	3
	B - A14 North-West	1475	6	113	0	10
	C - A1156 South-West	264	74	0	256	2
	D - A14 South-East	357	0	248	0	14
	E - Unnamed Road North-East	9	51	19	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	5	8	0
	B - A14 North-West	9	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	17.73	9.1	C	1882	2823
B - A14 North-West	0.14	4.42	0.2	A	1689	193
C - A1156 South-West	1.14	735.26	114.4	F	596	894
D - A14 South-East	1.16	835.47	133.0	F	620	930
E - Unnamed Road North-East	0.31	19.43	0.4	C	83	125

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1882	1882	471	0	1475	363	2088	0.902	1851	541	0.0	7.8	13.776	B
B - A14 North-West	1689	129	32	1475	0	775	950	0.136	128	1258	0.0	0.2	4.376	A
C - A1156 South-West	596	596	149	0	0	1520	538	1.108	514	684	0.0	20.7	89.196	F
D - A14 South-East	620	620	155	0	0	1675	551	1.124	528	593	0.0	22.9	94.123	F
E - Unnamed Road North-East	83	83	21	0	0	2187	283	0.294	82	27	0.0	0.4	17.716	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1882	1882	471	0	1475	367	2084	0.903	1880	545	7.8	8.5	17.122	C
B - A14 North-West	1689	129	32	1475	0	783	945	0.136	129	1278	0.2	0.2	4.410	A
C - A1156 South-West	596	596	149	0	0	1540	524	1.139	520	691	20.7	39.7	225.336	F
D - A14 South-East	620	620	155	0	0	1700	534	1.161	531	602	22.9	45.0	246.159	F
E - Unnamed Road North-East	83	83	21	0	0	2219	270	0.309	83	28	0.4	0.4	19.267	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1882	1882	471	0	1475	367	2083	0.903	1881	546	8.5	8.8	17.473	C
B - A14 North-West	1689	129	32	1475	0	784	944	0.137	129	1279	0.2	0.2	4.414	A
C - A1156 South-West	596	596	149	0	0	1542	523	1.141	521	692	39.7	58.4	352.389	F
D - A14 South-East	620	620	155	0	0	1702	533	1.164	532	602	45.0	67.1	392.568	F
E - Unnamed Road North-East	83	83	21	0	0	2221	269	0.310	83	28	0.4	0.4	19.377	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1882	1882	471	0	1475	367	2083	0.904	1882	546	8.8	8.9	17.613	C
B - A14 North-West	1689	129	32	1475	0	785	944	0.137	129	1279	0.2	0.2	4.416	A
C - A1156 South-West	596	596	149	0	0	1542	522	1.142	522	692	58.4	77.1	479.796	F
D - A14 South-East	620	620	155	0	0	1702	532	1.164	532	603	67.1	89.1	539.846	F
E - Unnamed Road North-East	83	83	21	0	0	2221	269	0.310	83	28	0.4	0.4	19.409	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1882	1882	471	0	1475	367	2083	0.904	1882	547	8.9	9.0	17.692	C
B - A14 North-West	1689	129	32	1475	0	785	944	0.137	129	1279	0.2	0.2	4.416	A
C - A1156 South-West	596	596	149	0	0	1542	522	1.142	522	692	77.1	95.8	607.462	F
D - A14 South-East	620	620	155	0	0	1702	532	1.164	532	603	89.1	111.0	687.561	F
E - Unnamed Road North-East	83	83	21	0	0	2222	269	0.310	83	28	0.4	0.4	19.422	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1882	1882	471	0	1475	367	2083	0.904	1882	547	9.0	9.1	17.734	C
B - A14 North-West	1689	129	32	1475	0	785	944	0.137	129	1279	0.2	0.2	4.417	A
C - A1156 South-West	596	596	149	0	0	1543	522	1.142	522	692	95.8	114.4	735.256	F
D - A14 South-East	620	620	155	0	0	1702	532	1.165	532	603	111.0	133.0	835.474	F
E - Unnamed Road North-East	83	83	21	0	0	2222	269	0.310	83	28	0.4	0.4	19.431	C

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	66.54	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	103	75.10
B - A14 North-West	800	128.00
C - A1156 South-West	1613	80.70
D - A14 South-East	1887	131.50
E - Unnamed Road North-East	2213	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1705	100.000
B - A14 North-West		ONE HOUR	✓	1264	100.000
C - A1156 South-West		ONE HOUR	✓	550	100.000
D - A14 South-East		ONE HOUR	✓	607	100.000
E - Unnamed Road North-East		ONE HOUR	✓	36	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1045	343	313	3
	B - A14 North-West	1180	4	42	0	38
	C - A1156 South-West	305	79	4	157	4
	D - A14 South-East	358	0	249	0	1
	E - Unnamed Road North-East	6	24	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	4	5	33
	B - A14 North-West	6	0	5	0	12
	C - A1156 South-West	2	3	0	1	0
	D - A14 South-East	6	0	0	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	10.02	5.1	B	1565	2347
B - A14 North-West	0.10	5.01	0.1	A	1146	115
C - A1156 South-West	1.13	219.30	40.1	F	504	756
D - A14 South-East	1.14	228.49	47.4	F	557	836
E - Unnamed Road North-East	0.12	12.12	0.1	B	33	49

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1284	1284	321	0	888	188	2309	0.556	1279	500	0.0	1.2	3.478	A
B - A14 North-West	940	63	16	888	0	624	1014	0.062	63	864	0.0	0.1	3.784	A
C - A1156 South-West	414	414	103	0	0	1078	891	0.464	410	479	0.0	0.9	7.432	A
D - A14 South-East	457	457	114	0	0	1103	977	0.468	454	355	0.0	0.9	6.836	A
E - Unnamed Road North-East	27	27	7	0	0	1431	652	0.041	27	35	0.0	0.0	5.754	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1533	1533	383	0	1061	224	2268	0.676	1530	596	1.2	2.1	4.853	A
B - A14 North-West	1123	75	19	1061	0	745	937	0.080	75	1033	0.1	0.1	4.180	A
C - A1156 South-West	494	494	124	0	0	1288	726	0.680	489	572	0.9	2.0	14.900	B
D - A14 South-East	546	546	136	0	0	1319	812	0.672	542	424	0.9	2.0	13.105	B
E - Unnamed Road North-East	32	32	8	0	0	1712	516	0.062	32	42	0.0	0.1	7.441	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1877	1877	469	0	1299	252	2236	0.839	1866	636	2.1	4.9	9.434	A
B - A14 North-West	1375	92	23	1299	0	796	903	0.102	92	1250	0.1	0.1	4.437	A
C - A1156 South-West	605	605	151	0	0	1520	544	1.112	526	662	2.0	21.9	100.193	F
D - A14 South-East	669	669	167	0	0	1609	591	1.131	574	497	2.0	25.7	103.786	F
E - Unnamed Road North-East	39	39	10	0	0	2067	342	0.115	39	51	0.1	0.1	11.860	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1877	1877	469	0	1299	254	2234	0.840	1877	645	4.9	5.1	10.020	B
B - A14 North-West	1375	92	23	1299	0	806	897	0.103	92	1258	0.1	0.1	4.473	A
C - A1156 South-West	605	605	151	0	0	1532	535	1.130	532	668	21.9	40.1	219.301	F
D - A14 South-East	669	669	167	0	0	1618	584	1.145	582	501	25.7	47.4	228.491	F
E - Unnamed Road North-East	39	39	10	0	0	2080	336	0.117	39	51	0.1	0.1	12.125	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1533	1533	383	0	1061	264	2225	0.689	1544	777	5.1	2.3	5.371	A
B - A14 North-West	1123	75	19	1061	0	965	794	0.095	75	1061	0.1	0.1	5.009	A
C - A1156 South-West	494	494	124	0	0	1406	635	0.778	619	652	40.1	8.7	149.307	F
D - A14 South-East	546	546	136	0	0	1332	802	0.681	726	464	47.4	2.4	95.037	F
E - Unnamed Road North-East	32	32	8	0	0	1765	491	0.065	32	43	0.1	0.1	7.853	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1284	1284	321	0	888	199	2297	0.559	1288	524	2.3	1.3	3.583	A
B - A14 North-West	940	63	16	888	0	660	992	0.064	63	874	0.1	0.1	3.880	A
C - A1156 South-West	414	414	103	0	0	1089	883	0.469	445	485	8.7	0.9	8.817	A
D - A14 South-East	457	457	114	0	0	1111	971	0.471	463	367	2.4	0.9	7.176	A
E - Unnamed Road North-East	27	27	7	0	0	1451	643	0.042	27	36	0.1	0.0	5.843	A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	68.08	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	153	75.10
B - A14 North-West	695	128.00
C - A1156 South-West	1621	80.70
D - A14 South-East	1944	131.50
E - Unnamed Road North-East	2358	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1738	100.000
B - A14 North-West		ONE HOUR	✓	1382	100.000
C - A1156 South-West		ONE HOUR	✓	544	100.000
D - A14 South-East		ONE HOUR	✓	675	100.000
E - Unnamed Road North-East		ONE HOUR	✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1115	228	393	1
	B - A14 North-West	1270	3	89	0	20
	C - A1156 South-West	230	77	0	210	27
	D - A14 South-East	343	0	333	0	0
	E - Unnamed Road North-East	0	18	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	3	3	1	0
	B - A14 North-West	4	33	0	0	11
	C - A1156 South-West	0	0	0	1	0
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	12.88	6.6	B	1595	2392
B - A14 North-West	0.13	4.71	0.1	A	1276	154
C - A1156 South-West	1.10	187.54	33.7	F	499	749
D - A14 South-East	1.17	248.59	57.4	F	620	929
E - Unnamed Road North-East	0.09	13.05	0.1	B	22	34

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1308	1308	327	0	956	261	2297	0.569	1303	429	0.0	1.3	3.601	A
B - A14 North-West	1047	84	21	956	0	606	1093	0.077	84	909	0.0	0.1	3.567	A
C - A1156 South-West	410	410	102	0	0	1109	903	0.454	406	490	0.0	0.8	7.208	A
D - A14 South-East	508	508	127	0	0	1094	1013	0.502	504	452	0.0	1.0	13.031	A
E - Unnamed Road North-East	18	18	5	0	0	1528	604	0.031	18	36	0.0	0.0	6.146	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1562	1562	391	0	1142	312	2241	0.697	1559	511	1.3	2.3	5.248	A
B - A14 North-West	1250	101	25	1142	0	722	1013	0.099	101	1088	0.1	0.1	3.943	A
C - A1156 South-West	489	489	122	0	0	1325	736	0.665	485	585	0.8	1.9	14.108	B
D - A14 South-East	607	607	152	0	0	1309	855	0.710	602	541	1.0	2.3	13.940	B
E - Unnamed Road North-East	22	22	6	0	0	1827	474	0.046	22	43	0.0	0.0	7.966	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1398	354	2193	0.873	1898	546	2.3	6.2	11.628	B
B - A14 North-West	1531	123	31	1398	0	777	976	0.126	123	1316	0.1	0.1	4.220	A
C - A1156 South-West	599	599	150	0	0	1562	554	1.082	531	663	1.9	18.9	88.787	F
D - A14 South-East	743	743	186	0	0	1594	646	1.151	631	635	2.3	30.4	109.518	F
E - Unnamed Road North-East	27	27	7	0	0	2203	310	0.087	27	49	0.0	0.1	12.681	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1398	358	2188	0.874	1912	552	6.2	6.6	12.878	B
B - A14 North-West	1531	123	31	1398	0	787	970	0.127	123	1326	0.1	0.1	4.253	A
C - A1156 South-West	599	599	150	0	0	1574	545	1.100	540	668	18.9	33.7	187.537	F
D - A14 South-East	743	743	186	0	0	1606	638	1.166	636	642	30.4	57.4	248.586	F
E - Unnamed Road North-East	27	27	7	0	0	2221	303	0.089	27	50	0.1	0.1	13.054	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1562	1562	391	0	1142	365	2182	0.716	1578	675	6.6	2.6	6.122	A
B - A14 North-West	1250	101	25	1142	0	939	865	0.116	101	1118	0.1	0.1	4.707	A
C - A1156 South-West	489	489	122	0	0	1450	639	0.765	607	697	33.7	4.3	112.329	F
D - A14 South-East	607	607	152	0	0	1324	844	0.720	822	592	57.4	3.6	136.816	F
E - Unnamed Road North-East	22	22	6	0	0	1894	445	0.049	22	49	0.1	0.1	8.519	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1308	1308	327	0	956	269	2289	0.572	1313	443	2.6	1.3	3.708	A
B - A14 North-West	1047	84	21	956	0	628	1078	0.078	85	919	0.1	0.1	3.622	A
C - A1156 South-West	410	410	102	0	0	1123	892	0.459	424	499	4.3	0.9	7.910	A
D - A14 South-East	508	508	127	0	0	1103	1006	0.505	519	461	3.6	1.0	7.537	A
E - Unnamed Road North-East	18	18	5	0	0	1546	596	0.031	19	37	0.1	0.0	6.232	A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	3.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	39	75.10
B - A14 North-West	231	128.00
C - A1156 South-West	870	80.70
D - A14 South-East	793	131.50
E - Unnamed Road North-East	982	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	914	100.000
B - A14 North-West		ONE HOUR	✓	626	100.000
C - A1156 South-West		ONE HOUR	✓	177	100.000
D - A14 South-East		ONE HOUR	✓	246	100.000
E - Unnamed Road North-East		ONE HOUR	✓	28	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	644	73	196	1
	B - A14 North-West	603	8	5	0	10
	C - A1156 South-West	30	7	0	139	1
	D - A14 South-East	161	0	75	0	11
	E - Unnamed Road North-East	9	18	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	13	88	20	0	11
	C - A1156 South-West	0	0	0	2	100
	D - A14 South-East	7	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.44	2.79	0.8	A	839	1259
B - A14 North-West	0.03	3.81	0.0	A	488	32
C - A1156 South-West	0.19	4.31	0.2	A	162	243
D - A14 South-East	0.22	3.77	0.3	A	226	339
E - Unnamed Road North-East	0.04	4.31	0.0	A	25	38

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	688	688	172	0	454	130	2366	0.291	687	150	0.0	0.4	2.141	A
B - A14 North-West	384	17	4	454	0	263	1039	0.017	17	508	0.0	0.0	3.522	A
C - A1156 South-West	133	133	33	0	0	639	1305	0.102	133	115	0.0	0.1	3.071	A
D - A14 South-East	185	185	46	0	0	568	1485	0.125	185	252	0.0	0.1	2.767	A
E - Unnamed Road North-East	21	21	5	0	0	800	1128	0.019	21	17	0.0	0.0	3.250	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	822	822	205	0	542	156	2336	0.352	821	179	0.4	0.5	2.376	A
B - A14 North-West	458	21	5	542	0	315	1010	0.020	21	608	0.0	0.0	3.637	A
C - A1156 South-West	159	159	40	0	0	764	1189	0.134	159	137	0.1	0.2	3.493	A
D - A14 South-East	221	221	55	0	0	680	1376	0.161	221	302	0.1	0.2	3.118	A
E - Unnamed Road North-East	25	25	6	0	0	957	1017	0.025	25	21	0.0	0.0	3.627	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1007	1007	252	0	664	191	2295	0.439	1006	219	0.5	0.8	2.790	A
B - A14 North-West	561	25	6	664	0	385	971	0.026	25	745	0.0	0.0	3.807	A
C - A1156 South-West	195	195	49	0	0	935	1031	0.189	194	168	0.2	0.2	4.301	A
D - A14 South-East	271	271	68	0	0	832	1226	0.221	271	369	0.2	0.3	3.770	A
E - Unnamed Road North-East	31	31	8	0	0	1171	866	0.035	31	26	0.0	0.0	4.310	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1007	1007	252	0	664	191	2295	0.439	1007	220	0.8	0.8	2.793	A
B - A14 North-West	561	25	6	664	0	386	970	0.026	25	745	0.0	0.0	3.808	A
C - A1156 South-West	195	195	49	0	0	936	1030	0.189	195	168	0.2	0.2	4.307	A
D - A14 South-East	271	271	68	0	0	833	1225	0.221	271	370	0.3	0.3	3.773	A
E - Unnamed Road North-East	31	31	8	0	0	1172	865	0.035	31	26	0.0	0.0	4.315	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	822	822	205	0	542	157	2336	0.352	823	180	0.8	0.5	2.380	A
B - A14 North-West	458	21	5	542	0	316	1010	0.020	21	609	0.0	0.0	3.642	A
C - A1156 South-West	159	159	40	0	0	766	1188	0.134	159	137	0.2	0.2	3.502	A
D - A14 South-East	221	221	55	0	0	681	1374	0.161	222	302	0.3	0.2	3.123	A
E - Unnamed Road North-East	25	25	6	0	0	959	1016	0.025	25	21	0.0	0.0	3.635	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	688	688	172	0	454	131	2366	0.291	689	150	0.5	0.4	2.149	A
B - A14 North-West	384	17	4	454	0	264	1039	0.017	17	510	0.0	0.0	3.527	A
C - A1156 South-West	133	133	33	0	0	641	1303	0.102	133	115	0.2	0.1	3.077	A
D - A14 South-East	185	185	46	0	0	570	1483	0.125	186	253	0.2	0.1	2.776	A
E - Unnamed Road North-East	21	21	5	0	0	802	1126	0.019	21	18	0.0	0.0	3.256	A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	43.49	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	144	75.10
B - A14 North-West	610	128.00
C - A1156 South-West	1662	80.70
D - A14 South-East	1609	131.50
E - Unnamed Road North-East	1877	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1616	100.000
B - A14 North-West		ONE HOUR	✓	1336	100.000
C - A1156 South-West		ONE HOUR	✓	387	100.000
D - A14 South-East		ONE HOUR	✓	548	100.000
E - Unnamed Road North-East		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1105	238	270	3
	B - A14 North-West	1239	2	65	0	30
	C - A1156 South-West	162	52	0	168	6
	D - A14 South-East	353	3	178	0	14
	E - Unnamed Road North-East	2	41	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	9	33
	B - A14 North-West	13	100	6	0	19
	C - A1156 South-West	2	12	0	3	100
	D - A14 South-East	8	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	10.33	5.0	B	1483	2225
B - A14 North-West	0.11	4.46	0.1	A	1239	133
C - A1156 South-West	0.99	103.61	12.0	F	355	533
D - A14 South-East	1.12	204.89	38.3	F	503	755
E - Unnamed Road North-East	0.17	14.24	0.2	B	44	66

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1217	1217	304	0	933	213	2230	0.546	1212	386	0.0	1.2	3.522	A
B - A14 North-West	1016	73	18	933	0	527	1054	0.069	73	902	0.0	0.1	3.669	A
C - A1156 South-West	292	292	73	0	0	1139	803	0.363	289	363	0.0	0.6	6.977	A
D - A14 South-East	413	413	103	0	0	1092	952	0.434	410	329	0.0	0.8	6.598	A
E - Unnamed Road North-East	36	36	9	0	0	1385	640	0.056	36	40	0.0	0.1	5.956	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1453	1453	363	0	1114	255	2183	0.666	1450	461	1.2	2.0	4.893	A
B - A14 North-West	1213	87	22	1114	0	629	986	0.088	87	1079	0.1	0.1	4.004	A
C - A1156 South-West	348	348	87	0	0	1362	634	0.549	346	434	0.6	1.2	12.386	B
D - A14 South-East	493	493	123	0	0	1307	778	0.633	489	393	0.8	1.7	12.295	B
E - Unnamed Road North-East	43	43	11	0	0	1657	498	0.086	43	48	0.1	0.1	7.898	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1780	1780	445	0	1364	299	2132	0.835	1769	507	2.0	4.7	9.619	A
B - A14 North-West	1486	107	27	1364	0	700	940	0.114	107	1312	0.1	0.1	4.321	A
C - A1156 South-West	426	426	107	0	0	1614	443	0.962	399	506	1.2	8.1	60.892	F
D - A14 South-East	604	604	151	0	0	1594	546	1.106	526	470	1.7	21.1	96.119	F
E - Unnamed Road North-East	53	53	13	0	0	2012	313	0.168	52	56	0.1	0.2	13.755	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1780	1780	445	0	1364	305	2126	0.837	1779	518	4.7	5.0	10.325	B
B - A14 North-West	1486	107	27	1364	0	716	929	0.115	107	1322	0.1	0.1	4.379	A
C - A1156 South-West	426	426	107	0	0	1627	433	0.985	411	511	8.1	12.0	103.614	F
D - A14 South-East	604	604	151	0	0	1603	539	1.121	535	477	21.1	38.3	204.887	F
E - Unnamed Road North-East	53	53	13	0	0	2027	305	0.172	53	57	0.2	0.2	14.236	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1453	1453	363	0	1114	278	2157	0.674	1465	575	5.0	2.1	5.286	A
B - A14 North-West	1213	87	22	1114	0	766	895	0.097	87	1096	0.1	0.1	4.458	A
C - A1156 South-West	348	348	87	0	0	1473	550	0.633	389	484	12.0	1.8	27.470	D
D - A14 South-East	493	493	123	0	0	1319	768	0.642	638	415	38.3	1.9	58.643	F
E - Unnamed Road North-East	43	43	11	0	0	1691	481	0.089	43	52	0.2	0.1	8.225	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1217	1217	304	0	933	217	2226	0.547	1221	394	2.1	1.2	3.595	A
B - A14 North-West	1016	73	18	933	0	538	1046	0.070	73	909	0.1	0.1	3.698	A
C - A1156 South-West	292	292	73	0	0	1150	795	0.367	297	367	1.8	0.6	7.301	A
D - A14 South-East	413	413	103	0	0	1100	946	0.436	417	334	1.9	0.8	6.868	A
E - Unnamed Road North-East	36	36	9	0	0	1397	634	0.057	36	40	0.1	0.1	6.023	A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	266.05	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	165	75.10
B - A14 North-West	818	128.00
C - A1156 South-West	1919	80.70
D - A14 South-East	2135	131.50
E - Unnamed Road North-East	2475	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1893	100.000
B - A14 North-West		FLAT	✓	1589	100.000
C - A1156 South-West		FLAT	✓	593	100.000
D - A14 South-East		FLAT	✓	631	100.000
E - Unnamed Road North-East		FLAT	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1174	340	376	3
	B - A14 North-West	1456	6	117	0	10
	C - A1156 South-West	264	75	0	252	2
	D - A14 South-East	367	0	249	0	14
	E - Unnamed Road North-East	9	51	19	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	9	5	9	0
	B - A14 North-West	13	67	3	0	0
	C - A1156 South-West	7	7	0	0	0
	D - A14 South-East	9	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	20.16	10.3	C	1893	2840
B - A14 North-West	0.14	4.49	0.2	A	1691	199
C - A1156 South-West	1.17	853.40	129.7	F	593	890
D - A14 South-East	1.24	1207.49	184.2	F	631	946
E - Unnamed Road North-East	0.32	20.55	0.5	C	83	125

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1893	1893	473	0	1456	359	2073	0.913	1859	529	0.0	8.7	14.974	B
B - A14 North-West	1691	133	33	1456	0	756	937	0.142	132	1272	0.0	0.2	4.469	A
C - A1156 South-West	593	593	148	0	0	1526	523	1.134	501	671	0.0	23.0	98.989	F
D - A14 South-East	631	631	158	0	0	1686	528	1.194	511	587	0.0	29.9	120.590	F
E - Unnamed Road North-East	83	83	21	0	0	2191	275	0.303	82	27	0.0	0.4	18.501	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1893	1893	473	0	1456	362	2069	0.915	1890	530	8.7	9.6	19.233	C
B - A14 North-West	1691	133	33	1456	0	759	935	0.142	133	1293	0.2	0.2	4.488	A
C - A1156 South-West	593	593	148	0	0	1545	510	1.164	507	676	23.0	44.5	255.879	F
D - A14 South-East	631	631	158	0	0	1713	509	1.239	508	596	29.9	60.6	335.990	F
E - Unnamed Road North-East	83	83	21	0	0	2225	260	0.320	83	27	0.4	0.5	20.333	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1893	1893	473	0	1456	362	2069	0.915	1892	530	9.6	9.9	19.754	C
B - A14 North-West	1691	133	33	1456	0	760	935	0.142	133	1294	0.2	0.2	4.489	A
C - A1156 South-West	593	593	148	0	0	1546	509	1.166	508	676	44.5	65.9	404.530	F
D - A14 South-East	631	631	158	0	0	1714	508	1.242	507	596	60.6	91.5	551.903	F
E - Unnamed Road North-East	83	83	21	0	0	2227	259	0.322	83	27	0.5	0.5	20.478	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1893	1893	473	0	1456	362	2069	0.915	1893	530	9.9	10.1	19.970	C
B - A14 North-West	1691	133	33	1456	0	760	935	0.142	133	1295	0.2	0.2	4.489	A
C - A1156 South-West	593	593	148	0	0	1546	509	1.166	508	676	65.9	87.1	553.851	F
D - A14 South-East	631	631	158	0	0	1715	507	1.243	507	596	91.5	122.4	769.818	F
E - Unnamed Road North-East	83	83	21	0	0	2228	259	0.322	83	27	0.5	0.5	20.521	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1893	1893	473	0	1456	362	2069	0.915	1893	530	10.1	10.2	20.089	C
B - A14 North-West	1691	133	33	1456	0	760	935	0.142	133	1295	0.2	0.2	4.489	A
C - A1156 South-West	593	593	148	0	0	1546	509	1.167	508	676	87.1	108.4	703.538	F
D - A14 South-East	631	631	158	0	0	1715	507	1.244	507	597	122.4	153.3	988.508	F
E - Unnamed Road North-East	83	83	21	0	0	2228	259	0.322	83	27	0.5	0.5	20.540	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1893	1893	473	0	1456	362	2069	0.915	1893	530	10.2	10.3	20.164	C
B - A14 North-West	1691	133	33	1456	0	760	935	0.142	133	1295	0.2	0.2	4.490	A
C - A1156 South-West	593	593	148	0	0	1546	508	1.167	508	676	108.4	129.7	853.397	F
D - A14 South-East	631	631	158	0	0	1715	507	1.244	507	597	153.3	184.2	1207.495	F
E - Unnamed Road North-East	83	83	21	0	0	2229	258	0.322	83	27	0.5	0.5	20.551	C

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	93.05	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	104	75.10
B - A14 North-West	811	128.00
C - A1156 South-West	1620	80.70
D - A14 South-East	1891	131.50
E - Unnamed Road North-East	2225	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1728	100.000
B - A14 North-West		ONE HOUR	✓	1232	100.000
C - A1156 South-West		ONE HOUR	✓	562	100.000
D - A14 South-East		ONE HOUR	✓	613	100.000
E - Unnamed Road North-East		ONE HOUR	✓	36	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1061	342	321	3
	B - A14 North-West	1147	4	43	0	38
	C - A1156 South-West	305	80	4	168	4
	D - A14 South-East	364	0	249	0	1
	E - Unnamed Road North-East	6	24	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	9	4	7	33
	B - A14 North-West	9	0	7	0	12
	C - A1156 South-West	2	4	0	0	0
	D - A14 South-East	7	0	0	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	12.19	6.2	B	1586	2379
B - A14 North-West	0.10	5.03	0.1	A	1130	117
C - A1156 South-West	1.20	306.05	56.0	F	515	773
D - A14 South-East	1.24	327.33	68.0	F	563	844
E - Unnamed Road North-East	0.13	13.39	0.1	B	33	49

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1301	1301	325	0	863	196	2260	0.576	1296	504	0.0	1.3	3.711	A
B - A14 North-West	927	64	16	863	0	637	992	0.064	64	876	0.0	0.1	3.876	A
C - A1156 South-West	423	423	106	0	0	1094	862	0.490	419	479	0.0	0.9	8.056	A
D - A14 South-East	462	462	115	0	0	1114	944	0.489	458	369	0.0	0.9	7.350	A
E - Unnamed Road North-East	27	27	7	0	0	1457	629	0.043	27	35	0.0	0.0	5.976	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1554	1554	388	0	1031	234	2219	0.700	1550	600	1.3	2.3	5.349	A
B - A14 North-West	1107	76	19	1031	0	758	914	0.083	76	1048	0.1	0.1	4.294	A
C - A1156 South-West	505	505	126	0	0	1307	692	0.729	499	572	0.9	2.5	18.046	C
D - A14 South-East	551	551	138	0	0	1333	777	0.710	546	441	0.9	2.3	15.247	C
E - Unnamed Road North-East	32	32	8	0	0	1742	489	0.066	32	42	0.0	0.1	7.880	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1903	1903	476	0	1263	255	2195	0.867	1888	606	2.3	6.0	11.218	B
B - A14 North-West	1356	93	23	1263	0	768	909	0.103	93	1263	0.1	0.1	4.416	A
C - A1156 South-West	618	618	155	0	0	1520	522	1.186	510	647	2.5	29.6	131.713	F
D - A14 South-East	675	675	169	0	0	1624	554	1.219	544	508	2.3	35.2	141.203	F
E - Unnamed Road North-East	39	39	10	0	0	2093	315	0.124	39	50	0.1	0.1	13.019	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1903	1903	476	0	1263	256	2194	0.867	1902	608	6.0	6.2	12.192	B
B - A14 North-West	1356	93	23	1263	0	771	907	0.103	93	1271	0.1	0.1	4.426	A
C - A1156 South-West	618	618	155	0	0	1529	514	1.202	513	650	29.6	56.0	306.048	F
D - A14 South-East	675	675	169	0	0	1635	545	1.238	544	511	35.2	68.0	327.330	F
E - Unnamed Road North-East	39	39	10	0	0	2107	308	0.127	39	50	0.1	0.1	13.393	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1554	1554	388	0	1031	259	2193	0.709	1568	765	6.2	2.5	5.901	A
B - A14 North-West	1107	76	19	1031	0	947	792	0.096	76	1070	0.1	0.1	5.031	A
C - A1156 South-West	505	505	126	0	0	1442	586	0.862	576	660	56.0	38.3	286.666	F
D - A14 South-East	551	551	138	0	0	1349	764	0.721	753	467	68.0	17.5	208.344	F
E - Unnamed Road North-East	32	32	8	0	0	1785	468	0.068	32	43	0.1	0.1	8.259	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1301	1301	325	0	863	245	2208	0.589	1305	628	2.5	1.4	4.004	A
B - A14 North-West	927	64	16	863	0	809	883	0.072	64	904	0.1	0.1	4.396	A
C - A1156 South-West	423	423	106	0	0	1141	825	0.513	572	510	38.3	1.1	26.473	D
D - A14 South-East	462	462	115	0	0	1124	937	0.493	528	417	17.5	1.0	10.313	B
E - Unnamed Road North-East	27	27	7	0	0	1514	603	0.044	27	37	0.1	0.0	6.256	A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	110.53	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	153	75.10
B - A14 North-West	730	128.00
C - A1156 South-West	1609	80.70
D - A14 South-East	1820	131.50
E - Unnamed Road North-East	2261	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1774	100.000
B - A14 North-West		ONE HOUR	✓	1384	100.000
C - A1156 South-West		ONE HOUR	✓	577	100.000
D - A14 South-East		ONE HOUR	✓	696	100.000
E - Unnamed Road North-East		ONE HOUR	✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1138	227	407	1
	B - A14 North-West	1272	3	89	0	20
	C - A1156 South-West	255	82	0	213	27
	D - A14 South-East	346	0	351	0	0
	E - Unnamed Road North-East	0	18	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	3	2	0
	B - A14 North-West	4	33	0	0	11
	C - A1156 South-West	0	1	0	1	0
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	16.47	8.5	C	1628	2442
B - A14 North-West	0.12	4.63	0.1	A	1287	154
C - A1156 South-West	1.21	311.30	58.9	F	530	794
D - A14 South-East	1.31	408.46	93.6	F	639	958
E - Unnamed Road North-East	0.10	15.11	0.1	C	22	34

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	1335	334	0	958	263	2250	0.594	1330	449	0.0	1.4	3.888	A
B - A14 North-West	1056	84	21	958	0	628	1073	0.079	84	930	0.0	0.1	3.641	A
C - A1156 South-West	435	435	109	0	0	1128	870	0.499	431	502	0.0	1.0	8.123	A
D - A14 South-East	524	524	131	0	0	1110	984	0.533	520	465	0.0	1.1	17.686	A
E - Unnamed Road North-East	18	18	5	0	0	1557	579	0.032	18	36	0.0	0.0	6.420	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1595	1595	399	0	1143	313	2195	0.727	1590	534	1.4	2.6	5.910	A
B - A14 North-West	1261	101	25	1143	0	747	992	0.102	101	1112	0.1	0.1	4.038	A
C - A1156 South-West	519	519	130	0	0	1347	698	0.744	512	599	1.0	2.7	18.745	C
D - A14 South-East	626	626	156	0	0	1328	816	0.767	618	555	1.1	3.0	17.576	C
E - Unnamed Road North-East	22	22	6	0	0	1861	440	0.050	22	43	0.0	0.1	8.603	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1953	1953	488	0	1400	340	2165	0.902	1932	524	2.6	7.9	14.299	B
B - A14 North-West	1544	123	31	1400	0	741	997	0.124	123	1337	0.1	0.1	4.121	A
C - A1156 South-West	635	635	159	0	0	1555	533	1.192	522	647	2.7	31.0	134.206	F
D - A14 South-East	767	767	192	0	0	1614	595	1.289	588	637	3.0	47.7	171.037	F
E - Unnamed Road North-East	27	27	7	0	0	2225	274	0.098	27	47	0.1	0.1	14.538	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1953	1953	488	0	1400	341	2164	0.903	1951	522	7.9	8.5	16.472	C
B - A14 North-West	1544	123	31	1400	0	740	997	0.124	123	1349	0.1	0.1	4.118	A
C - A1156 South-West	635	635	159	0	0	1565	525	1.209	524	647	31.0	58.9	311.300	F
D - A14 South-East	767	767	192	0	0	1629	583	1.314	583	642	47.7	93.6	408.461	F
E - Unnamed Road North-East	27	27	7	0	0	2244	265	0.102	27	48	0.1	0.1	15.115	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1595	1595	399	0	1143	353	2152	0.741	1617	662	8.5	2.9	6.998	A
B - A14 North-West	1261	101	25	1143	0	914	878	0.115	101	1143	0.1	0.1	4.630	A
C - A1156 South-West	519	519	130	0	0	1450	617	0.841	607	690	58.9	36.9	280.031	F
D - A14 South-East	626	626	156	0	0	1349	800	0.783	791	596	93.6	52.3	327.108	F
E - Unnamed Road North-East	22	22	6	0	0	1923	413	0.053	22	47	0.1	0.1	9.225	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	1335	334	0	958	324	2183	0.612	1341	618	2.9	1.6	4.300	A
B - A14 North-West	1056	84	21	958	0	857	917	0.092	84	958	0.1	0.1	4.323	A
C - A1156 South-West	435	435	109	0	0	1239	783	0.555	577	610	36.9	1.3	34.173	D
D - A14 South-East	524	524	131	0	0	1120	977	0.537	729	522	52.3	1.2	35.235	E
E - Unnamed Road North-East	18	18	5	0	0	1623	550	0.034	19	43	0.1	0.0	6.776	A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	2.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	38	75.10
B - A14 North-West	229	128.00
C - A1156 South-West	893	80.70
D - A14 South-East	811	131.50
E - Unnamed Road North-East	1003	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	894	100.000
B - A14 North-West		ONE HOUR	✓	577	100.000
C - A1156 South-West		ONE HOUR	✓	38	100.000
D - A14 South-East		ONE HOUR	✓	243	100.000
E - Unnamed Road North-East		ONE HOUR	✓	29	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	614	77	202	1
	B - A14 North-West	555	8	3	0	11
	C - A1156 South-West	30	7	0	0	1
	D - A14 South-East	157	0	75	0	12
	E - Unnamed Road North-East	9	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	10	88	0	0	11
	C - A1156 South-West	0	0	0	0	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.40	2.44	0.7	A	821	1231
B - A14 North-West	0.02	3.44	0.0	A	427	30
C - A1156 South-West	0.04	3.56	0.0	A	35	53
D - A14 South-East	0.21	3.61	0.3	A	223	334
E - Unnamed Road North-East	0.03	3.79	0.0	A	27	40

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	673	673	168	0	418	26	2478	0.272	672	147	0.0	0.4	1.991	A
B - A14 North-West	351	16	4	418	0	157	1112	0.015	16	487	0.0	0.0	3.284	A
C - A1156 South-West	29	29	7	0	0	615	1313	0.022	29	116	0.0	0.0	2.801	A
D - A14 South-East	183	183	46	0	0	548	1517	0.121	182	153	0.0	0.1	2.695	A
E - Unnamed Road North-East	22	22	5	0	0	679	1207	0.018	22	18	0.0	0.0	3.037	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	804	804	201	0	499	31	2471	0.325	804	176	0.4	0.5	2.159	A
B - A14 North-West	419	19	5	499	0	188	1094	0.018	19	582	0.0	0.0	3.348	A
C - A1156 South-West	34	34	9	0	0	735	1204	0.029	34	139	0.0	0.0	3.078	A
D - A14 South-East	218	218	55	0	0	656	1411	0.155	218	183	0.1	0.2	3.018	A
E - Unnamed Road North-East	26	26	7	0	0	812	1112	0.024	26	22	0.0	0.0	3.313	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	985	985	246	0	611	38	2462	0.400	984	215	0.5	0.7	2.435	A
B - A14 North-West	513	24	6	611	0	230	1070	0.022	24	713	0.0	0.0	3.438	A
C - A1156 South-West	42	42	11	0	0	900	1053	0.040	42	170	0.0	0.0	3.558	A
D - A14 South-East	267	267	67	0	0	803	1265	0.211	267	224	0.2	0.3	3.608	A
E - Unnamed Road North-East	32	32	8	0	0	995	983	0.033	32	27	0.0	0.0	3.784	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	985	985	246	0	611	38	2462	0.400	985	216	0.7	0.7	2.437	A
B - A14 North-West	513	24	6	611	0	230	1070	0.022	24	713	0.0	0.0	3.439	A
C - A1156 South-West	42	42	11	0	0	901	1053	0.040	42	170	0.0	0.0	3.560	A
D - A14 South-East	267	267	67	0	0	804	1264	0.212	267	224	0.3	0.3	3.610	A
E - Unnamed Road North-East	32	32	8	0	0	996	983	0.033	32	27	0.0	0.0	3.786	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	804	804	201	0	499	31	2471	0.325	805	176	0.7	0.5	2.161	A
B - A14 North-West	419	19	5	499	0	188	1094	0.018	19	583	0.0	0.0	3.349	A
C - A1156 South-West	34	34	9	0	0	736	1202	0.029	34	139	0.0	0.0	3.081	A
D - A14 South-East	218	218	55	0	0	657	1410	0.155	219	183	0.3	0.2	3.025	A
E - Unnamed Road North-East	26	26	7	0	0	814	1112	0.024	26	22	0.0	0.0	3.316	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	673	673	168	0	418	26	2478	0.272	674	148	0.5	0.4	1.995	A
B - A14 North-West	351	16	4	418	0	157	1111	0.015	16	488	0.0	0.0	3.288	A
C - A1156 South-West	29	29	7	0	0	617	1312	0.022	29	116	0.0	0.0	2.808	A
D - A14 South-East	183	183	46	0	0	550	1515	0.121	183	153	0.2	0.1	2.704	A
E - Unnamed Road North-East	22	22	5	0	0	681	1205	0.018	22	18	0.0	0.0	3.041	A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	21.18	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	155	75.10
B - A14 North-West	628	128.00
C - A1156 South-West	1721	80.70
D - A14 South-East	1656	131.50
E - Unnamed Road North-East	1931	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1566	100.000
B - A14 North-West		ONE HOUR	✓	1330	100.000
C - A1156 South-West		ONE HOUR	✓	304	100.000
D - A14 South-East		ONE HOUR	✓	554	100.000
E - Unnamed Road North-East		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1098	192	272	4
	B - A14 North-West	1236	2	60	0	32
	C - A1156 South-West	162	52	0	84	6
	D - A14 South-East	338	3	198	0	15
	E - Unnamed Road North-East	2	43	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	9	33
	B - A14 North-West	10	100	5	0	19
	C - A1156 South-West	2	12	0	5	100
	D - A14 South-East	5	33	1	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	7.24	3.4	A	1437	2155
B - A14 North-West	0.11	4.13	0.1	A	1203	129
C - A1156 South-West	0.77	33.99	3.0	D	279	418
D - A14 South-East	1.00	99.30	16.9	F	508	763
E - Unnamed Road North-East	0.14	10.93	0.2	B	46	69

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1179	1179	295	0	931	149	2301	0.512	1175	375	0.0	1.0	3.185	A
B - A14 North-West	987	70	18	931	0	454	1106	0.064	70	899	0.0	0.1	3.476	A
C - A1156 South-West	229	229	57	0	0	1125	811	0.282	227	340	0.0	0.4	6.147	A
D - A14 South-East	417	417	104	0	0	1051	1010	0.413	414	268	0.0	0.7	6.017	A
E - Unnamed Road North-East	38	38	9	0	0	1281	693	0.055	38	42	0.0	0.1	5.495	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1407	1407	352	0	1111	178	2267	0.621	1405	449	1.0	1.6	4.168	A
B - A14 North-West	1178	84	21	1111	0	543	1047	0.080	84	1075	0.1	0.1	3.735	A
C - A1156 South-West	273	273	68	0	0	1346	650	0.420	272	406	0.4	0.7	9.481	A
D - A14 South-East	498	498	125	0	0	1257	841	0.592	495	321	0.7	1.4	10.313	B
E - Unnamed Road North-East	45	45	11	0	0	1533	563	0.080	45	50	0.1	0.1	6.946	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1724	1724	431	0	1361	215	2223	0.775	1717	524	1.6	3.3	7.017	A
B - A14 North-West	1443	103	26	1361	0	636	986	0.104	103	1313	0.1	0.1	4.074	A
C - A1156 South-West	334	334	84	0	0	1622	448	0.745	327	484	0.7	2.6	28.035	D
D - A14 South-East	610	610	152	0	0	1536	614	0.994	569	390	1.4	11.5	57.404	F
E - Unnamed Road North-East	55	55	14	0	0	1872	389	0.142	55	60	0.1	0.2	10.772	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1724	1724	431	0	1361	218	2220	0.776	1724	539	3.3	3.4	7.235	A
B - A14 North-West	1443	103	26	1361	0	653	975	0.106	103	1319	0.1	0.1	4.127	A
C - A1156 South-West	334	334	84	0	0	1639	436	0.767	333	492	2.6	3.0	33.989	D
D - A14 South-East	610	610	152	0	0	1542	609	1.002	589	393	11.5	16.9	99.297	F
E - Unnamed Road North-East	55	55	14	0	0	1880	385	0.144	55	61	0.2	0.2	10.931	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1407	1407	352	0	1111	183	2261	0.623	1414	493	3.4	1.7	4.287	A
B - A14 North-West	1178	84	21	1111	0	592	1015	0.083	84	1084	0.1	0.1	3.866	A
C - A1156 South-West	273	273	68	0	0	1394	616	0.443	282	431	3.0	0.8	11.048	B
D - A14 South-East	498	498	125	0	0	1265	835	0.597	560	325	16.9	1.5	16.114	C
E - Unnamed Road North-East	45	45	11	0	0	1545	557	0.081	45	52	0.2	0.1	7.041	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1179	1179	295	0	931	150	2299	0.513	1181	381	1.7	1.1	3.229	A
B - A14 North-West	987	70	18	931	0	460	1101	0.064	70	904	0.1	0.1	3.494	A
C - A1156 South-West	229	229	57	0	0	1134	805	0.284	230	343	0.8	0.4	6.282	A
D - A14 South-East	417	417	104	0	0	1057	1005	0.415	420	270	1.5	0.7	6.192	A
E - Unnamed Road North-East	38	38	9	0	0	1289	689	0.055	38	42	0.1	0.1	5.532	A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	195.47	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	168	75.10
B - A14 North-West	888	128.00
C - A1156 South-West	1941	80.70
D - A14 South-East	2164	131.50
E - Unnamed Road North-East	2497	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1913	100.000
B - A14 North-West		FLAT	✓	1623	100.000
C - A1156 South-West		FLAT	✓	470	100.000
D - A14 South-East		FLAT	✓	641	100.000
E - Unnamed Road North-East		FLAT	✓	88	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1228	312	370	4
	B - A14 North-West	1494	6	113	0	11
	C - A1156 South-West	264	74	0	130	2
	D - A14 South-East	364	0	261	0	15
	E - Unnamed Road North-East	9	54	20	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	5	8	0
	B - A14 North-West	9	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	13.65	7.1	B	1913	2870
B - A14 North-West	0.13	4.20	0.2	A	1710	194
C - A1156 South-West	0.98	150.02	18.8	F	470	706
D - A14 South-East	1.26	1316.11	200.7	F	641	961
E - Unnamed Road North-East	0.30	17.51	0.4	C	88	131

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1494	264	2184	0.876	1888	544	0.0	6.4	11.321	B
B - A14 North-West	1710	130	32	1494	0	679	1001	0.129	129	1339	0.0	0.1	4.124	A
C - A1156 South-West	470	470	118	0	0	1580	494	0.953	439	647	0.0	8.0	50.753	F
D - A14 South-East	641	641	160	0	0	1719	523	1.226	507	491	0.0	33.3	132.709	F
E - Unnamed Road North-East	88	88	22	0	0	2124	307	0.285	86	28	0.0	0.4	16.188	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1494	270	2179	0.878	1912	553	6.4	6.8	13.300	B
B - A14 North-West	1710	130	32	1494	0	694	992	0.131	129	1358	0.1	0.1	4.175	A
C - A1156 South-West	470	470	118	0	0	1596	482	0.975	456	651	8.0	11.6	92.222	F
D - A14 South-East	641	641	160	0	0	1740	508	1.262	507	501	33.3	66.8	369.884	F
E - Unnamed Road North-East	88	88	22	0	0	2153	295	0.297	87	28	0.4	0.4	17.352	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1494	271	2177	0.879	1913	556	6.8	6.9	13.488	B
B - A14 North-West	1710	130	32	1494	0	698	989	0.131	129	1359	0.1	0.2	4.188	A
C - A1156 South-West	470	470	118	0	0	1596	482	0.976	461	651	11.6	14.1	113.212	F
D - A14 South-East	641	641	160	0	0	1741	507	1.263	507	502	66.8	100.2	605.032	F
E - Unnamed Road North-East	88	88	22	0	0	2156	294	0.298	87	28	0.4	0.4	17.449	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1494	272	2177	0.879	1913	557	6.9	7.0	13.571	B
B - A14 North-West	1710	130	32	1494	0	700	988	0.131	130	1360	0.2	0.2	4.194	A
C - A1156 South-West	470	470	118	0	0	1597	482	0.977	463	651	14.1	15.9	128.221	F
D - A14 South-East	641	641	160	0	0	1741	507	1.264	507	503	100.2	133.7	841.611	F
E - Unnamed Road North-East	88	88	22	0	0	2157	293	0.298	88	28	0.4	0.4	17.480	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1494	272	2176	0.879	1913	558	7.0	7.1	13.617	B
B - A14 North-West	1710	130	32	1494	0	701	987	0.131	130	1360	0.2	0.2	4.198	A
C - A1156 South-West	470	470	118	0	0	1597	482	0.977	464	651	15.9	17.5	140.117	F
D - A14 South-East	641	641	160	0	0	1741	507	1.264	507	503	133.7	167.2	1078.711	F
E - Unnamed Road North-East	88	88	22	0	0	2157	293	0.298	88	28	0.4	0.4	17.500	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1494	272	2176	0.879	1913	559	7.1	7.1	13.647	B
B - A14 North-West	1710	130	32	1494	0	702	986	0.131	130	1360	0.2	0.2	4.201	A
C - A1156 South-West	470	470	118	0	0	1597	482	0.977	465	651	17.5	18.8	150.016	F
D - A14 South-East	641	641	160	0	0	1741	507	1.264	507	504	167.2	200.7	1316.106	F
E - Unnamed Road North-East	88	88	22	0	0	2157	293	0.299	88	28	0.4	0.4	17.511	C

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	26.83	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	118	75.10
B - A14 North-West	915	128.00
C - A1156 South-West	1719	80.70
D - A14 South-East	1958	131.50
E - Unnamed Road North-East	2309	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1590	100.000
B - A14 North-West		ONE HOUR	✓	1366	100.000
C - A1156 South-West		ONE HOUR	✓	498	100.000
D - A14 South-East		ONE HOUR	✓	625	100.000
E - Unnamed Road North-East		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	936	333	317	4
	B - A14 North-West	1280	4	42	0	40
	C - A1156 South-West	280	79	4	130	5
	D - A14 South-East	377	0	248	0	1
	E - Unnamed Road North-East	6	26	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	4	5	33
	B - A14 North-West	6	0	5	0	12
	C - A1156 South-West	3	3	0	1	0
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	7.48	3.6	A	1459	2189
B - A14 North-West	0.11	4.78	0.1	A	1237	118
C - A1156 South-West	0.94	64.67	9.3	F	457	685
D - A14 South-East	1.01	98.48	19.0	F	574	861
E - Unnamed Road North-East	0.10	9.86	0.1	A	34	52

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1197	1197	299	0	964	169	2317	0.517	1193	496	0.0	1.1	3.192	A
B - A14 North-West	1015	65	16	964	0	601	1012	0.064	64	783	0.0	0.1	3.798	A
C - A1156 South-West	375	375	94	0	0	1012	934	0.401	372	471	0.0	0.7	6.381	A
D - A14 South-East	471	471	118	0	0	1015	1040	0.453	468	338	0.0	0.8	6.251	A
E - Unnamed Road North-East	28	28	7	0	0	1325	699	0.040	28	37	0.0	0.0	5.362	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1430	1430	357	0	1151	203	2280	0.627	1427	593	1.1	1.7	4.210	A
B - A14 North-West	1212	77	19	1151	0	718	938	0.082	77	937	0.1	0.1	4.180	A
C - A1156 South-West	448	448	112	0	0	1210	783	0.572	445	563	0.7	1.3	10.582	B
D - A14 South-East	562	562	141	0	0	1215	890	0.631	559	405	0.8	1.7	10.749	B
E - Unnamed Road North-East	34	34	8	0	0	1586	576	0.059	34	44	0.0	0.1	6.639	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1751	1751	438	0	1409	242	2235	0.783	1744	690	1.7	3.5	7.214	A
B - A14 North-West	1485	94	24	1409	0	838	863	0.110	94	1142	0.1	0.1	4.686	A
C - A1156 South-West	548	548	137	0	0	1455	596	0.920	526	673	1.3	7.0	42.211	E
D - A14 South-East	688	688	172	0	0	1484	688	1.001	644	490	1.7	12.9	56.222	F
E - Unnamed Road North-East	41	41	10	0	0	1932	411	0.100	41	54	0.1	0.1	9.720	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1751	1751	438	0	1409	246	2231	0.785	1751	710	3.5	3.6	7.476	A
B - A14 North-West	1485	94	24	1409	0	862	848	0.111	94	1148	0.1	0.1	4.778	A
C - A1156 South-West	548	548	137	0	0	1471	584	0.939	539	682	7.0	9.3	64.667	F
D - A14 South-East	688	688	172	0	0	1490	683	1.007	664	495	12.9	19.0	98.483	F
E - Unnamed Road North-East	41	41	10	0	0	1943	406	0.102	41	54	0.1	0.1	9.862	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1430	1430	357	0	1151	212	2269	0.630	1437	655	3.6	1.7	4.363	A
B - A14 North-West	1212	77	19	1151	0	790	893	0.086	77	948	0.1	0.1	4.414	A
C - A1156 South-West	448	448	112	0	0	1260	745	0.600	478	594	9.3	1.6	14.971	B
D - A14 South-East	562	562	141	0	0	1223	884	0.636	631	415	19.0	1.8	18.243	C
E - Unnamed Road North-East	34	34	8	0	0	1604	567	0.059	34	45	0.1	0.1	6.756	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1197	1197	299	0	964	171	2314	0.517	1200	503	1.7	1.1	3.239	A
B - A14 North-West	1015	65	16	964	0	610	1006	0.064	65	788	0.1	0.1	3.823	A
C - A1156 South-West	375	375	94	0	0	1020	927	0.404	378	475	1.6	0.7	6.596	A
D - A14 South-East	471	471	118	0	0	1021	1036	0.454	475	341	1.8	0.8	6.460	A
E - Unnamed Road North-East	28	28	7	0	0	1334	695	0.041	28	37	0.1	0.0	5.400	A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	61.55	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	155	75.10
B - A14 North-West	761	128.00
C - A1156 South-West	1709	80.70
D - A14 South-East	1995	131.50
E - Unnamed Road North-East	2406	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1728	100.000
B - A14 North-West		ONE HOUR	✓	1610	100.000
C - A1156 South-West		ONE HOUR	✓	518	100.000
D - A14 South-East		ONE HOUR	✓	713	100.000
E - Unnamed Road North-East		ONE HOUR	✓	26	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1057	273	396	1
	B - A14 North-West	1497	3	89	0	21
	C - A1156 South-West	239	77	0	173	28
	D - A14 South-East	391	0	323	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	4	2	1	0
	B - A14 North-West	3	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	11.59	5.9	B	1586	2378
B - A14 North-West	0.13	4.59	0.2	A	1477	156
C - A1156 South-West	0.99	96.37	15.0	F	475	712
D - A14 South-East	1.20	289.27	70.0	F	655	982
E - Unnamed Road North-East	0.09	12.26	0.1	B	24	35

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1301	1301	325	0	1127	235	2325	0.560	1296	471	0.0	1.3	3.482	A
B - A14 North-West	1212	85	21	1127	0	622	1074	0.079	85	867	0.0	0.1	3.638	A
C - A1156 South-West	390	390	97	0	0	1102	909	0.429	387	516	0.0	0.7	6.855	A
D - A14 South-East	537	537	134	0	0	1085	1022	0.525	533	427	0.0	1.1	7.290	A
E - Unnamed Road North-East	19	19	5	0	0	1493	619	0.031	19	38	0.0	0.0	6.004	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1553	1553	388	0	1346	281	2273	0.683	1550	562	1.3	2.1	4.952	A
B - A14 North-West	1447	102	25	1346	0	742	994	0.102	102	1037	0.1	0.1	4.034	A
C - A1156 South-West	465	465	116	0	0	1317	747	0.623	462	617	0.7	1.6	12.485	B
D - A14 South-East	641	641	160	0	0	1298	867	0.739	635	511	1.1	2.7	15.086	C
E - Unnamed Road North-East	23	23	6	0	0	1786	493	0.047	23	45	0.0	0.0	7.657	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1903	1903	476	0	1648	332	2216	0.858	1889	604	2.1	5.6	10.566	B
B - A14 North-West	1772	125	31	1648	0	812	948	0.131	124	1259	0.1	0.2	4.373	A
C - A1156 South-West	570	570	142	0	0	1536	581	0.981	535	696	1.6	10.3	56.637	F
D - A14 South-East	785	785	196	0	0	1583	661	1.188	649	613	2.7	36.7	124.634	F
E - Unnamed Road North-East	28	28	7	0	0	2168	330	0.086	28	54	0.0	0.1	11.935	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1903	1903	476	0	1648	339	2209	0.861	1901	613	5.6	5.9	11.589	B
B - A14 North-West	1772	125	31	1648	0	827	937	0.133	124	1269	0.2	0.2	4.428	A
C - A1156 South-West	570	570	142	0	0	1546	574	0.993	551	699	10.3	15.0	96.375	F
D - A14 South-East	785	785	196	0	0	1593	654	1.202	652	621	36.7	70.0	289.273	F
E - Unnamed Road North-East	28	28	7	0	0	2186	322	0.088	28	54	0.1	0.1	12.261	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1553	1553	388	0	1346	302	2251	0.690	1568	702	5.9	2.3	5.381	A
B - A14 North-West	1447	102	25	1346	0	902	886	0.115	102	1056	0.2	0.1	4.592	A
C - A1156 South-West	465	465	116	0	0	1443	652	0.714	515	715	15.0	2.7	33.640	D
D - A14 South-East	641	641	160	0	0	1313	857	0.748	845	533	70.0	19.0	193.602	F
E - Unnamed Road North-East	23	23	6	0	0	1822	478	0.048	23	48	0.1	0.1	7.921	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1301	1301	325	0	1127	240	2320	0.561	1305	518	2.3	1.3	3.560	A
B - A14 North-West	1212	85	21	1127	0	672	1040	0.082	85	874	0.1	0.1	3.770	A
C - A1156 South-West	390	390	97	0	0	1149	873	0.446	397	553	2.7	0.8	7.678	A
D - A14 South-East	537	537	134	0	0	1093	1017	0.528	609	433	19.0	1.1	10.488	B
E - Unnamed Road North-East	19	19	5	0	0	1506	613	0.032	19	38	0.1	0.0	6.066	A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	3.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	72	75.10
B - A14 North-West	258	128.00
C - A1156 South-West	916	80.70
D - A14 South-East	855	131.50
E - Unnamed Road North-East	1047	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	895	100.000
B - A14 North-West		ONE HOUR	✓	730	100.000
C - A1156 South-West		ONE HOUR	✓	60	100.000
D - A14 South-East		ONE HOUR	✓	253	100.000
E - Unnamed Road North-East		ONE HOUR	✓	29	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	615	77	202	1
	B - A14 North-West	660	8	51	0	11
	C - A1156 South-West	52	7	0	0	1
	D - A14 South-East	170	0	72	0	12
	E - Unnamed Road North-East	9	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	9	88	94	0	11
	C - A1156 South-West	42	0	0	0	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.66	0.7	A	822	1232
B - A14 North-West	0.10	5.06	0.1	A	429	96
C - A1156 South-West	0.09	5.10	0.1	A	55	83
D - A14 South-East	0.24	4.07	0.3	A	232	348
E - Unnamed Road North-East	0.04	4.10	0.0	A	27	40

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	674	674	169	0	497	62	2394	0.282	673	173	0.0	0.4	2.089	A
B - A14 North-West	352	52	13	497	0	183	827	0.063	52	487	0.0	0.1	4.643	A
C - A1156 South-West	45	45	11	0	0	625	968	0.047	45	150	0.0	0.0	3.897	A
D - A14 South-East	190	190	48	0	0	585	1444	0.132	190	153	0.0	0.2	2.869	A
E - Unnamed Road North-East	22	22	5	0	0	716	1154	0.019	22	18	0.0	0.0	3.178	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	805	805	201	0	593	74	2371	0.339	804	207	0.4	0.5	2.297	A
B - A14 North-West	420	62	16	593	0	219	810	0.077	62	583	0.1	0.1	4.813	A
C - A1156 South-West	54	54	14	0	0	748	886	0.061	54	179	0.0	0.1	4.327	A
D - A14 South-East	227	227	57	0	0	700	1325	0.172	227	183	0.2	0.2	3.278	A
E - Unnamed Road North-East	26	26	7	0	0	856	1051	0.025	26	22	0.0	0.0	3.510	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	986	986	246	0	727	91	2341	0.421	985	254	0.5	0.7	2.653	A
B - A14 North-West	515	77	19	727	0	268	787	0.097	76	714	0.1	0.1	5.063	A
C - A1156 South-West	66	66	17	0	0	916	773	0.086	66	220	0.1	0.1	5.094	A
D - A14 South-East	278	278	70	0	0	857	1163	0.239	278	224	0.2	0.3	4.066	A
E - Unnamed Road North-East	32	32	8	0	0	1049	911	0.035	32	27	0.0	0.0	4.097	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	986	986	246	0	727	91	2341	0.421	986	254	0.7	0.7	2.656	A
B - A14 North-West	515	77	19	727	0	268	787	0.097	77	714	0.1	0.1	5.065	A
C - A1156 South-West	66	66	17	0	0	916	772	0.086	66	220	0.1	0.1	5.098	A
D - A14 South-East	278	278	70	0	0	858	1162	0.240	278	224	0.3	0.3	4.072	A
E - Unnamed Road North-East	32	32	8	0	0	1050	910	0.035	32	27	0.0	0.0	4.100	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	805	805	201	0	593	74	2371	0.340	806	208	0.7	0.5	2.302	A
B - A14 North-West	420	62	16	593	0	220	810	0.077	63	584	0.1	0.1	4.816	A
C - A1156 South-West	54	54	14	0	0	749	885	0.061	54	180	0.1	0.1	4.334	A
D - A14 South-East	227	227	57	0	0	701	1324	0.172	228	183	0.3	0.2	3.285	A
E - Unnamed Road North-East	26	26	7	0	0	858	1050	0.025	26	22	0.0	0.0	3.514	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	674	674	169	0	497	62	2393	0.282	675	174	0.5	0.4	2.095	A
B - A14 North-West	352	52	13	497	0	184	827	0.063	52	489	0.1	0.1	4.648	A
C - A1156 South-West	45	45	11	0	0	627	967	0.047	45	150	0.1	0.0	3.907	A
D - A14 South-East	190	190	48	0	0	587	1441	0.132	191	153	0.2	0.2	2.880	A
E - Unnamed Road North-East	22	22	5	0	0	718	1152	0.019	22	18	0.0	0.0	3.183	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	45.37	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	158	75.10
B - A14 North-West	650	128.00
C - A1156 South-West	1750	80.70
D - A14 South-East	1697	131.50
E - Unnamed Road North-East	1946	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1564	100.000
B - A14 North-West		ONE HOUR	✓	1407	100.000
C - A1156 South-West		ONE HOUR	✓	353	100.000
D - A14 South-East		ONE HOUR	✓	562	100.000
E - Unnamed Road North-East		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1094	192	274	4
	B - A14 North-West	1268	2	105	0	32
	C - A1156 South-West	216	52	0	79	6
	D - A14 South-East	346	3	198	0	15
	E - Unnamed Road North-East	2	43	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	9	33
	B - A14 North-West	9	100	46	0	19
	C - A1156 South-West	27	12	0	5	100
	D - A14 South-East	5	33	1	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	8.89	4.2	A	1435	2152
B - A14 North-West	0.21	6.16	0.3	A	1035	191
C - A1156 South-West	0.95	90.87	9.3	F	324	485
D - A14 South-East	1.14	227.16	43.7	F	516	774
E - Unnamed Road North-East	0.16	12.52	0.2	B	46	69

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1177	1177	294	0	955	178	2233	0.527	1173	421	0.0	1.1	3.383	A
B - A14 North-West	849	104	26	955	0	496	836	0.125	104	895	0.0	0.1	4.913	A
C - A1156 South-West	265	265	66	0	0	1128	712	0.373	263	373	0.0	0.6	7.972	A
D - A14 South-East	423	423	106	0	0	1081	962	0.440	420	266	0.0	0.8	6.608	A
E - Unnamed Road North-East	38	38	9	0	0	1309	663	0.057	38	42	0.0	0.1	5.758	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1406	1406	351	0	1140	214	2185	0.643	1403	503	1.1	1.8	4.586	A
B - A14 North-West	1014	125	31	1140	0	592	782	0.159	124	1071	0.1	0.2	5.469	A
C - A1156 South-West	317	317	79	0	0	1349	572	0.555	314	446	0.6	1.2	13.869	B
D - A14 South-East	505	505	126	0	0	1294	785	0.643	501	318	0.8	1.7	12.511	B
E - Unnamed Road North-East	45	45	11	0	0	1566	528	0.085	45	50	0.1	0.1	7.451	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1722	1722	430	0	1396	255	2129	0.809	1713	553	1.8	4.0	8.471	A
B - A14 North-West	1241	152	38	1396	0	655	746	0.204	152	1304	0.2	0.3	6.058	A
C - A1156 South-West	388	388	97	0	0	1594	415	0.936	366	516	1.2	6.8	57.922	F
D - A14 South-East	619	619	155	0	0	1580	548	1.129	531	384	1.7	23.8	104.511	F
E - Unnamed Road North-East	55	55	14	0	0	1908	349	0.158	55	59	0.1	0.2	12.239	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1722	1722	430	0	1396	258	2125	0.810	1721	566	4.0	4.2	8.895	A
B - A14 North-West	1241	152	38	1396	0	671	737	0.207	152	1313	0.3	0.3	6.159	A
C - A1156 South-West	388	388	97	0	0	1606	407	0.954	378	521	6.8	9.3	90.874	F
D - A14 South-East	619	619	155	0	0	1587	542	1.142	539	388	23.8	43.7	227.157	F
E - Unnamed Road North-East	55	55	14	0	0	1920	343	0.161	55	59	0.2	0.2	12.519	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1406	1406	351	0	1140	226	2171	0.648	1415	628	4.2	1.9	4.819	A
B - A14 North-West	1014	125	31	1140	0	729	709	0.176	125	1086	0.3	0.2	6.159	A
C - A1156 South-West	317	317	79	0	0	1468	497	0.637	347	508	9.3	1.9	28.010	D
D - A14 South-East	505	505	126	0	0	1304	777	0.650	672	327	43.7	2.0	76.952	F
E - Unnamed Road North-East	45	45	11	0	0	1586	518	0.087	45	55	0.2	0.1	7.625	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1177	1177	294	0	955	181	2229	0.528	1180	431	1.9	1.1	3.443	A
B - A14 North-West	849	104	26	955	0	507	830	0.126	105	902	0.2	0.1	4.969	A
C - A1156 South-West	265	265	66	0	0	1139	706	0.376	270	378	1.9	0.6	8.365	A
D - A14 South-East	423	423	106	0	0	1088	956	0.443	428	269	2.0	0.8	6.884	A
E - Unnamed Road North-East	38	38	9	0	0	1319	658	0.057	38	42	0.1	0.1	5.811	A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	305.15	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	182	75.10
B - A14 North-West	946	128.00
C - A1156 South-West	1978	80.70
D - A14 South-East	2187	131.50
E - Unnamed Road North-East	2519	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1913	100.000
B - A14 North-West		FLAT	✓	1617	100.000
C - A1156 South-West		FLAT	✓	494	100.000
D - A14 South-East		FLAT	✓	643	100.000
E - Unnamed Road North-East		FLAT	✓	88	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1245	288	377	4
	B - A14 North-West	1460	6	141	0	11
	C - A1156 South-West	319	74	0	99	2
	D - A14 South-East	366	0	261	0	15
	E - Unnamed Road North-East	9	54	20	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	6	9	0
	B - A14 North-West	9	67	20	0	0
	C - A1156 South-West	23	5	0	0	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	14.85	7.7	B	1913	2870
B - A14 North-West	0.19	5.32	0.2	A	1481	236
C - A1156 South-West	1.13	681.41	88.5	F	494	742
D - A14 South-East	1.35	1712.19	246.4	F	643	964
E - Unnamed Road North-East	0.30	17.99	0.4	C	88	131

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1460	255	2158	0.887	1886	558	0.0	6.9	12.186	B
B - A14 North-West	1481	158	39	1460	0	657	839	0.188	157	1349	0.0	0.2	5.266	A
C - A1156 South-West	494	494	124	0	0	1581	449	1.101	425	640	0.0	17.4	92.601	F
D - A14 South-East	643	643	161	0	0	1738	495	1.299	483	462	0.0	40.0	163.399	F
E - Unnamed Road North-East	88	88	22	0	0	2114	301	0.291	86	27	0.0	0.4	16.644	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1460	258	2155	0.888	1912	563	6.9	7.4	14.527	B
B - A14 North-West	1481	158	39	1460	0	663	835	0.189	157	1368	0.2	0.2	5.313	A
C - A1156 South-West	494	494	124	0	0	1596	440	1.125	436	643	17.4	32.1	223.515	F
D - A14 South-East	643	643	161	0	0	1761	478	1.343	478	469	40.0	81.2	470.607	F
E - Unnamed Road North-East	88	88	22	0	0	2142	289	0.303	87	27	0.4	0.4	17.880	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1460	258	2155	0.888	1913	564	7.4	7.6	14.715	B
B - A14 North-West	1481	158	39	1460	0	665	834	0.189	157	1369	0.2	0.2	5.319	A
C - A1156 South-West	494	494	124	0	0	1597	439	1.126	437	643	32.1	46.4	338.954	F
D - A14 South-East	643	643	161	0	0	1762	478	1.345	477	469	81.2	122.5	779.419	F
E - Unnamed Road North-East	88	88	22	0	0	2144	288	0.304	87	27	0.4	0.4	17.949	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1460	259	2155	0.888	1913	564	7.6	7.7	14.788	B
B - A14 North-West	1481	158	39	1460	0	665	834	0.189	158	1370	0.2	0.2	5.321	A
C - A1156 South-West	494	494	124	0	0	1597	439	1.126	438	643	46.4	60.5	453.343	F
D - A14 South-East	643	643	161	0	0	1762	477	1.346	477	470	122.5	163.8	1089.773	F
E - Unnamed Road North-East	88	88	22	0	0	2144	288	0.304	88	27	0.4	0.4	17.972	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1460	259	2154	0.888	1913	564	7.7	7.7	14.827	B
B - A14 North-West	1481	158	39	1460	0	665	834	0.189	158	1370	0.2	0.2	5.323	A
C - A1156 South-West	494	494	124	0	0	1597	439	1.126	438	643	60.5	74.5	567.441	F
D - A14 South-East	643	643	161	0	0	1762	477	1.346	477	470	163.8	205.1	1400.894	F
E - Unnamed Road North-East	88	88	22	0	0	2145	288	0.304	88	27	0.4	0.4	17.982	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1913	1913	478	0	1460	259	2154	0.888	1913	564	7.7	7.7	14.850	B
B - A14 North-West	1481	158	39	1460	0	666	834	0.189	158	1370	0.2	0.2	5.323	A
C - A1156 South-West	494	494	124	0	0	1597	439	1.126	438	643	74.5	88.5	681.409	F
D - A14 South-East	643	643	161	0	0	1762	477	1.346	477	470	205.1	246.4	1712.193	F
E - Unnamed Road North-East	88	88	22	0	0	2145	288	0.304	88	27	0.4	0.4	17.986	C

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	58.77	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	116	75.10
B - A14 North-West	940	128.00
C - A1156 South-West	1816	80.70
D - A14 South-East	2071	131.50
E - Unnamed Road North-East	2422	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1617	100.000
B - A14 North-West		ONE HOUR	✓	1342	100.000
C - A1156 South-West		ONE HOUR	✓	542	100.000
D - A14 South-East		ONE HOUR	✓	626	100.000
E - Unnamed Road North-East		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	972	310	331	4
	B - A14 North-West	1241	4	57	0	40
	C - A1156 South-West	323	79	4	131	5
	D - A14 South-East	378	0	248	0	1
	E - Unnamed Road North-East	6	26	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	10	4	6	33
	B - A14 North-West	6	0	30	0	12
	C - A1156 South-West	15	3	0	1	0
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	8.79	4.3	A	1484	2226
B - A14 North-West	0.15	6.17	0.2	A	1089	139
C - A1156 South-West	1.15	238.46	43.3	F	497	746
D - A14 South-East	1.07	148.43	30.7	F	575	862
E - Unnamed Road North-East	0.11	10.51	0.1	B	34	52

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1218	1218	304	0	934	181	2266	0.537	1213	528	0.0	1.2	3.404	A
B - A14 North-West	894	76	19	934	0	633	860	0.088	76	810	0.0	0.1	4.587	A
C - A1156 South-West	408	408	102	0	0	1039	838	0.486	404	465	0.0	0.9	8.221	A
D - A14 South-East	472	472	118	0	0	1036	1008	0.468	468	349	0.0	0.9	6.631	A
E - Unnamed Road North-East	28	28	7	0	0	1357	671	0.042	28	37	0.0	0.0	5.595	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1454	1454	363	0	1115	216	2225	0.654	1451	630	1.2	1.9	4.637	A
B - A14 North-West	1067	91	23	1115	0	756	789	0.115	91	969	0.1	0.1	5.156	A
C - A1156 South-West	487	487	122	0	0	1243	697	0.699	482	556	0.9	2.2	16.411	C
D - A14 South-East	563	563	141	0	0	1239	856	0.658	559	418	0.9	1.9	11.964	B
E - Unnamed Road North-East	34	34	8	0	0	1623	547	0.062	34	44	0.0	0.1	7.010	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1781	1781	445	0	1366	245	2190	0.813	1772	689	1.9	4.1	8.424	A
B - A14 North-West	1307	111	28	1366	0	823	750	0.148	111	1172	0.1	0.2	5.628	A
C - A1156 South-West	597	597	149	0	0	1482	529	1.128	513	655	2.2	23.2	107.889	F
D - A14 South-East	690	690	172	0	0	1513	653	1.057	624	491	1.9	18.2	74.568	F
E - Unnamed Road North-East	41	41	10	0	0	1963	388	0.106	41	53	0.1	0.1	10.366	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1781	1781	445	0	1366	246	2189	0.814	1780	701	4.1	4.3	8.791	A
B - A14 North-West	1307	111	28	1366	0	835	743	0.149	111	1178	0.2	0.2	5.694	A
C - A1156 South-West	597	597	149	0	0	1497	519	1.150	516	663	23.2	43.3	238.455	F
D - A14 South-East	690	690	172	0	0	1520	647	1.065	640	494	18.2	30.7	148.429	F
E - Unnamed Road North-East	41	41	10	0	0	1973	384	0.108	41	53	0.1	0.1	10.515	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1454	1454	363	0	1115	255	2184	0.666	1463	789	4.3	2.0	5.055	A
B - A14 North-West	1067	91	23	1115	0	953	674	0.134	91	997	0.2	0.2	6.173	A
C - A1156 South-West	487	487	122	0	0	1322	643	0.758	628	606	43.3	8.0	154.539	F
D - A14 South-East	563	563	141	0	0	1250	848	0.664	678	455	30.7	2.1	36.158	E
E - Unnamed Road North-East	34	34	8	0	0	1672	526	0.064	34	46	0.1	0.1	7.325	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1218	1218	304	0	934	190	2256	0.540	1221	552	2.0	1.2	3.491	A
B - A14 North-West	894	76	19	934	0	665	841	0.090	76	820	0.2	0.1	4.709	A
C - A1156 South-West	408	408	102	0	0	1049	832	0.491	436	470	8.0	1.0	9.732	A
D - A14 South-East	472	472	118	0	0	1043	1002	0.470	476	359	2.1	0.9	6.905	A
E - Unnamed Road North-East	28	28	7	0	0	1373	664	0.043	28	37	0.1	0.0	5.664	A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	70.12	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	158	75.10
B - A14 North-West	773	128.00
C - A1156 South-West	1718	80.70
D - A14 South-East	2020	131.50
E - Unnamed Road North-East	2453	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1712	100.000
B - A14 North-West		ONE HOUR	✓	1606	100.000
C - A1156 South-West		ONE HOUR	✓	546	100.000
D - A14 South-East		ONE HOUR	✓	713	100.000
E - Unnamed Road North-East		ONE HOUR	✓	26	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1029	275	406	1
	B - A14 North-West	1490	3	92	0	21
	C - A1156 South-West	251	77	0	189	28
	D - A14 South-East	392	0	322	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	2	2	0
	B - A14 North-West	3	33	3	0	11
	C - A1156 South-West	5	0	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	13.28	6.7	B	1571	2356
B - A14 North-West	0.14	5.06	0.2	A	1441	160
C - A1156 South-West	1.07	155.98	27.5	F	501	751
D - A14 South-East	1.21	293.71	71.0	F	655	982
E - Unnamed Road North-East	0.09	12.70	0.1	B	24	35

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1289	1289	322	0	1122	249	2261	0.570	1284	481	0.0	1.3	3.664	A
B - A14 North-West	1182	87	22	1122	0	643	1028	0.085	87	846	0.0	0.1	3.825	A
C - A1156 South-West	411	411	103	0	0	1081	889	0.462	407	519	0.0	0.8	7.416	A
D - A14 South-East	537	537	134	0	0	1068	1019	0.527	533	446	0.0	1.1	15.341	A
E - Unnamed Road North-East	19	19	5	0	0	1495	606	0.032	19	38	0.0	0.0	6.132	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1539	1539	385	0	1339	298	2208	0.697	1535	573	1.3	2.3	5.325	A
B - A14 North-West	1411	104	26	1339	0	767	946	0.110	104	1011	0.1	0.1	4.277	A
C - A1156 South-West	490	490	123	0	0	1292	731	0.671	486	620	0.8	1.9	14.429	B
D - A14 South-East	641	641	160	0	0	1278	864	0.742	635	534	1.1	2.7	15.274	C
E - Unnamed Road North-East	23	23	6	0	0	1788	480	0.048	23	45	0.0	0.1	7.874	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1885	1885	471	0	1640	344	2156	0.874	1869	607	2.3	6.3	11.908	B
B - A14 North-West	1729	128	32	1640	0	823	909	0.141	128	1224	0.1	0.2	4.608	A
C - A1156 South-West	601	601	150	0	0	1504	571	1.052	543	699	1.9	16.3	78.358	F
D - A14 South-East	785	785	196	0	0	1556	659	1.191	648	633	2.7	37.1	125.988	F
E - Unnamed Road North-East	28	28	7	0	0	2160	320	0.089	28	52	0.1	0.1	12.335	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1885	1885	471	0	1640	349	2151	0.876	1883	614	6.3	6.7	13.283	B
B - A14 North-West	1729	128	32	1640	0	835	901	0.142	128	1235	0.2	0.2	4.655	A
C - A1156 South-West	601	601	150	0	0	1514	563	1.066	556	703	16.3	27.5	155.978	F
D - A14 South-East	785	785	196	0	0	1567	651	1.206	650	641	37.1	71.0	293.709	F
E - Unnamed Road North-East	28	28	7	0	0	2179	312	0.091	28	53	0.1	0.1	12.702	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1539	1539	385	0	1339	337	2165	0.711	1556	732	6.7	2.5	6.062	A
B - A14 North-West	1411	104	26	1339	0	964	815	0.128	104	1038	0.2	0.1	5.063	A
C - A1156 South-West	490	490	123	0	0	1418	639	0.768	584	717	27.5	4.0	85.819	F
D - A14 South-East	641	641	160	0	0	1294	853	0.752	641	573	71.0	21.1	200.714	F
E - Unnamed Road North-East	23	23	6	0	0	1843	457	0.051	23	50	0.1	0.1	8.300	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1289	1289	322	0	1122	256	2254	0.572	1294	534	2.5	1.3	3.769	A
B - A14 North-West	1182	87	22	1122	0	703	988	0.088	88	854	0.1	0.1	3.998	A
C - A1156 South-West	411	411	103	0	0	1134	851	0.483	423	559	4.0	0.9	8.650	A
D - A14 South-East	537	537	134	0	0	1076	1013	0.530	617	454	21.1	1.2	11.118	B
E - Unnamed Road North-East	19	19	5	0	0	1511	599	0.032	19	39	0.1	0.0	6.208	A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	3.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	39	75.10
B - A14 North-West	235	128.00
C - A1156 South-West	954	80.70
D - A14 South-East	867	131.50
E - Unnamed Road North-East	1068	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	930	100.000
B - A14 North-West		ONE HOUR	✓	612	100.000
C - A1156 South-West		ONE HOUR	✓	38	100.000
D - A14 South-East		ONE HOUR	✓	250	100.000
E - Unnamed Road North-East		ONE HOUR	✓	30	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	642	77	210	1
	B - A14 North-West	590	8	3	0	11
	C - A1156 South-West	30	7	0	0	1
	D - A14 South-East	163	0	76	0	12
	E - Unnamed Road North-East	10	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	10	88	0	0	11
	C - A1156 South-West	0	0	0	0	100
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.49	0.7	A	854	1281
B - A14 North-West	0.02	3.44	0.0	A	454	30
C - A1156 South-West	0.04	3.70	0.0	A	35	53
D - A14 South-East	0.22	3.79	0.3	A	230	345
E - Unnamed Road North-East	0.03	3.92	0.0	A	28	42

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	700	700	175	0	444	26	2484	0.282	699	152	0.0	0.4	2.015	A
B - A14 North-West	372	16	4	444	0	162	1112	0.015	16	508	0.0	0.0	3.285	A
C - A1156 South-West	29	29	7	0	0	641	1282	0.022	29	117	0.0	0.0	2.871	A
D - A14 South-East	188	188	47	0	0	570	1485	0.127	188	159	0.0	0.1	2.774	A
E - Unnamed Road North-East	23	23	6	0	0	706	1182	0.019	23	19	0.0	0.0	3.105	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	836	836	209	0	531	32	2477	0.338	836	182	0.4	0.5	2.194	A
B - A14 North-West	445	20	5	531	0	194	1094	0.018	20	608	0.0	0.0	3.351	A
C - A1156 South-West	34	34	9	0	0	767	1169	0.029	34	140	0.0	0.0	3.170	A
D - A14 South-East	225	225	56	0	0	682	1376	0.164	225	190	0.1	0.2	3.127	A
E - Unnamed Road North-East	27	27	7	0	0	845	1085	0.025	27	23	0.0	0.0	3.401	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1024	1024	256	0	650	39	2477	0.415	1024	222	0.5	0.7	2.493	A
B - A14 North-West	544	24	6	650	0	237	1069	0.023	24	744	0.0	0.0	3.444	A
C - A1156 South-West	42	42	11	0	0	939	1015	0.041	42	171	0.0	0.0	3.698	A
D - A14 South-East	276	276	69	0	0	835	1227	0.225	275	233	0.2	0.3	3.780	A
E - Unnamed Road North-East	33	33	8	0	0	1034	953	0.035	33	28	0.0	0.0	3.913	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1024	1024	256	0	650	39	2467	0.415	1024	223	0.7	0.7	2.495	A
B - A14 North-West	544	24	6	650	0	237	1069	0.023	24	745	0.0	0.0	3.445	A
C - A1156 South-West	42	42	11	0	0	940	1014	0.041	42	171	0.0	0.0	3.701	A
D - A14 South-East	276	276	69	0	0	836	1226	0.225	276	233	0.3	0.3	3.786	A
E - Unnamed Road North-East	33	33	8	0	0	1035	953	0.035	33	28	0.0	0.0	3.915	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	836	836	209	0	531	32	2477	0.338	837	182	0.7	0.5	2.198	A
B - A14 North-West	445	20	5	531	0	194	1093	0.018	20	609	0.0	0.0	3.352	A
C - A1156 South-West	34	34	9	0	0	768	1168	0.029	34	140	0.0	0.0	3.174	A
D - A14 South-East	225	225	56	0	0	683	1375	0.164	225	190	0.3	0.2	3.135	A
E - Unnamed Road North-East	27	27	7	0	0	846	1084	0.025	27	23	0.0	0.0	3.407	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	700	700	175	0	444	27	2484	0.282	701	152	0.5	0.4	2.021	A
B - A14 North-West	372	16	4	444	0	163	1112	0.015	16	510	0.0	0.0	3.286	A
C - A1156 South-West	29	29	7	0	0	643	1280	0.022	29	117	0.0	0.0	2.875	A
D - A14 South-East	188	188	47	0	0	572	1483	0.127	189	159	0.2	0.1	2.783	A
E - Unnamed Road North-East	23	23	6	0	0	708	1180	0.019	23	19	0.0	0.0	3.112	A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	36.83	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	173	75.10
B - A14 North-West	671	128.00
C - A1156 South-West	1782	80.70
D - A14 South-East	1755	131.50
E - Unnamed Road North-East	2057	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1624	100.000
B - A14 North-West		ONE HOUR	✓	1394	100.000
C - A1156 South-West		ONE HOUR	✓	344	100.000
D - A14 South-East		ONE HOUR	✓	584	100.000
E - Unnamed Road North-East		ONE HOUR	✓	52	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1141	197	282	4
	B - A14 North-West	1299	2	60	0	33
	C - A1156 South-West	162	52	0	124	6
	D - A14 South-East	349	3	216	0	16
	E - Unnamed Road North-East	2	45	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	9	33
	B - A14 North-West	8	100	5	0	19
	C - A1156 South-West	2	12	0	3	100
	D - A14 South-East	4	33	1	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	9.13	4.4	A	1490	2235
B - A14 North-West	0.11	4.24	0.1	A	1245	130
C - A1156 South-West	0.89	60.66	5.9	F	315	473
D - A14 South-East	1.10	186.66	36.9	F	535	803
E - Unnamed Road North-East	0.17	12.52	0.2	B	48	72

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1222	1222	306	0	978	180	2273	0.538	1218	383	0.0	1.2	3.395	A
B - A14 North-West	1021	71	18	978	0	492	1075	0.066	71	932	0.0	0.1	3.584	A
C - A1156 South-West	259	259	65	0	0	1167	793	0.327	257	357	0.0	0.5	6.695	A
D - A14 South-East	439	439	110	0	0	1088	987	0.445	436	305	0.0	0.8	6.504	A
E - Unnamed Road North-East	39	39	10	0	0	1354	657	0.060	39	44	0.0	0.1	5.822	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1460	1460	365	0	1168	215	2233	0.654	1457	458	1.2	1.9	4.622	A
B - A14 North-West	1219	85	21	1168	0	588	1014	0.084	85	1115	0.1	0.1	3.876	A
C - A1156 South-West	309	309	77	0	0	1396	628	0.492	307	427	0.5	0.9	11.170	B
D - A14 South-East	525	525	131	0	0	1302	817	0.642	521	365	0.8	1.7	12.009	B
E - Unnamed Road North-East	47	47	12	0	0	1620	526	0.089	47	52	0.1	0.1	7.514	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1788	1788	447	0	1430	257	2185	0.818	1778	512	1.9	4.3	8.648	A
B - A14 North-West	1493	104	26	1430	0	665	964	0.108	104	1359	0.1	0.1	4.185	A
C - A1156 South-West	379	379	95	0	0	1660	436	0.868	363	495	0.9	4.7	42.980	E
D - A14 South-East	643	643	161	0	0	1589	589	1.091	566	442	1.7	20.7	88.899	F
E - Unnamed Road North-East	57	57	14	0	0	1973	351	0.163	57	62	0.1	0.2	12.225	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1788	1788	447	0	1430	261	2180	0.820	1787	524	4.3	4.4	9.128	A
B - A14 North-West	1493	104	26	1430	0	681	954	0.109	104	1367	0.1	0.1	4.235	A
C - A1156 South-West	379	379	95	0	0	1674	426	0.888	374	501	4.7	5.9	60.665	F
D - A14 South-East	643	643	161	0	0	1597	582	1.103	578	447	20.7	36.9	186.655	F
E - Unnamed Road North-East	57	57	14	0	0	1986	345	0.166	57	62	0.2	0.2	12.522	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1460	1460	365	0	1168	227	2220	0.658	1470	553	4.4	1.9	4.859	A
B - A14 North-West	1219	85	21	1168	0	695	945	0.090	85	1128	0.1	0.1	4.188	A
C - A1156 South-West	309	309	77	0	0	1495	557	0.555	328	481	5.9	1.3	16.860	C
D - A14 South-East	525	525	131	0	0	1313	808	0.649	664	375	36.9	2.0	50.535	F
E - Unnamed Road North-East	47	47	12	0	0	1640	516	0.091	47	56	0.2	0.1	7.688	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1222	1222	306	0	978	182	2271	0.538	1226	390	1.9	1.2	3.454	A
B - A14 North-West	1021	71	18	978	0	501	1070	0.067	71	938	0.1	0.1	3.609	A
C - A1156 South-West	259	259	65	0	0	1178	785	0.330	262	361	1.3	0.5	6.923	A
D - A14 South-East	439	439	110	0	0	1095	981	0.448	444	308	2.0	0.8	6.760	A
E - Unnamed Road North-East	39	39	10	0	0	1364	652	0.060	39	44	0.1	0.1	5.877	A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	412.04	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	177	75.10
B - A14 North-West	971	128.00
C - A1156 South-West	2035	80.70
D - A14 South-East	2308	131.50
E - Unnamed Road North-East	2658	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	2081	100.000
B - A14 North-West		FLAT	✓	1646	100.000
C - A1156 South-West		FLAT	✓	516	100.000
D - A14 South-East		FLAT	✓	673	100.000
E - Unnamed Road North-East		FLAT	✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1314	377	386	4
	B - A14 North-West	1516	6	113	0	11
	C - A1156 South-West	264	74	0	176	2
	D - A14 South-East	365	0	292	0	16
	E - Unnamed Road North-East	10	56	21	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	5	7	0
	B - A14 North-West	8	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	6	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.96	38.35	21.2	E	2081	3121
B - A14 North-West	0.13	4.12	0.1	A	1718	195
C - A1156 South-West	1.08	466.63	65.1	F	516	775
D - A14 South-East	1.54	2630.77	347.3	F	673	1010
E - Unnamed Road North-East	0.38	24.35	0.6	C	91	136

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2081	2081	520	0	1516	299	2169	0.959	2025	494	0.0	14.0	20.211	C
B - A14 North-West	1718	130	32	1516	0	664	1003	0.129	129	1405	0.0	0.1	4.116	A
C - A1156 South-West	516	516	129	0	0	1608	494	1.046	461	698	0.0	13.9	73.143	F
D - A14 South-East	673	673	168	0	0	1848	467	1.441	459	538	0.0	53.6	225.447	F
E - Unnamed Road North-East	91	91	23	0	0	2297	262	0.346	89	27	0.0	0.5	20.541	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2081	2081	520	0	1516	304	2165	0.961	2068	491	14.0	17.1	31.347	D
B - A14 North-West	1718	130	32	1516	0	665	1003	0.130	130	1435	0.1	0.1	4.124	A
C - A1156 South-West	516	516	129	0	0	1627	480	1.075	473	700	13.9	24.8	166.082	F
D - A14 South-East	673	673	168	0	0	1885	442	1.523	442	550	53.6	111.4	687.687	F
E - Unnamed Road North-East	91	91	23	0	0	2345	243	0.374	91	27	0.5	0.6	23.545	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2081	2081	520	0	1516	304	2164	0.962	2074	491	17.1	18.8	34.512	D
B - A14 North-West	1718	130	32	1516	0	665	1003	0.130	130	1439	0.1	0.1	4.125	A
C - A1156 South-West	516	516	129	0	0	1629	479	1.078	475	700	24.8	35.1	243.139	F
D - A14 South-East	673	673	168	0	0	1890	439	1.534	439	552	111.4	170.0	1166.021	F
E - Unnamed Road North-East	91	91	23	0	0	2351	241	0.378	91	27	0.6	0.6	24.010	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2081	2081	520	0	1516	305	2163	0.962	2076	490	18.8	19.9	36.314	E
B - A14 North-West	1718	130	32	1516	0	665	1003	0.130	130	1441	0.1	0.1	4.125	A
C - A1156 South-West	516	516	129	0	0	1630	479	1.079	476	700	35.1	45.2	318.216	F
D - A14 South-East	673	673	168	0	0	1892	437	1.539	437	553	170.0	229.0	1652.280	F
E - Unnamed Road North-East	91	91	23	0	0	2354	239	0.379	91	27	0.6	0.6	24.195	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2081	2081	520	0	1516	305	2163	0.962	2078	490	19.9	20.7	37.503	E
B - A14 North-West	1718	130	32	1516	0	665	1003	0.130	130	1442	0.1	0.1	4.125	A
C - A1156 South-West	516	516	129	0	0	1630	478	1.080	477	700	45.2	55.2	392.604	F
D - A14 South-East	673	673	168	0	0	1893	437	1.541	437	553	229.0	288.1	2142.126	F
E - Unnamed Road North-East	91	91	23	0	0	2355	239	0.380	91	27	0.6	0.6	24.294	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2081	2081	520	0	1516	305	2163	0.962	2078	490	20.7	21.2	38.352	E
B - A14 North-West	1718	130	32	1516	0	665	1003	0.130	130	1442	0.1	0.1	4.125	A
C - A1156 South-West	516	516	129	0	0	1631	478	1.080	477	699	55.2	65.1	466.628	F
D - A14 South-East	673	673	168	0	0	1894	436	1.543	436	553	288.1	347.3	2630.773	F
E - Unnamed Road North-East	91	91	23	0	0	2356	239	0.381	91	27	0.6	0.6	24.353	C

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	98.51	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	138	75.10
B - A14 North-West	1026	128.00
C - A1156 South-West	1785	80.70
D - A14 South-East	2100	131.50
E - Unnamed Road North-East	2484	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1759	100.000
B - A14 North-West		ONE HOUR	✓	1437	100.000
C - A1156 South-West		ONE HOUR	✓	576	100.000
D - A14 South-East		ONE HOUR	✓	717	100.000
E - Unnamed Road North-East		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1019	395	341	4
	B - A14 North-West	1350	4	42	0	41
	C - A1156 South-West	327	79	4	161	5
	D - A14 South-East	414	0	303	0	1
	E - Unnamed Road North-East	6	27	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	4	33
	B - A14 North-West	5	0	5	0	12
	C - A1156 South-West	2	3	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	12.23	6.3	B	1614	2422
B - A14 North-West	0.11	5.34	0.1	A	1289	120
C - A1156 South-West	1.10	194.57	36.8	F	529	793
D - A14 South-East	1.33	434.83	101.3	F	658	987
E - Unnamed Road North-East	0.13	12.32	0.1	B	36	54

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1325	1325	331	0	1016	193	2308	0.574	1319	558	0.0	1.3	3.622	A
B - A14 North-West	1057	66	16	1016	0	686	947	0.069	65	846	0.0	0.1	4.081	A
C - A1156 South-West	434	434	108	0	0	1101	877	0.495	430	558	0.0	1.0	7.986	A
D - A14 South-East	540	540	135	0	0	1124	970	0.557	535	379	0.0	1.2	8.189	A
E - Unnamed Road North-East	29	29	7	0	0	1474	635	0.046	29	38	0.0	0.0	5.944	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1582	1582	395	0	1213	231	2267	0.698	1578	663	1.3	2.3	5.200	A
B - A14 North-West	1263	79	20	1213	0	816	868	0.090	78	1011	0.1	0.1	4.559	A
C - A1156 South-West	518	518	129	0	0	1315	718	0.721	512	666	1.0	2.4	17.012	C
D - A14 South-East	645	645	161	0	0	1345	812	0.794	636	453	1.2	3.5	19.534	C
E - Unnamed Road North-East	35	35	9	0	0	1763	506	0.069	35	46	0.0	0.1	7.636	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1937	1937	484	0	1486	263	2231	0.868	1922	669	2.3	6.0	11.152	B
B - A14 North-West	1546	96	24	1486	0	835	857	0.112	96	1223	0.1	0.1	4.732	A
C - A1156 South-West	634	634	159	0	0	1498	580	1.093	560	735	2.4	21.0	93.150	F
D - A14 South-East	790	790	197	0	0	1638	601	1.313	595	534	3.5	52.1	183.199	F
E - Unnamed Road North-East	43	43	11	0	0	2130	343	0.125	43	55	0.1	0.1	11.987	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1937	1937	484	0	1486	266	2227	0.870	1936	673	6.0	6.3	12.228	B
B - A14 North-West	1546	96	24	1486	0	843	852	0.113	96	1233	0.1	0.1	4.762	A
C - A1156 South-West	634	634	159	0	0	1505	575	1.103	571	737	21.0	36.8	194.572	F
D - A14 South-East	790	790	197	0	0	1650	593	1.331	593	540	52.1	101.3	434.832	F
E - Unnamed Road North-East	43	43	11	0	0	2147	335	0.128	43	55	0.1	0.1	12.317	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1582	1582	395	0	1213	265	2230	0.709	1597	818	6.3	2.5	5.823	A
B - A14 North-West	1263	79	20	1213	0	1005	753	0.104	79	1038	0.1	0.1	5.341	A
C - A1156 South-West	518	518	129	0	0	1417	643	0.805	626	737	36.8	9.7	141.078	F
D - A14 South-East	645	645	161	0	0	1361	800	0.806	792	489	101.3	64.5	368.658	F
E - Unnamed Road North-East	35	35	9	0	0	1815	484	0.072	35	47	0.1	0.1	8.034	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1325	1325	331	0	1016	205	2295	0.577	1329	727	2.5	1.4	3.745	A
B - A14 North-West	1057	66	16	1016	0	867	836	0.079	66	857	0.1	0.1	4.678	A
C - A1156 South-West	434	434	108	0	0	1256	763	0.568	467	669	9.7	1.4	13.475	B
D - A14 South-East	540	540	135	0	0	1133	964	0.560	793	392	64.5	1.3	70.705	F
E - Unnamed Road North-East	29	29	7	0	0	1495	626	0.047	29	39	0.1	0.0	6.038	A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	137.14	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	162	75.10
B - A14 North-West	901	128.00
C - A1156 South-West	1885	80.70
D - A14 South-East	2153	131.50
E - Unnamed Road North-East	2578	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1901	100.000
B - A14 North-West		ONE HOUR	✓	1764	100.000
C - A1156 South-West		ONE HOUR	✓	579	100.000
D - A14 South-East		ONE HOUR	✓	763	100.000
E - Unnamed Road North-East		ONE HOUR	✓	27	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1177	323	399	1
	B - A14 North-West	1650	3	89	0	22
	C - A1156 South-West	253	77	0	219	29
	D - A14 South-East	405	0	359	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	2	2	0	0
	B - A14 North-West	2	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	3	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	27.45	15.0	D	1744	2617
B - A14 North-West	0.13	4.77	0.2	A	1611	157
C - A1156 South-West	1.16	252.73	48.3	F	531	796
D - A14 South-East	1.52	634.67	145.3	F	700	1051
E - Unnamed Road North-East	0.11	15.58	0.1	C	25	37

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1431	1431	358	0	1242	271	2302	0.622	1425	491	0.0	1.6	4.073	A
B - A14 North-West	1322	86	21	1242	0	676	1020	0.084	85	957	0.0	0.1	3.854	A
C - A1156 South-West	436	436	109	0	0	1201	842	0.517	431	580	0.0	1.1	8.676	A
D - A14 South-East	575	575	144	0	0	1213	942	0.610	569	463	0.0	1.5	9.497	A
E - Unnamed Road North-East	20	20	5	0	0	1656	557	0.036	20	39	0.0	0.0	6.704	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1709	1709	427	0	1483	322	2244	0.762	1703	580	1.6	3.1	6.580	A
B - A14 North-West	1578	102	26	1483	0	800	939	0.109	102	1143	0.1	0.1	4.300	A
C - A1156 South-West	520	520	130	0	0	1430	679	0.766	512	689	1.1	3.0	20.752	C
D - A14 South-East	686	686	172	0	0	1450	778	0.882	669	553	1.5	5.8	29.324	D
E - Unnamed Road North-East	24	24	6	0	0	1979	427	0.056	24	47	0.0	0.1	8.930	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2093	2093	523	0	1817	359	2203	0.950	2054	541	3.1	12.8	20.395	C
B - A14 North-West	1933	125	31	1817	0	775	957	0.131	125	1369	0.1	0.2	4.330	A
C - A1156 South-West	637	637	159	0	0	1599	559	1.140	545	720	3.0	26.1	114.420	F
D - A14 South-East	840	840	210	0	0	1751	571	1.471	569	639	5.8	73.8	268.142	F
E - Unnamed Road North-East	29	29	7	0	0	2360	273	0.108	29	53	0.1	0.1	14.744	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2093	2093	523	0	1817	361	2201	0.951	2084	535	12.8	15.0	27.446	D
B - A14 North-West	1933	125	31	1817	0	770	960	0.131	125	1389	0.2	0.2	4.315	A
C - A1156 South-West	637	637	159	0	0	1611	551	1.157	548	719	26.1	48.3	252.731	F
D - A14 South-East	840	840	210	0	0	1775	554	1.516	554	646	73.8	145.3	634.671	F
E - Unnamed Road North-East	29	29	7	0	0	2392	260	0.113	29	53	0.1	0.1	15.583	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1709	1709	427	0	1483	366	2195	0.778	1754	665	15.0	3.6	8.952	A
B - A14 North-West	1578	102	26	1483	0	929	856	0.120	102	1189	0.2	0.1	4.774	A
C - A1156 South-West	520	520	130	0	0	1503	627	0.829	614	733	48.3	24.7	216.399	F
D - A14 South-East	686	686	172	0	0	1491	750	0.915	745	602	145.3	130.5	619.647	F
E - Unnamed Road North-East	24	24	6	0	0	2069	391	0.062	24	52	0.1	0.1	9.825	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1431	1431	358	0	1242	312	2256	0.634	1439	723	3.6	1.8	4.447	A
B - A14 North-West	1322	86	21	1242	0	949	841	0.102	86	978	0.1	0.1	4.768	A
C - A1156 South-West	436	436	109	0	0	1400	700	0.622	527	751	24.7	1.7	32.829	D
D - A14 South-East	575	575	144	0	0	1225	934	0.615	927	503	130.5	42.5	339.159	F
E - Unnamed Road North-East	20	20	5	0	0	1707	537	0.038	20	44	0.1	0.0	6.972	A

2034 Operational Forecast, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	3.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	39	75.10
B - A14 North-West	235	128.00
C - A1156 South-West	954	80.70
D - A14 South-East	867	131.50
E - Unnamed Road North-East	1068	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Forecast	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	930	100.000
B - A14 North-West		ONE HOUR	✓	612	100.000
C - A1156 South-West		ONE HOUR	✓	38	100.000
D - A14 South-East		ONE HOUR	✓	250	100.000
E - Unnamed Road North-East		ONE HOUR	✓	30	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	642	77	210	1
	B - A14 North-West	590	8	3	0	11
	C - A1156 South-West	30	7	0	0	1
	D - A14 South-East	163	0	76	0	12
	E - Unnamed Road North-East	10	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	10	88	0	0	11
	C - A1156 South-West	0	0	0	0	100
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.49	0.7	A	854	1281
B - A14 North-West	0.02	3.44	0.0	A	454	30
C - A1156 South-West	0.04	3.70	0.0	A	35	53
D - A14 South-East	0.22	3.79	0.3	A	230	345
E - Unnamed Road North-East	0.03	3.92	0.0	A	28	42

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	700	700	175	0	444	26	2484	0.282	699	152	0.0	0.4	2.015	A
B - A14 North-West	372	16	4	444	0	162	1112	0.015	16	508	0.0	0.0	3.285	A
C - A1156 South-West	29	29	7	0	0	641	1282	0.022	29	117	0.0	0.0	2.871	A
D - A14 South-East	188	188	47	0	0	570	1485	0.127	188	159	0.0	0.1	2.774	A
E - Unnamed Road North-East	23	23	6	0	0	706	1182	0.019	23	19	0.0	0.0	3.105	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	836	836	209	0	531	32	2477	0.338	836	182	0.4	0.5	2.194	A
B - A14 North-West	445	20	5	531	0	194	1094	0.018	20	608	0.0	0.0	3.351	A
C - A1156 South-West	34	34	9	0	0	767	1169	0.029	34	140	0.0	0.0	3.170	A
D - A14 South-East	225	225	56	0	0	682	1376	0.164	225	190	0.1	0.2	3.127	A
E - Unnamed Road North-East	27	27	7	0	0	845	1085	0.025	27	23	0.0	0.0	3.401	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1024	1024	256	0	650	39	2477	0.415	1024	222	0.5	0.7	2.493	A
B - A14 North-West	544	24	6	650	0	237	1069	0.023	24	744	0.0	0.0	3.444	A
C - A1156 South-West	42	42	11	0	0	939	1015	0.041	42	171	0.0	0.0	3.698	A
D - A14 South-East	276	276	69	0	0	835	1227	0.225	275	233	0.2	0.3	3.780	A
E - Unnamed Road North-East	33	33	8	0	0	1034	953	0.035	33	28	0.0	0.0	3.913	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1024	1024	256	0	650	39	2467	0.415	1024	223	0.7	0.7	2.495	A
B - A14 North-West	544	24	6	650	0	237	1069	0.023	24	745	0.0	0.0	3.445	A
C - A1156 South-West	42	42	11	0	0	940	1014	0.041	42	171	0.0	0.0	3.701	A
D - A14 South-East	276	276	69	0	0	836	1226	0.225	276	233	0.3	0.3	3.786	A
E - Unnamed Road North-East	33	33	8	0	0	1035	953	0.035	33	28	0.0	0.0	3.915	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	836	836	209	0	531	32	2477	0.338	837	182	0.7	0.5	2.198	A
B - A14 North-West	445	20	5	531	0	194	1093	0.018	20	609	0.0	0.0	3.352	A
C - A1156 South-West	34	34	9	0	0	768	1168	0.029	34	140	0.0	0.0	3.174	A
D - A14 South-East	225	225	56	0	0	683	1375	0.164	225	190	0.3	0.2	3.135	A
E - Unnamed Road North-East	27	27	7	0	0	846	1084	0.025	27	23	0.0	0.0	3.407	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	700	700	175	0	444	27	2484	0.282	701	152	0.5	0.4	2.021	A
B - A14 North-West	372	16	4	444	0	163	1112	0.015	16	510	0.0	0.0	3.286	A
C - A1156 South-West	29	29	7	0	0	643	1280	0.022	29	117	0.0	0.0	2.875	A
D - A14 South-East	188	188	47	0	0	572	1483	0.127	189	159	0.2	0.1	2.783	A
E - Unnamed Road North-East	23	23	6	0	0	708	1180	0.019	23	19	0.0	0.0	3.112	A

2034 Operational Forecast, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	37.19	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	174	75.10
B - A14 North-West	673	128.00
C - A1156 South-West	1781	80.70
D - A14 South-East	1754	131.50
E - Unnamed Road North-East	2057	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Forecast	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1625	100.000
B - A14 North-West		ONE HOUR	✓	1397	100.000
C - A1156 South-West		ONE HOUR	✓	348	100.000
D - A14 South-East		ONE HOUR	✓	584	100.000
E - Unnamed Road North-East		ONE HOUR	✓	52	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1139	200	282	4
	B - A14 North-West	1302	2	60	0	33
	C - A1156 South-West	162	52	0	128	6
	D - A14 South-East	349	3	216	0	16
	E - Unnamed Road North-East	2	45	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	9	33
	B - A14 North-West	9	100	5	0	19
	C - A1156 South-West	2	12	0	3	100
	D - A14 South-East	4	33	1	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	9.25	4.5	A	1491	2236
B - A14 North-West	0.11	4.25	0.1	A	1252	130
C - A1156 South-West	0.89	62.41	6.2	F	319	479
D - A14 South-East	1.10	188.10	37.2	F	535	803
E - Unnamed Road North-East	0.17	12.63	0.2	B	48	72

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1223	1223	306	0	980	183	2270	0.539	1219	383	0.0	1.2	3.407	A
B - A14 North-West	1027	71	18	980	0	495	1073	0.066	71	930	0.0	0.1	3.591	A
C - A1156 South-West	262	262	65	0	0	1166	794	0.330	260	359	0.0	0.5	6.713	A
D - A14 South-East	439	439	110	0	0	1089	986	0.445	436	308	0.0	0.8	6.509	A
E - Unnamed Road North-East	39	39	10	0	0	1358	655	0.060	39	44	0.0	0.1	5.838	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1461	1461	365	0	1171	219	2229	0.655	1458	458	1.2	1.9	4.648	A
B - A14 North-West	1226	85	21	1171	0	592	1011	0.084	85	1113	0.1	0.1	3.886	A
C - A1156 South-West	313	313	78	0	0	1394	629	0.497	311	429	0.5	1.0	11.234	B
D - A14 South-East	525	525	131	0	0	1302	816	0.643	521	369	0.8	1.7	12.032	B
E - Unnamed Road North-East	47	47	12	0	0	1625	524	0.089	47	52	0.1	0.1	7.546	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1789	1789	447	0	1434	261	2181	0.820	1779	512	1.9	4.3	8.751	A
B - A14 North-West	1502	104	26	1434	0	668	962	0.108	104	1356	0.1	0.1	4.197	A
C - A1156 South-West	383	383	96	0	0	1657	438	0.874	367	498	1.0	4.9	43.769	E
D - A14 South-East	643	643	161	0	0	1590	588	1.093	566	446	1.7	20.9	89.398	F
E - Unnamed Road North-East	57	57	14	0	0	1978	349	0.164	57	62	0.1	0.2	12.319	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1789	1789	447	0	1434	265	2176	0.822	1788	523	4.3	4.5	9.255	A
B - A14 North-West	1502	104	26	1434	0	684	952	0.110	104	1365	0.1	0.1	4.248	A
C - A1156 South-West	383	383	96	0	0	1671	428	0.894	378	504	4.9	6.2	62.413	F
D - A14 South-East	643	643	161	0	0	1598	582	1.105	577	451	20.9	37.2	188.097	F
E - Unnamed Road North-East	57	57	14	0	0	1992	342	0.167	57	62	0.2	0.2	12.627	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1461	1461	365	0	1171	231	2216	0.659	1471	554	4.5	2.0	4.897	A
B - A14 North-West	1226	85	21	1171	0	700	942	0.090	85	1126	0.1	0.1	4.205	A
C - A1156 South-West	313	313	78	0	0	1495	558	0.560	332	485	6.2	1.3	17.197	C
D - A14 South-East	525	525	131	0	0	1314	807	0.650	665	379	37.2	2.0	51.585	F
E - Unnamed Road North-East	47	47	12	0	0	1645	513	0.091	47	56	0.2	0.1	7.728	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1223	1223	306	0	980	186	2267	0.539	1226	390	2.0	1.2	3.467	A
B - A14 North-West	1027	71	18	980	0	505	1067	0.067	71	937	0.1	0.1	3.614	A
C - A1156 South-West	262	262	65	0	0	1176	786	0.333	265	363	1.3	0.5	6.945	A
D - A14 South-East	439	439	110	0	0	1096	981	0.448	444	312	2.0	0.8	6.764	A
E - Unnamed Road North-East	39	39	10	0	0	1368	650	0.060	39	44	0.1	0.1	5.892	A

2034 Operational Forecast, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	454.62	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	163	75.10
B - A14 North-West	957	128.00
C - A1156 South-West	2034	80.70
D - A14 South-East	2301	131.50
E - Unnamed Road North-East	2637	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D33	2034 Operational Forecast	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	2105	100.000
B - A14 North-West		FLAT	✓	1645	100.000
C - A1156 South-West		FLAT	✓	517	100.000
D - A14 South-East		FLAT	✓	674	100.000
E - Unnamed Road North-East		FLAT	✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1322	393	386	4
	B - A14 North-West	1515	6	113	0	11
	C - A1156 South-West	264	74	0	177	2
	D - A14 South-East	366	0	292	0	16
	E - Unnamed Road North-East	10	56	21	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	4	7	0
	B - A14 North-West	8	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	47.38	26.5	E	2105	3157
B - A14 North-West	0.13	4.09	0.1	A	1719	195
C - A1156 South-West	1.08	467.91	65.4	F	517	776
D - A14 South-East	1.61	2932.14	372.3	F	674	1011
E - Unnamed Road North-East	0.40	26.46	0.7	D	91	136

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2105	2105	526	0	1515	300	2171	0.970	2041	487	0.0	15.8	21.946	C
B - A14 North-West	1719	130	32	1515	0	658	1009	0.129	129	1408	0.0	0.1	4.091	A
C - A1156 South-West	517	517	129	0	0	1604	495	1.045	462	707	0.0	13.9	72.871	F
D - A14 South-East	674	674	169	0	0	1866	454	1.486	446	537	0.0	57.1	246.479	F
E - Unnamed Road North-East	91	91	23	0	0	2314	253	0.359	89	27	0.0	0.5	21.689	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2105	2105	526	0	1515	304	2166	0.972	2088	483	15.8	20.0	35.929	E
B - A14 North-West	1719	130	32	1515	0	658	1009	0.129	130	1440	0.1	0.1	4.094	A
C - A1156 South-West	517	517	129	0	0	1624	482	1.075	474	708	13.9	24.8	165.471	F
D - A14 South-East	674	674	169	0	0	1905	427	1.580	427	550	57.1	119.0	759.402	F
E - Unnamed Road North-East	91	91	23	0	0	2365	232	0.391	90	27	0.5	0.6	25.288	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2105	2105	526	0	1515	305	2165	0.972	2095	482	20.0	22.6	40.705	E
B - A14 North-West	1719	130	32	1515	0	657	1009	0.129	130	1445	0.1	0.1	4.093	A
C - A1156 South-West	517	517	129	0	0	1626	480	1.078	476	708	24.8	35.1	242.587	F
D - A14 South-East	674	674	169	0	0	1911	423	1.594	423	552	119.0	181.8	1292.056	F
E - Unnamed Road North-East	91	91	23	0	0	2373	229	0.396	91	27	0.6	0.6	25.933	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2105	2105	526	0	1515	305	2165	0.972	2098	482	22.6	24.3	43.689	E
B - A14 North-West	1719	130	32	1515	0	657	1010	0.129	130	1447	0.1	0.1	4.092	A
C - A1156 South-West	517	517	129	0	0	1627	479	1.080	477	708	35.1	45.3	318.060	F
D - A14 South-East	674	674	169	0	0	1914	421	1.601	421	553	181.8	245.1	1835.746	F
E - Unnamed Road North-East	91	91	23	0	0	2376	228	0.398	91	27	0.6	0.6	26.204	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2105	2105	526	0	1515	305	2165	0.972	2100	481	24.3	25.6	45.792	E
B - A14 North-West	1719	130	32	1515	0	657	1010	0.129	130	1448	0.1	0.1	4.091	A
C - A1156 South-West	517	517	129	0	0	1628	479	1.081	477	708	45.3	55.4	393.088	F
D - A14 South-East	674	674	169	0	0	1915	420	1.605	420	553	245.1	308.6	2385.193	F
E - Unnamed Road North-East	91	91	23	0	0	2378	227	0.400	91	27	0.6	0.7	26.359	D

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2105	2105	526	0	1515	305	2165	0.972	2101	481	25.6	26.5	47.376	E
B - A14 North-West	1719	130	32	1515	0	656	1010	0.129	130	1449	0.1	0.1	4.090	A
C - A1156 South-West	517	517	129	0	0	1628	479	1.081	477	708	55.4	65.4	467.909	F
D - A14 South-East	674	674	169	0	0	1916	419	1.607	419	554	308.6	372.3	2932.140	F
E - Unnamed Road North-East	91	91	23	0	0	2379	227	0.400	91	27	0.7	0.7	26.458	D

2034 Operational Forecast, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	97.12	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	137	75.10
B - A14 North-West	1028	128.00
C - A1156 South-West	1786	80.70
D - A14 South-East	2097	131.50
E - Unnamed Road North-East	2479	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Forecast	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1752	100.000
B - A14 North-West		ONE HOUR	✓	1439	100.000
C - A1156 South-West		ONE HOUR	✓	578	100.000
D - A14 South-East		ONE HOUR	✓	717	100.000
E - Unnamed Road North-East		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1010	397	341	4
	B - A14 North-West	1352	4	42	0	41
	C - A1156 South-West	327	79	4	163	5
	D - A14 South-East	414	0	303	0	1
	E - Unnamed Road North-East	6	27	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	4	33
	B - A14 North-West	5	0	5	0	12
	C - A1156 South-West	2	3	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	12.18	6.3	B	1608	2412
B - A14 North-West	0.11	5.36	0.1	A	1291	120
C - A1156 South-West	1.10	191.08	36.2	F	530	796
D - A14 South-East	1.33	428.32	100.0	F	658	987
E - Unnamed Road North-East	0.13	12.30	0.1	B	36	54

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1319	1319	330	0	1018	195	2302	0.573	1314	558	0.0	1.3	3.623	A
B - A14 North-West	1059	66	16	1018	0	687	946	0.070	65	839	0.0	0.1	4.086	A
C - A1156 South-West	435	435	109	0	0	1095	880	0.494	431	560	0.0	1.0	7.956	A
D - A14 South-East	540	540	135	0	0	1119	972	0.556	535	381	0.0	1.2	8.152	A
E - Unnamed Road North-East	29	29	7	0	0	1471	635	0.046	29	38	0.0	0.0	5.938	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1575	1575	394	0	1215	233	2261	0.697	1572	663	1.3	2.3	5.197	A
B - A14 North-West	1264	79	20	1215	0	818	867	0.091	78	1003	0.1	0.1	4.567	A
C - A1156 South-West	520	520	130	0	0	1307	722	0.720	514	668	1.0	2.4	16.863	C
D - A14 South-East	645	645	161	0	0	1339	814	0.792	636	455	1.2	3.5	19.319	C
E - Unnamed Road North-East	35	35	9	0	0	1759	507	0.069	35	46	0.0	0.1	7.627	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1929	1929	482	0	1488	265	2224	0.867	1915	671	2.3	6.0	11.117	B
B - A14 North-West	1549	96	24	1488	0	840	854	0.113	96	1214	0.1	0.1	4.750	A
C - A1156 South-West	636	636	159	0	0	1490	584	1.090	563	738	2.4	20.7	91.813	F
D - A14 South-East	790	790	197	0	0	1631	604	1.308	598	536	3.5	51.4	180.449	F
E - Unnamed Road North-East	43	43	11	0	0	2124	343	0.125	43	55	0.1	0.1	11.972	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1929	1929	482	0	1488	268	2221	0.869	1928	676	6.0	6.3	12.180	B
B - A14 North-West	1549	96	24	1488	0	848	849	0.113	96	1223	0.1	0.1	4.781	A
C - A1156 South-West	636	636	159	0	0	1497	579	1.099	574	741	20.7	36.2	191.084	F
D - A14 South-East	790	790	197	0	0	1642	596	1.325	595	542	51.4	100.0	428.319	F
E - Unnamed Road North-East	43	43	11	0	0	2141	335	0.128	43	55	0.1	0.1	12.301	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1575	1575	394	0	1215	267	2223	0.709	1591	820	6.3	2.5	5.823	A
B - A14 North-West	1264	79	20	1215	0	1009	750	0.105	79	1030	0.1	0.1	5.361	A
C - A1156 South-West	520	520	130	0	0	1410	646	0.804	629	740	36.2	8.9	137.041	F
D - A14 South-East	645	645	161	0	0	1355	802	0.804	794	491	100.0	62.7	361.113	F
E - Unnamed Road North-East	35	35	9	0	0	1811	484	0.072	35	47	0.1	0.1	8.026	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1319	1319	330	0	1018	206	2290	0.576	1324	721	2.5	1.4	3.739	A
B - A14 North-West	1059	66	16	1018	0	861	839	0.078	66	849	0.1	0.1	4.659	A
C - A1156 South-West	435	435	109	0	0	1245	770	0.565	465	668	8.9	1.3	12.971	B
D - A14 South-East	540	540	135	0	0	1128	966	0.559	785	392	62.7	1.3	64.812	F
E - Unnamed Road North-East	29	29	7	0	0	1491	627	0.047	29	39	0.1	0.0	6.028	A

2034 Operational Forecast, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	138.30	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	164	75.10
B - A14 North-West	909	128.00
C - A1156 South-West	1886	80.70
D - A14 South-East	2154	131.50
E - Unnamed Road North-East	2582	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Forecast	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1906	100.000
B - A14 North-West		ONE HOUR	✓	1768	100.000
C - A1156 South-West		ONE HOUR	✓	572	100.000
D - A14 South-East		ONE HOUR	✓	763	100.000
E - Unnamed Road North-East		ONE HOUR	✓	27	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1186	319	399	1
	B - A14 North-West	1654	3	89	0	22
	C - A1156 South-West	241	77	0	224	29
	D - A14 South-East	405	0	359	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	2	2	0	0
	B - A14 North-West	2	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	3	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.96	29.41	16.1	D	1749	2624
B - A14 North-West	0.13	4.75	0.1	A	1614	157
C - A1156 South-West	1.15	249.12	47.0	F	525	787
D - A14 South-East	1.52	642.72	146.5	F	700	1051
E - Unnamed Road North-East	0.11	15.61	0.1	C	25	37

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1435	1435	359	0	1245	274	2298	0.625	1428	482	0.0	1.6	4.113	A
B - A14 North-West	1325	86	21	1245	0	671	1022	0.084	85	963	0.0	0.1	3.844	A
C - A1156 South-West	430	430	108	0	0	1208	838	0.514	426	577	0.0	1.0	8.667	A
D - A14 South-East	575	575	144	0	0	1217	940	0.612	569	467	0.0	1.5	9.550	A
E - Unnamed Road North-East	20	20	5	0	0	1664	554	0.036	20	39	0.0	0.0	6.741	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1713	1713	428	0	1487	327	2239	0.765	1707	569	1.6	3.2	6.698	A
B - A14 North-West	1582	102	26	1487	0	793	943	0.109	102	1151	0.1	0.1	4.284	A
C - A1156 South-West	514	514	128	0	0	1438	673	0.763	506	685	1.0	2.9	20.680	C
D - A14 South-East	686	686	172	0	0	1454	776	0.885	669	557	1.5	5.9	29.827	D
E - Unnamed Road North-East	24	24	6	0	0	1987	424	0.057	24	47	0.0	0.1	9.004	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2099	2099	525	0	1821	364	2196	0.956	2057	529	3.2	13.6	21.354	C
B - A14 North-West	1937	125	31	1821	0	768	960	0.131	125	1377	0.1	0.1	4.313	A
C - A1156 South-West	629	629	157	0	0	1606	554	1.136	539	715	2.9	25.4	113.125	F
D - A14 South-East	840	840	210	0	0	1754	569	1.476	567	643	5.9	74.3	271.368	F
E - Unnamed Road North-East	29	29	7	0	0	2368	270	0.109	29	53	0.1	0.1	14.907	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2099	2099	525	0	1821	366	2194	0.956	2088	523	13.6	16.1	29.414	D
B - A14 North-West	1937	125	31	1821	0	763	963	0.130	125	1398	0.1	0.1	4.297	A
C - A1156 South-West	629	629	157	0	0	1618	545	1.154	543	713	25.4	47.0	249.125	F
D - A14 South-East	840	840	210	0	0	1779	552	1.523	552	651	74.3	146.5	642.717	F
E - Unnamed Road North-East	29	29	7	0	0	2401	257	0.115	29	53	0.1	0.1	15.806	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1713	1713	428	0	1487	372	2188	0.783	1763	650	16.1	3.8	9.387	A
B - A14 North-West	1582	102	26	1487	0	920	861	0.119	102	1200	0.1	0.1	4.745	A
C - A1156 South-West	514	514	128	0	0	1511	621	0.827	608	728	47.0	23.4	211.087	F
D - A14 South-East	686	686	172	0	0	1499	745	0.921	740	609	146.5	133.0	630.271	F
E - Unnamed Road North-East	24	24	6	0	0	2083	385	0.062	24	52	0.1	0.1	9.974	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1435	1435	359	0	1245	315	2252	0.637	1443	709	3.8	1.8	4.489	A
B - A14 North-West	1325	86	21	1245	0	938	847	0.101	86	985	0.1	0.1	4.728	A
C - A1156 South-West	430	430	108	0	0	1406	696	0.618	517	747	23.4	1.7	30.550	D
D - A14 South-East	575	575	144	0	0	1229	931	0.617	924	506	133.0	45.6	350.757	F
E - Unnamed Road North-East	20	20	5	0	0	1714	534	0.038	20	44	0.1	0.0	7.012	A

Junctions 9									
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Report generation date: 13/03/2020 14:02:42

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 »2023 Reference Case, 6-7 AM
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 »2028 Reference Case, 6-7 AM
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 »2028 Peak Construction, 6-7 AM
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 »2034 Reference Case, 6-7 AM
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 »2034 Operational Forecast, 7-8 AM
 »2034 Operational Forecast, 8-9 AM
 »2034 Operational Forecast, 3-4 PM
 »2034 Operational Forecast, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North		0.7	2.68	0.41	A		3.1	6.93	0.76	A		5.5	11.41	0.85	B		3.2	6.85	0.76	A		4.2	8.75	0.81	A
B - A14 North-West		0.0	3.82	0.02	A		0.1	4.28	0.10	A		0.2	4.59	0.14	A		0.1	4.58	0.10	A		0.1	4.46	0.13	A
C - A1156 South-West	D1	0.2	3.91	0.17	A	D2	3.5	33.70	0.79	D	D3	26.9	186.78	1.00	F	D4	11.0	74.00	0.96	F	D5	6.7	48.67	0.90	E
D - A14 South-East		0.2	3.37	0.19	A		6.2	39.95	0.88	E		29.6	187.87	1.00	F		5.1	34.08	0.85	D		14.2	76.24	0.98	F
E - Unnamed Road North-East		0.0	4.02	0.03	A		0.1	10.21	0.12	B		0.3	15.01	0.24	C		0.1	9.66	0.09	A		0.1	11.04	0.07	B
2023 Reference Case																									
A - A12 North		0.7	2.73	0.43	A		3.5	7.75	0.78	A		6.0	12.35	0.86	B		3.8	7.86	0.79	A		4.8	9.67	0.83	A
B - A14 North-West		0.0	3.73	0.02	A		0.1	4.33	0.11	A		0.2	4.60	0.14	A		0.1	4.64	0.11	A		0.1	4.34	0.13	A
C - A1156 South-West	D6	0.2	4.18	0.18	A	D7	6.3	58.12	0.89	F	D8	56.0	359.09	1.06	F	D9	27.0	152.75	1.07	F	D10	10.6	71.70	0.95	F
D - A14 South-East		0.3	3.58	0.20	A		6.9	47.10	0.90	E		51.4	307.57	1.04	F		12.9	75.85	0.97	F		31.1	140.32	1.06	F
E - Unnamed Road North-East		0.0	4.20	0.03	A		0.2	11.65	0.15	B		0.4	16.03	0.27	C		0.1	10.37	0.10	B		0.1	11.33	0.08	B
2023 Early Years																									
A - A12 North		0.8	2.84	0.45	A		4.7	9.97	0.83	A		8.5	17.01	0.90	C		5.6	11.26	0.85	B		6.0	12.27	0.86	B
B - A14 North-West		0.0	3.82	0.03	A		0.1	4.48	0.12	A		0.2	4.66	0.15	A		0.1	5.03	0.10	A		0.1	4.87	0.13	A
C - A1156 South-West	D11	0.2	4.40	0.19	A	D12	11.8	100.69	0.98	F	D13	114.7	725.08	1.14	F	D14	56.4	311.91	1.21	F	D15	36.2	191.68	1.10	F
D - A14 South-East		0.3	3.84	0.23	A		38.4	200.44	1.12	F		151.4	938.25	1.19	F		74.3	343.76	1.25	F		59.5	249.45	1.17	F
E - Unnamed Road North-East		0.0	4.38	0.04	A		0.2	13.85	0.17	B		0.4	18.81	0.30	C		0.1	12.76	0.12	B		0.1	13.02	0.09	B
2028 Reference Case																									
A - A12 North		0.6	2.41	0.39	A		3.1	6.67	0.76	A		5.7	11.26	0.85	B		3.1	6.69	0.76	A		4.1	8.52	0.81	A
B - A14 North-West		0.0	3.43	0.02	A		0.1	4.06	0.10	A		0.2	4.26	0.13	A		0.1	4.74	0.11	A		0.2	4.58	0.14	A
C - A1156 South-West	D16	0.2	3.51	0.04	A	D17	2.2	26.24	0.70	D	D18	9.3	75.78	0.92	F	D19	6.3	45.22	0.89	E	D20	9.3	62.46	0.94	F
D - A14 South-East		0.3	3.54	0.20	A		11.7	73.24	0.96	F		130.1	807.00	1.16	F		14.9	80.59	0.98	F		43.2	177.99	1.10	F
E - Unnamed Road North-East		0.0	3.73	0.03	A		0.2	10.26	0.14	B		0.4	15.64	0.28	C		0.1	9.21	0.10	A		0.1	10.50	0.08	B
2028 Peak Construction																									
A - A12 North		0.7	2.62	0.41	A		3.6	7.93	0.79	A		6.0	11.95	0.86	B		3.4	7.38	0.78	A		3.7	7.93	0.79	A
B - A14 North-West		0.1	5.04	0.10	A		0.3	6.10	0.21	A		0.2	5.59	0.20	A		0.2	5.88	0.15	A		0.2	4.91	0.15	A
C - A1156 South-West	D21	0.1	4.99	0.08	A	D22	5.8	61.90	0.88	F	D23	55.3	410.18	1.06	F	D24	22.7	134.47	1.05	F	D25	9.6	63.24	0.94	F
D - A14 South-East		0.3	3.97	0.23	A		31.4	170.22	1.08	F		157.5	1005.18	1.20	F		18.9	98.81	1.01	F		27.7	119.36	1.04	F
E - Unnamed Road North-East		0.0	4.04	0.03	A		0.2	11.50	0.15	B		0.4	15.83	0.28	C		0.1	9.48	0.10	A		0.1	9.89	0.07	A
2034 Reference Case																									
A - A12 North		0.7	2.46	0.40	A		3.3	6.96	0.77	A		7.7	14.68	0.89	B		3.7	7.65	0.79	A		5.1	10.33	0.84	B
B - A14 North-West		0.0	3.43	0.02	A		0.1	4.16	0.11	A		0.2	4.29	0.13	A		0.1	4.94	0.12	A		0.2	4.79	0.14	A
C - A1156 South-West	D26	0.0	3.62	0.04	A	D27	2.5	29.14	0.73	D	D28	17.1	132.82	0.97	F	D29	8.3	55.10	0.92	F	D30	13.7	83.59	0.98	F
D - A14 South-East		0.3	3.65	0.21	A		13.9	82.74	0.98	F		194.0	1248.47	1.25	F		49.6	210.29	1.13	F		47.9	197.96	1.12	F

E - Unnamed Road North-East	0.0	3.84	0.03	A	0.2	10.40	0.14	B	0.4	17.04	0.30	C	0.1	9.71	0.10	A	0.1	11.06	0.08	B
2034 Operational Forecast																				
A - A12 North	0.7	2.46	0.40	A	3.4	7.15	0.77	A	8.8	16.59	0.90	C	3.7	7.54	0.79	A	5.1	10.34	0.84	B
B - A14 North-West	0.0	3.43	0.02	A	0.1	4.15	0.11	A	0.2	4.29	0.13	A	0.1	4.96	0.12	A	0.2	4.80	0.14	A
C - A1156 South-West	0.0	3.62	0.04	A	2.7	30.64	0.74	D	18.9	144.12	0.98	F	8.5	55.95	0.92	F	13.9	84.92	0.98	F
D - A14 South-East	0.3	3.65	0.21	A	15.7	91.93	0.99	F	214.0	1411.20	1.28	F	47.5	201.68	1.12	F	47.6	196.71	1.12	F
E - Unnamed Road North-East	0.0	3.84	0.03	A	0.2	10.60	0.14	B	0.5	18.26	0.32	C	0.1	9.63	0.10	A	0.1	11.05	0.08	B

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / A14 / A1156 Seven Hills Interchange
Location	52.026165, 1.254641
Site number	21
Date	01/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	The entry to exit separation has been calculated for Arm C and Arm E, as it is the major arm with significant separation. Arm E (A14 North-West) has bypass for left turn movement. The circulating flow shall be added after receiving the flows.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D3	2019 Base Year	8-9 AM	FLAT	07:45	09:15	90	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D8	2023 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D13	2023 Early Years	8-9 AM	FLAT	07:45	09:15	90	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D18	2028 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D23	2028 Peak Construction	8-9 AM	FLAT	07:45	09:15	90	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D28	2034 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D31	2034 Operational Forecast	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D32	2034 Operational Forecast	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D33	2034 Operational Forecast	8-9 AM	FLAT	07:45	09:15	90	15	✓
D34	2034 Operational Forecast	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D35	2034 Operational Forecast	5-6 PM	ONE HOUR	16:45	18:15		15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	3.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	A14 North-West	
C	A1156 South-West	
D	A14 South-East	
E	Unnamed Road North-East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.40	9.60	5.5	24.5	160.0	41.0	
B - A14 North-West	2.80	4.80	5.1	40.4	160.0	36.0	
C - A1156 South-West	3.50	8.90	21.4	45.4	163.3	34.0	
D - A14 South-East	5.70	7.60	40.0	44.6	163.3	35.0	
E - Unnamed Road North-East	2.50	4.50	10.2	29.9	160.0	16.0	

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	179	75.10
B - A14 North-West	362	128.00
C - A1156 South-West	844	80.70
D - A14 South-East	745	131.50
E - Unnamed Road North-East	1073	37.20

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
A - A12 North		
B - A14 North-West	✓	100
C - A1156 South-West		
D - A14 South-East		
E - Unnamed Road North-East		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-475
B - A14 North-West	None		
C - A1156 South-West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-550
D - A14 South-East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-515
E - Unnamed Road North-East	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	1.129	2652
B - A14 North-West	0.733	1626
C - A1156 South-West	0.888	1941
D - A14 South-East	0.971	2146
E - Unnamed Road North-East	0.675	1739

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	833	100.000
B - A14 North-West		ONE HOUR	✓	533	100.000

C - A1156 South-West	ONE HOUR	✓	170	100.000
D - A14 South-East	ONE HOUR	✓	228	100.000
E - Unnamed Road North-East	ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	577	65	190	1
	B - A14 North-West	513	8	3	0	9
	C - A1156 South-West	30	7	0	132	1
	D - A14 South-East	148	0	70	0	10
	E - Unnamed Road North-East	8	16	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	6	9	0
	B - A14 North-West	12	88	0	0	11
	C - A1156 South-West	0	0	0	2	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.41	2.68	0.7	A	764	1147
B - A14 North-West	0.02	3.82	0.0	A	395	28
C - A1156 South-West	0.17	3.91	0.2	A	156	234
D - A14 South-East	0.19	3.37	0.2	A	209	314
E - Unnamed Road North-East	0.03	4.02	0.0	A	23	34

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	627	627	157	0	386	122	2326	0.270	626	140	0.0	0.4	2.116	A
B - A14 North-West	324	15	4	386	0	247	1028	0.015	15	457	0.0	0.0	3.553	A
C - A1156 South-West	128	128	32	0	0	576	1359	0.094	128	104	0.0	0.1	2.924	A
D - A14 South-East	172	172	43	0	0	508	1559	0.110	171	243	0.0	0.1	2.595	A
E - Unnamed Road North-East	19	19	5	0	0	732	1161	0.016	19	16	0.0	0.0	3.150	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	749	749	187	0	461	146	2298	0.326	748	167	0.4	0.5	2.322	A
B - A14 North-West	387	18	4	461	0	296	1001	0.018	18	546	0.0	0.0	3.659	A
C - A1156 South-West	153	153	38	0	0	689	1253	0.122	153	124	0.1	0.1	3.270	A
D - A14 South-East	205	205	51	0	0	608	1457	0.141	205	290	0.1	0.2	2.873	A
E - Unnamed Road North-East	22	22	6	0	0	876	1061	0.021	22	19	0.0	0.0	3.465	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	917	917	229	0	585	179	2261	0.406	916	205	0.5	0.7	2.675	A
B - A14 North-West	473	22	6	565	0	362	965	0.023	22	669	0.0	0.0	3.814	A
C - A1156 South-West	187	187	47	0	0	844	1109	0.169	187	152	0.1	0.2	3.903	A
D - A14 South-East	251	251	63	0	0	745	1319	0.190	251	355	0.2	0.2	3.369	A
E - Unnamed Road North-East	28	28	7	0	0	1072	924	0.030	27	23	0.0	0.0	4.016	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	917	917	229	0	585	179	2261	0.406	917	205	0.7	0.7	2.677	A
B - A14 North-West	473	22	6	565	0	362	965	0.023	22	669	0.0	0.0	3.815	A
C - A1156 South-West	187	187	47	0	0	844	1108	0.169	187	152	0.2	0.2	3.908	A
D - A14 South-East	251	251	63	0	0	745	1319	0.190	251	356	0.2	0.2	3.371	A
E - Unnamed Road North-East	28	28	7	0	0	1073	923	0.030	28	23	0.0	0.0	4.019	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	749	749	187	0	461	147	2298	0.326	750	167	0.7	0.5	2.325	A
B - A14 North-West	387	18	4	461	0	296	1001	0.018	18	547	0.0	0.0	3.664	A
C - A1156 South-West	153	153	38	0	0	690	1252	0.122	153	124	0.2	0.1	3.275	A
D - A14 South-East	205	205	51	0	0	609	1456	0.141	205	291	0.2	0.2	2.879	A
E - Unnamed Road North-East	22	22	6	0	0	877	1060	0.021	23	19	0.0	0.0	3.469	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	749	749	187	0	461	147	2298	0.326	750	167	0.7	0.5	2.325	A
B - A14 North-West	387	18	4	461	0	296	1001	0.018	18	547	0.0	0.0	3.664	A
C - A1156 South-West	153	153	38	0	0	690	1252	0.122	153	124	0.2	0.1	3.275	A
D - A14 South-East	205	205	51	0	0	609	1456	0.141	205	291	0.2	0.2	2.879	A
E - Unnamed Road North-East	22	22	6	0	0	877	1060	0.021	23	19	0.0	0.0	3.469	A

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	627	627	157	0	386	123	2325	0.270	628	140	0.5	0.4	2.121	A
B - A14 North-West	324	15	4	386	0	248	1027	0.015	15	458	0.0	0.0	3.555	A
C - A1156 South-West	128	128	32	0	0	578	1357	0.094	128	104	0.1	0.1	2.929	A
D - A14 South-East	172	172	43	0	0	510	1557	0.110	172	243	0.2	0.1	2.600	A
E - Unnamed Road North-East	19	19	5	0	0	735	1160	0.016	19	16	0.0	0.0	3.157	A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	13.41	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	282	75.10
B - A14 North-West	705	128.00
C - A1156 South-West	1553	80.70
D - A14 South-East	1450	131.50
E - Unnamed Road North-East	1850	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1474	100.000
B - A14 North-West		ONE HOUR	✓	1201	100.000
C - A1156 South-West		ONE HOUR	✓	358	100.000
D - A14 South-East		ONE HOUR	✓	540	100.000
E - Unnamed Road North-East		ONE HOUR	✓	43	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1035	179	257	3
	B - A14 North-West	1112	2	60	0	27
	C - A1156 South-West	152	52	0	149	5
	D - A14 South-East	320	3	204	0	13
	E - Unnamed Road North-East	2	37	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	9	33
	B - A14 North-West	10	100	5	0	19
	C - A1156 South-West	3	12	0	3	100
	D - A14 South-East	4	33	1	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	6.93	3.1	A	1353	2029
B - A14 North-West	0.10	4.28	0.1	A	1090	123
C - A1156 South-West	0.79	33.70	3.5	D	329	493
D - A14 South-East	0.88	39.95	6.2	E	496	743
E - Unnamed Road North-East	0.12	10.21	0.1	B	39	59

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1110	1110	277	0	837	192	2242	0.495	1106	355	0.0	1.0	3.159	A
B - A14 North-West	894	67	17	837	0	480	1083	0.062	67	847	0.0	0.1	3.544	A
C - A1156 South-West	270	270	67	0	0	1059	874	0.308	268	334	0.0	0.4	5.924	A
D - A14 South-East	407	407	102	0	0	989	1073	0.379	404	305	0.0	0.6	5.364	A
E - Unnamed Road North-East	32	32	8	0	0	1261	708	0.046	32	36	0.0	0.0	5.323	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1325	1325	331	0	1000	229	2199	0.602	1323	424	1.0	1.5	4.097	A
B - A14 North-West	1068	80	20	1000	0	574	1022	0.078	80	1013	0.1	0.1	3.820	A
C - A1156 South-West	322	322	80	0	0	1266	715	0.450	320	400	0.4	0.8	9.090	A
D - A14 South-East	485	485	121	0	0	1183	906	0.536	483	365	0.6	1.1	8.478	A
E - Unnamed Road North-East	39	39	10	0	0	1509	579	0.067	39	43	0.0	0.1	6.665	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1623	1623	406	0	1224	277	2146	0.756	1617	508	1.5	3.0	6.729	A
B - A14 North-West	1308	98	24	1224	0	687	949	0.103	98	1237	0.1	0.1	4.230	A
C - A1156 South-West	394	394	99	0	0	1540	506	0.779	385	484	0.8	3.1	27.911	D
D - A14 South-East	595	595	149	0	0	1446	680	0.874	578	443	1.1	5.4	31.157	D
E - Unnamed Road North-East	47	47	12	0	0	1842	405	0.117	47	52	0.1	0.1	10.063	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1623	1623	406	0	1224	281	2142	0.758	1623	519	3.0	3.1	6.925	A
B - A14 North-West	1308	98	24	1224	0	702	939	0.104	98	1243	0.1	0.1	4.278	A
C - A1156 South-West	394	394	99	0	0	1553	496	0.794	393	490	3.1	3.5	33.700	D
D - A14 South-East	595	595	149	0	0	1451	676	0.880	591	447	5.4	6.2	39.953	E
E - Unnamed Road North-East	47	47	12	0	0	1851	400	0.118	47	53	0.1	0.1	10.208	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1325	1325	331	0	1000	235	2193	0.604	1331	442	3.1	1.5	4.205	A
B - A14 North-West	1068	80	20	1000	0	597	1007	0.079	80	1021	0.1	0.1	3.886	A
C - A1156 South-West	322	322	80	0	0	1286	700	0.460	332	409	3.5	0.9	10.053	B
D - A14 South-East	485	485	121	0	0	1190	900	0.540	505	371	6.2	1.2	9.571	A
E - Unnamed Road North-East	39	39	10	0	0	1523	572	0.068	39	44	0.1	0.1	6.757	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1110	1110	277	0	837	194	2239	0.496	1112	359	1.5	1.0	3.198	A
B - A14 North-West	894	67	17	837	0	485	1079	0.062	67	852	0.1	0.1	3.560	A
C - A1156 South-West	270	270	67	0	0	1066	868	0.310	271	337	0.9	0.5	6.046	A
D - A14 South-East	407	407	102	0	0	994	1068	0.381	409	307	1.2	0.6	5.481	A
E - Unnamed Road North-East	32	32	8	0	0	1269	704	0.046	32	36	0.1	0.0	5.359	A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	52.26	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	394	75.10
B - A14 North-West	910	128.00
C - A1156 South-West	1661	80.70
D - A14 South-East	1726	131.50
E - Unnamed Road North-East	2284	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1745	100.000
B - A14 North-West		FLAT	✓	1507	100.000
C - A1156 South-West		FLAT	✓	534	100.000
D - A14 South-East		FLAT	✓	583	100.000
E - Unnamed Road North-East		FLAT	✓	75	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1091	288	363	3
	B - A14 North-West	1379	6	113	0	9
	C - A1156 South-West	243	74	0	215	2
	D - A14 South-East	346	0	224	0	13
	E - Unnamed Road North-East	8	46	17	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	6	8	0
	B - A14 North-West	9	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	7	0	3	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	11.41	5.5	B	1745	2618
B - A14 North-West	0.14	4.59	0.2	A	1586	192
C - A1156 South-West	1.00	186.78	26.9	F	534	801
D - A14 South-East	1.00	187.87	29.6	F	583	874
E - Unnamed Road North-East	0.24	15.01	0.3	C	75	113

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1745	1745	436	0	1379	342	2071	0.843	1725	557	0.0	5.0	9.908	A
B - A14 North-West	1586	128	32	1379	0	772	938	0.136	127	1199	0.0	0.2	4.438	A
C - A1156 South-West	534	534	133	0	0	1471	556	0.980	499	622	0.0	8.7	48.437	E
D - A14 South-East	583	583	146	0	0	1552	595	0.980	542	564	0.0	10.2	50.620	F
E - Unnamed Road North-East	75	75	19	0	0	2041	328	0.229	74	26	0.0	0.3	14.103	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1745	1745	436	0	1379	349	2064	0.846	1744	575	5.0	5.2	11.184	B
B - A14 North-West	1586	128	32	1379	0	796	922	0.139	128	1214	0.2	0.2	4.535	A
C - A1156 South-West	534	534	133	0	0	1496	538	0.992	514	633	8.7	13.7	93.724	F
D - A14 South-East	583	583	146	0	0	1568	582	1.002	561	574	10.2	15.8	98.465	F
E - Unnamed Road North-East	75	75	19	0	0	2067	317	0.237	75	26	0.3	0.3	14.887	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1745	1745	436	0	1379	351	2062	0.846	1745	580	5.2	5.3	11.304	B
B - A14 North-West	1586	128	32	1379	0	803	917	0.140	128	1215	0.2	0.2	4.562	A
C - A1156 South-West	534	534	133	0	0	1499	535	0.998	518	635	13.7	17.6	122.405	F
D - A14 South-East	583	583	146	0	0	1569	582	1.003	566	576	15.8	20.0	127.068	F
E - Unnamed Road North-East	75	75	19	0	0	2069	316	0.238	75	27	0.3	0.3	14.955	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1745	1745	436	0	1379	352	2061	0.847	1745	582	5.3	5.4	11.356	B
B - A14 North-West	1586	128	32	1379	0	807	915	0.140	128	1215	0.2	0.2	4.575	A
C - A1156 South-West	534	534	133	0	0	1501	534	1.000	520	636	17.6	21.0	146.155	F
D - A14 South-East	583	583	146	0	0	1569	581	1.003	569	576	20.0	23.6	150.013	F
E - Unnamed Road North-East	75	75	19	0	0	2070	315	0.238	75	27	0.3	0.3	14.985	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1745	1745	436	0	1379	353	2060	0.847	1745	584	5.4	5.4	11.388	B
B - A14 North-West	1586	128	32	1379	0	809	913	0.140	128	1215	0.2	0.2	4.583	A
C - A1156 South-West	534	534	133	0	0	1502	533	1.002	522	637	21.0	24.0	167.315	F
D - A14 South-East	583	583	146	0	0	1569	581	1.003	570	577	23.6	26.7	169.939	F
E - Unnamed Road North-East	75	75	19	0	0	2071	315	0.238	75	27	0.3	0.3	15.001	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1745	1745	436	0	1379	353	2060	0.847	1745	585	5.4	5.5	11.409	B
B - A14 North-West	1586	128	32	1379	0	810	912	0.140	128	1215	0.2	0.2	4.589	A
C - A1156 South-West	534	534	133	0	0	1503	533	1.003	523	638	24.0	26.9	186.783	F
D - A14 South-East	583	583	146	0	0	1569	581	1.003	572	577	26.7	29.6	187.874	F
E - Unnamed Road North-East	75	75	19	0	0	2071	315	0.238	75	27	0.3	0.3	15.011	C

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	18.60	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	250	75.10
B - A14 North-West	845	128.00
C - A1156 South-West	1464	80.70
D - A14 South-East	1448	131.50
E - Unnamed Road North-East	1893	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1536	100.000
B - A14 North-West		ONE HOUR	✓	1167	100.000
C - A1156 South-West		ONE HOUR	✓	504	100.000
D - A14 South-East		ONE HOUR	✓	522	100.000
E - Unnamed Road North-East		ONE HOUR	✓	32	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	962	274	296	3
	B - A14 North-West	1087	4	42	0	34
	C - A1156 South-West	279	79	4	138	4
	D - A14 South-East	336	0	185	0	1
	E - Unnamed Road North-East	5	22	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	5	4	33
	B - A14 North-West	6	0	5	0	12
	C - A1156 South-West	3	3	0	1	0
	D - A14 South-East	6	0	2	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	6.85	3.2	A	1409	2114
B - A14 North-West	0.10	4.58	0.1	A	1060	110
C - A1156 South-West	0.96	74.00	11.0	F	462	694
D - A14 South-East	0.85	34.08	5.1	D	479	718
E - Unnamed Road North-East	0.09	9.66	0.1	A	29	44

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1156	1156	289	0	818	170	2299	0.503	1152	465	0.0	1.0	3.131	A
B - A14 North-West	870	60	15	818	0	574	1041	0.058	60	800	0.0	0.1	3.670	A
C - A1156 South-West	379	379	95	0	0	998	956	0.397	377	380	0.0	0.7	6.191	A
D - A14 South-East	393	393	98	0	0	987	1065	0.369	391	327	0.0	0.6	5.317	A
E - Unnamed Road North-East	24	24	6	0	0	1291	728	0.033	24	31	0.0	0.0	5.113	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1381	1381	345	0	977	203	2263	0.610	1379	556	1.0	1.5	4.063	A
B - A14 North-West	1039	72	18	977	0	687	969	0.074	72	957	0.1	0.1	4.013	A
C - A1156 South-West	453	453	113	0	0	1194	797	0.568	451	455	0.7	1.3	10.302	B
D - A14 South-East	469	469	117	0	0	1181	901	0.521	467	392	0.6	1.1	8.264	A
E - Unnamed Road North-East	29	29	7	0	0	1544	593	0.049	29	38	0.0	0.1	6.380	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	1691	423	0	1197	242	2221	0.762	1685	660	1.5	3.1	6.645	A
B - A14 North-West	1272	88	22	1197	0	814	888	0.099	88	1167	0.1	0.1	4.502	A
C - A1156 South-West	555	555	139	0	0	1452	588	0.943	528	552	1.3	8.1	46.954	E
D - A14 South-East	575	575	144	0	0	1444	678	0.847	561	473	1.1	4.6	27.890	D
E - Unnamed Road North-East	35	35	9	0	0	1881	413	0.085	35	46	0.1	0.1	9.517	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	1691	423	0	1197	247	2216	0.763	1691	676	3.1	3.2	6.851	A
B - A14 North-West	1272	88	22	1197	0	834	874	0.101	88	1173	0.1	0.1	4.578	A
C - A1156 South-West	555	555	139	0	0	1464	579	0.958	543	557	8.1	11.0	73.996	F
D - A14 South-East	575	575	144	0	0	1449	674	0.853	573	478	4.6	5.1	34.078	D
E - Unnamed Road North-East	35	35	9	0	0	1891	408	0.086	35	46	0.1	0.1	9.663	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1381	1381	345	0	977	215	2250	0.614	1387	590	3.2	1.6	4.203	A
B - A14 North-West	1039	72	18	977	0	733	940	0.077	72	969	0.1	0.1	4.150	A
C - A1156 South-West	453	453	113	0	0	1211	784	0.578	491	463	11.0	1.4	13.891	B
D - A14 South-East	469	469	117	0	0	1189	895	0.525	485	405	5.1	1.1	9.124	A
E - Unnamed Road North-East	29	29	7	0	0	1564	582	0.049	29	38	0.1	0.1	6.507	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1156	1156	289	0	818	172	2297	0.504	1159	471	1.6	1.0	3.169	A
B - A14 North-West	870	60	15	818	0	582	1036	0.058	60	805	0.1	0.1	3.692	A
C - A1156 South-West	379	379	95	0	0	1005	950	0.399	382	383	1.4	0.7	6.375	A
D - A14 South-East	393	393	98	0	0	993	1061	0.370	395	330	1.1	0.6	5.424	A
E - Unnamed Road North-East	24	24	6	0	0	1299	724	0.033	24	32	0.1	0.0	5.148	A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	22.17	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	348	75.10
B - A14 North-West	843	128.00
C - A1156 South-West	1518	80.70
D - A14 South-East	1476	131.50
E - Unnamed Road North-East	2068	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1607	100.000
B - A14 North-West		ONE HOUR	✓	1382	100.000
C - A1156 South-West		ONE HOUR	✓	484	100.000
D - A14 South-East		ONE HOUR	✓	625	100.000
E - Unnamed Road North-East		ONE HOUR	✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1002	226	377	1
	B - A14 North-West	1272	3	89	0	18
	C - A1156 South-West	201	77	0	182	24
	D - A14 South-East	358	0	267	0	0
	E - Unnamed Road North-East	0	16	5	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	3	3	1	0
	B - A14 North-West	3	33	0	0	11
	C - A1156 South-West	0	0	0	1	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	8.75	4.2	A	1475	2212
B - A14 North-West	0.13	4.46	0.1	A	1270	151
C - A1156 South-West	0.90	48.67	6.7	E	444	666
D - A14 South-East	0.98	76.24	14.2	F	574	860
E - Unnamed Road North-East	0.07	11.04	0.1	B	20	30

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1210	1210	302	0	958	237	2297	0.527	1205	419	0.0	1.1	3.284	A
B - A14 North-West	1042	83	21	958	0	573	1097	0.076	82	823	0.0	0.1	3.549	A
C - A1156 South-West	364	364	91	0	0	1034	968	0.377	362	440	0.0	0.6	5.921	A
D - A14 South-East	471	471	118	0	0	1007	1094	0.430	468	420	0.0	0.7	5.709	A
E - Unnamed Road North-East	17	17	4	0	0	1410	661	0.025	16	32	0.0	0.0	5.584	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1445	1445	361	0	1143	283	2247	0.643	1442	501	1.1	1.8	4.458	A
B - A14 North-West	1244	99	25	1143	0	685	1023	0.097	99	985	0.1	0.1	3.896	A
C - A1156 South-West	435	435	109	0	0	1237	808	0.538	433	526	0.6	1.1	9.535	A
D - A14 South-East	562	562	140	0	0	1204	931	0.604	559	502	0.7	1.5	9.608	A
E - Unnamed Road North-East	20	20	5	0	0	1686	530	0.037	20	39	0.0	0.0	7.050	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1769	1769	442	0	1400	341	2184	0.810	1760	589	1.8	4.1	8.310	A
B - A14 North-West	1524	121	30	1400	0	809	941	0.129	121	1200	0.1	0.1	4.387	A
C - A1156 South-West	533	533	133	0	0	1493	607	0.878	516	630	1.1	5.4	34.691	D
D - A14 South-East	688	688	172	0	0	1470	710	0.969	653	608	1.5	10.3	46.996	E
E - Unnamed Road North-East	24	24	6	0	0	2054	356	0.068	24	46	0.0	0.1	10.825	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1769	1769	442	0	1400	346	2179	0.812	1769	605	4.1	4.2	8.751	A
B - A14 North-West	1524	121	30	1400	0	830	927	0.131	121	1208	0.1	0.1	4.465	A
C - A1156 South-West	533	533	133	0	0	1510	594	0.898	528	640	5.4	6.7	48.667	E
D - A14 South-East	688	688	172	0	0	1477	705	0.976	673	614	10.3	14.2	76.241	F
E - Unnamed Road North-East	24	24	6	0	0	2067	350	0.069	24	47	0.1	0.1	11.038	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1445	1445	361	0	1143	293	2235	0.646	1454	541	4.2	1.9	4.662	A
B - A14 North-West	1244	99	25	1143	0	736	989	0.100	99	996	0.1	0.1	4.045	A
C - A1156 South-West	435	435	109	0	0	1275	778	0.559	457	551	6.7	1.3	11.921	B
D - A14 South-East	562	562	140	0	0	1214	923	0.609	612	514	14.2	1.6	13.486	B
E - Unnamed Road North-East	20	20	5	0	0	1708	520	0.038	20	40	0.1	0.0	7.194	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1210	1210	302	0	958	239	2294	0.527	1213	425	1.9	1.1	3.339	A
B - A14 North-West	1042	83	21	958	0	581	1092	0.076	83	829	0.1	0.1	3.568	A
C - A1156 South-West	364	364	91	0	0	1043	961	0.379	367	444	1.3	0.6	6.088	A
D - A14 South-East	471	471	118	0	0	1013	1089	0.432	474	423	1.6	0.8	5.883	A
E - Unnamed Road North-East	17	17	4	0	0	1419	657	0.025	17	33	0.0	0.0	5.627	A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	3.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	37	75.10
B - A14 North-West	222	128.00
C - A1156 South-West	857	80.70
D - A14 South-East	778	131.50
E - Unnamed Road North-East	968	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	891	100.000
B - A14 North-West		ONE HOUR	✓	553	100.000
C - A1156 South-West		ONE HOUR	✓	174	100.000
D - A14 South-East		ONE HOUR	✓	234	100.000
E - Unnamed Road North-East		ONE HOUR	✓	28	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	631	65	194	1
	B - A14 North-West	532	8	3	0	10
	C - A1156 South-West	30	7	0	136	1
	D - A14 South-East	151	0	73	0	11
	E - Unnamed Road North-East	9	18	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	6	9	0
	B - A14 North-West	11	88	0	0	11
	C - A1156 South-West	0	0	0	2	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.73	0.7	A	817	1226
B - A14 North-West	0.02	3.73	0.0	A	410	29
C - A1156 South-West	0.18	4.18	0.2	A	159	239
D - A14 South-East	0.20	3.58	0.3	A	215	322
E - Unnamed Road North-East	0.03	4.20	0.0	A	25	38

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	670	670	168	0	401	127	2366	0.283	669	142	0.0	0.4	2.119	A
B - A14 North-West	336	16	4	401	0	253	1054	0.015	16	498	0.0	0.0	3.465	A
C - A1156 South-West	131	131	33	0	0	621	1320	0.099	130	106	0.0	0.1	3.026	A
D - A14 South-East	176	176	44	0	0	551	1518	0.116	176	248	0.0	0.1	2.681	A
E - Unnamed Road North-East	21	21	5	0	0	778	1144	0.018	21	17	0.0	0.0	3.204	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	801	801	200	0	479	152	2337	0.343	800	170	0.4	0.5	2.342	A
B - A14 North-West	402	19	5	479	0	303	1026	0.018	19	596	0.0	0.0	3.572	A
C - A1156 South-West	156	156	39	0	0	743	1208	0.129	156	126	0.1	0.1	3.423	A
D - A14 South-East	211	211	53	0	0	659	1411	0.149	210	297	0.1	0.2	2.999	A
E - Unnamed Road North-East	25	25	6	0	0	931	1036	0.024	25	21	0.0	0.0	3.561	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	981	981	245	0	586	186	2297	0.427	980	208	0.5	0.7	2.730	A
B - A14 North-West	492	23	6	586	0	371	988	0.023	23	730	0.0	0.0	3.729	A
C - A1156 South-West	191	191	48	0	0	910	1054	0.182	191	155	0.1	0.2	4.172	A
D - A14 South-East	258	258	64	0	0	807	1263	0.204	258	363	0.2	0.3	3.580	A
E - Unnamed Road North-East	31	31	8	0	0	1140	887	0.034	31	26	0.0	0.0	4.201	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	981	981	245	0	586	186	2297	0.427	981	209	0.7	0.7	2.733	A
B - A14 North-West	492	23	6	586	0	371	988	0.023	23	731	0.0	0.0	3.730	A
C - A1156 South-West	191	191	48	0	0	911	1053	0.182	191	155	0.2	0.2	4.177	A
D - A14 South-East	258	258	64	0	0	808	1262	0.204	258	364	0.3	0.3	3.582	A
E - Unnamed Road North-East	31	31	8	0	0	1141	887	0.034	31	26	0.0	0.0	4.204	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	801	801	200	0	479	152	2337	0.343	801	171	0.7	0.5	2.347	A
B - A14 North-West	402	19	5	479	0	304	1026	0.018	19	597	0.0	0.0	3.576	A
C - A1156 South-West	156	156	39	0	0	745	1206	0.129	156	127	0.2	0.1	3.429	A
D - A14 South-East	211	211	53	0	0	660	1409	0.149	211	297	0.3	0.2	3.005	A
E - Unnamed Road North-East	25	25	6	0	0	932	1034	0.024	25	21	0.0	0.0	3.566	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	670	670	168	0	401	127	2365	0.283	671	143	0.5	0.4	2.126	A
B - A14 North-West	336	16	4	401	0	254	1054	0.015	16	500	0.0	0.0	3.467	A
C - A1156 South-West	131	131	33	0	0	623	1318	0.099	131	106	0.1	0.1	3.031	A
D - A14 South-East	176	176	44	0	0	553	1517	0.116	177	249	0.2	0.1	2.685	A
E - Unnamed Road North-East	21	21	5	0	0	781	1142	0.018	21	18	0.0	0.0	3.212	A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	16.92	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	123	75.10
B - A14 North-West	572	128.00
C - A1156 South-West	1637	80.70
D - A14 South-East	1563	131.50
E - Unnamed Road North-East	1813	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1517	100.000
B - A14 North-West		ONE HOUR	✓	1259	100.000
C - A1156 South-West		ONE HOUR	✓	381	100.000
D - A14 South-East		ONE HOUR	✓	517	100.000
E - Unnamed Road North-East		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1057	193	264	3
	B - A14 North-West	1167	2	60	0	30
	C - A1156 South-West	162	52	0	162	6
	D - A14 South-East	325	3	175	0	14
	E - Unnamed Road North-East	2	41	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	10	33
	B - A14 North-West	10	100	5	0	19
	C - A1156 South-West	2	12	0	3	100
	D - A14 South-East	5	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	7.75	3.5	A	1392	2088
B - A14 North-West	0.11	4.33	0.1	A	1141	127
C - A1156 South-West	0.89	58.12	6.3	F	350	525
D - A14 South-East	0.90	47.10	6.9	E	475	712
E - Unnamed Road North-East	0.15	11.65	0.2	B	44	66

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1142	1142	286	0	878	205	2241	0.510	1138	366	0.0	1.0	3.252	A
B - A14 North-West	936	69	17	878	0	502	1084	0.064	69	866	0.0	0.1	3.545	A
C - A1156 South-West	287	287	72	0	0	1083	850	0.337	285	323	0.0	0.5	6.346	A
D - A14 South-East	389	389	97	0	0	1019	1032	0.377	387	320	0.0	0.6	5.559	A
E - Unnamed Road North-East	36	36	9	0	0	1303	684	0.053	36	40	0.0	0.1	5.551	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1364	1364	341	0	1049	245	2195	0.621	1361	438	1.0	1.6	4.306	A
B - A14 North-West	1118	83	21	1049	0	600	1020	0.081	83	1036	0.1	0.1	3.842	A
C - A1156 South-West	343	343	86	0	0	1295	690	0.497	341	387	0.5	1.0	10.265	B
D - A14 South-East	465	465	116	0	0	1219	865	0.537	463	382	0.6	1.1	8.900	A
E - Unnamed Road North-East	43	43	11	0	0	1559	548	0.078	43	48	0.1	0.1	7.120	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1670	1670	418	0	1285	294	2140	0.781	1663	520	1.6	3.4	7.440	A
B - A14 North-West	1369	101	25	1285	0	712	946	0.107	101	1264	0.1	0.1	4.263	A
C - A1156 South-West	420	420	105	0	0	1572	480	0.874	403	468	1.0	5.0	40.813	E
D - A14 South-East	570	570	142	0	0	1489	640	0.891	551	462	1.1	5.9	35.042	E
E - Unnamed Road North-East	53	53	13	0	0	1899	368	0.143	52	58	0.1	0.2	11.402	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1670	1670	418	0	1285	299	2134	0.783	1670	534	3.4	3.5	7.746	A
B - A14 North-West	1369	101	25	1285	0	731	933	0.109	101	1270	0.1	0.1	4.327	A
C - A1156 South-West	420	420	105	0	0	1587	469	0.895	414	474	5.0	6.3	58.119	F
D - A14 South-East	570	570	142	0	0	1495	635	0.898	565	467	5.9	6.9	47.101	E
E - Unnamed Road North-East	53	53	13	0	0	1910	362	0.145	53	58	0.2	0.2	11.649	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1364	1364	341	0	1049	256	2183	0.625	1371	463	3.5	1.7	4.475	A
B - A14 North-West	1118	83	21	1049	0	636	996	0.083	83	1046	0.1	0.1	3.944	A
C - A1156 South-West	343	343	86	0	0	1319	672	0.510	364	397	6.3	1.1	12.434	B
D - A14 South-East	465	465	116	0	0	1228	858	0.542	488	394	6.9	1.2	10.311	B
E - Unnamed Road North-East	43	43	11	0	0	1578	538	0.080	43	49	0.2	0.1	7.281	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1142	1142	286	0	878	207	2238	0.510	1145	371	1.7	1.0	3.298	A
B - A14 North-West	936	69	17	878	0	509	1080	0.064	69	871	0.1	0.1	3.564	A
C - A1156 South-West	287	287	72	0	0	1091	844	0.340	289	326	1.1	0.5	6.511	A
D - A14 South-East	389	389	97	0	0	1025	1027	0.379	392	323	1.2	0.6	5.684	A
E - Unnamed Road North-East	36	36	9	0	0	1312	679	0.053	36	40	0.1	0.1	5.595	A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	89.64	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	161	75.10
B - A14 North-West	797	128.00
C - A1156 South-West	1897	80.70
D - A14 South-East	2135	131.50
E - Unnamed Road North-East	2473	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1785	100.000
B - A14 North-West		FLAT	✓	1554	100.000
C - A1156 South-West		FLAT	✓	571	100.000
D - A14 South-East		FLAT	✓	610	100.000
E - Unnamed Road North-East		FLAT	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1088	330	364	3
	B - A14 North-West	1425	6	113	0	10
	C - A1156 South-West	263	74	0	232	2
	D - A14 South-East	355	0	240	0	14
	E - Unnamed Road North-East	9	51	19	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	9	5	8	0
	B - A14 North-West	9	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	12.35	6.0	B	1785	2677
B - A14 North-West	0.14	4.60	0.2	A	1639	193
C - A1156 South-West	1.06	359.09	56.0	F	571	857
D - A14 South-East	1.04	307.57	51.4	F	610	914
E - Unnamed Road North-East	0.27	16.03	0.4	C	83	125

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1785	1785	446	0	1425	355	2084	0.856	1763	572	0.0	5.5	10.572	B
B - A14 North-West	1639	129	32	1425	0	799	932	0.138	128	1199	0.0	0.2	4.471	A
C - A1156 South-West	571	571	143	0	0	1477	562	1.017	521	676	0.0	12.7	61.294	F
D - A14 South-East	610	610	152	0	0	1597	599	1.018	557	575	0.0	13.2	59.575	F
E - Unnamed Road North-East	83	83	21	0	0	2089	320	0.260	82	28	0.0	0.3	15.025	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1785	1785	446	0	1425	361	2078	0.859	1784	588	5.5	5.8	12.122	B
B - A14 North-West	1639	129	32	1425	0	820	918	0.141	129	1214	0.2	0.2	4.564	A
C - A1156 South-West	571	571	143	0	0	1501	544	1.049	533	687	12.7	22.1	134.583	F
D - A14 South-East	610	610	152	0	0	1615	586	1.040	574	584	13.2	22.2	127.211	F
E - Unnamed Road North-East	83	83	21	0	0	2116	309	0.269	83	29	0.3	0.4	15.932	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1785	1785	446	0	1425	362	2076	0.860	1784	592	5.8	5.9	12.254	B
B - A14 North-West	1639	129	32	1425	0	826	914	0.141	129	1215	0.2	0.2	4.584	A
C - A1156 South-West	571	571	143	0	0	1504	542	1.054	536	689	22.1	30.9	193.165	F
D - A14 South-East	610	610	152	0	0	1615	585	1.041	578	586	22.2	30.1	176.817	F
E - Unnamed Road North-East	83	83	21	0	0	2118	308	0.270	83	29	0.4	0.4	15.996	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1785	1785	446	0	1425	363	2076	0.860	1785	594	5.9	6.0	12.305	B
B - A14 North-West	1639	129	32	1425	0	828	913	0.141	129	1215	0.2	0.2	4.593	A
C - A1156 South-West	571	571	143	0	0	1506	541	1.055	537	690	30.9	39.4	249.272	F
D - A14 South-East	610	610	152	0	0	1616	585	1.041	580	586	30.1	37.4	222.194	F
E - Unnamed Road North-East	83	83	21	0	0	2118	308	0.270	83	29	0.4	0.4	16.017	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1785	1785	446	0	1425	363	2076	0.860	1785	595	6.0	6.0	12.334	B
B - A14 North-West	1639	129	32	1425	0	829	912	0.141	129	1215	0.2	0.2	4.598	A
C - A1156 South-West	571	571	143	0	0	1506	541	1.057	538	691	39.4	47.8	304.435	F
D - A14 South-East	610	610	152	0	0	1616	585	1.042	581	586	37.4	44.5	265.509	F
E - Unnamed Road North-East	83	83	21	0	0	2119	308	0.271	83	29	0.4	0.4	16.027	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1785	1785	446	0	1425	363	2075	0.860	1785	595	6.0	6.0	12.351	B
B - A14 North-West	1639	129	32	1425	0	830	911	0.142	129	1215	0.2	0.2	4.601	A
C - A1156 South-West	571	571	143	0	0	1507	540	1.057	538	691	47.8	56.0	359.093	F
D - A14 South-East	610	610	152	0	0	1616	585	1.042	582	586	44.5	51.4	307.568	F
E - Unnamed Road North-East	83	83	21	0	0	2119	308	0.271	83	29	0.4	0.4	16.034	C

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	35.34	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	103	75.10
B - A14 North-West	800	128.00
C - A1156 South-West	1613	80.70
D - A14 South-East	1887	131.50
E - Unnamed Road North-East	2213	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1601	100.000
B - A14 North-West		ONE HOUR	✓	1227	100.000
C - A1156 South-West		ONE HOUR	✓	534	100.000
D - A14 South-East		ONE HOUR	✓	576	100.000
E - Unnamed Road North-East		ONE HOUR	✓	36	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	990	304	303	3
	B - A14 North-West	1143	4	42	0	38
	C - A1156 South-West	291	79	4	155	4
	D - A14 South-East	351	0	224	0	1
	E - Unnamed Road North-East	6	24	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	4	5	33
	B - A14 North-West	6	0	5	0	12
	C - A1156 South-West	2	3	0	0	0
	D - A14 South-East	6	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	7.86	3.8	A	1470	2204
B - A14 North-West	0.11	4.64	0.1	A	1113	115
C - A1156 South-West	1.07	152.75	27.0	F	490	735
D - A14 South-East	0.97	75.85	12.9	F	529	793
E - Unnamed Road North-East	0.10	10.37	0.1	B	33	49

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1206	1206	301	0	861	186	2302	0.524	1201	485	0.0	1.1	3.258	A
B - A14 North-West	913	63	16	861	0	609	1024	0.062	63	823	0.0	0.1	3.745	A
C - A1156 South-West	402	402	101	0	0	1033	924	0.435	399	432	0.0	0.8	6.819	A
D - A14 South-East	434	434	109	0	0	1033	1023	0.424	431	346	0.0	0.7	6.053	A
E - Unnamed Road North-East	27	27	7	0	0	1352	689	0.039	27	35	0.0	0.0	5.437	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1440	1440	360	0	1028	223	2262	0.637	1437	580	1.1	1.7	4.354	A
B - A14 North-West	1090	75	19	1028	0	727	947	0.080	75	985	0.1	0.1	4.127	A
C - A1156 South-West	480	480	120	0	0	1235	765	0.628	477	517	0.8	1.6	12.356	B
D - A14 South-East	518	518	130	0	0	1236	868	0.597	515	413	0.7	1.4	10.119	B
E - Unnamed Road North-East	32	32	8	0	0	1618	559	0.057	32	42	0.0	0.1	6.828	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1763	1763	441	0	1259	257	2223	0.793	1755	665	1.7	3.7	7.572	A
B - A14 North-West	1336	92	23	1259	0	830	881	0.105	92	1195	0.1	0.1	4.562	A
C - A1156 South-West	588	588	147	0	0	1492	562	1.046	533	620	1.6	15.4	75.643	F
D - A14 South-East	635	635	159	0	0	1510	660	0.962	602	491	1.4	9.6	47.766	E
E - Unnamed Road North-East	39	39	10	0	0	1961	391	0.100	39	51	0.1	0.1	10.220	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1763	1763	441	0	1259	260	2220	0.794	1763	681	3.7	3.8	7.858	A
B - A14 North-West	1336	92	23	1259	0	849	869	0.106	92	1202	0.1	0.1	4.635	A
C - A1156 South-West	588	588	147	0	0	1509	550	1.070	542	629	15.4	27.0	152.752	F
D - A14 South-East	635	635	159	0	0	1516	655	0.969	621	495	9.6	12.9	75.851	F
E - Unnamed Road North-East	39	39	10	0	0	1972	386	0.102	39	51	0.1	0.1	10.375	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1440	1440	360	0	1028	255	2227	0.646	1447	666	3.8	1.9	4.663	A
B - A14 North-West	1090	75	19	1028	0	845	872	0.086	75	1006	0.1	0.1	4.518	A
C - A1156 South-West	480	480	120	0	0	1271	737	0.652	580	538	27.0	2.0	38.028	E
D - A14 South-East	518	518	130	0	0	1246	861	0.602	564	445	12.9	1.6	13.945	B
E - Unnamed Road North-East	32	32	8	0	0	1659	540	0.059	32	43	0.1	0.1	7.094	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1206	1206	301	0	861	189	2299	0.525	1209	493	1.9	1.1	3.310	A
B - A14 North-West	913	63	16	861	0	619	1017	0.062	63	829	0.1	0.1	3.773	A
C - A1156 South-West	402	402	101	0	0	1041	917	0.438	407	436	2.0	0.8	7.118	A
D - A14 South-East	434	434	109	0	0	1040	1018	0.426	437	349	1.6	0.8	6.232	A
E - Unnamed Road North-East	27	27	7	0	0	1362	684	0.039	27	35	0.1	0.0	5.482	A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	35.80	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	153	75.10
B - A14 North-West	695	128.00
C - A1156 South-West	1621	80.70
D - A14 South-East	1944	131.50
E - Unnamed Road North-East	2358	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1656	100.000
B - A14 North-West		ONE HOUR	✓	1377	100.000
C - A1156 South-West		ONE HOUR	✓	505	100.000
D - A14 South-East		ONE HOUR	✓	671	100.000
E - Unnamed Road North-East		ONE HOUR	✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1044	225	384	1
	B - A14 North-West	1265	3	89	0	20
	C - A1156 South-West	217	77	0	185	27
	D - A14 South-East	342	0	330	0	0
	E - Unnamed Road North-East	0	18	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	4	3	1	0
	B - A14 North-West	4	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	9.67	4.8	A	1519	2279
B - A14 North-West	0.13	4.34	0.1	A	1275	154
C - A1156 South-West	0.95	71.70	10.6	F	464	695
D - A14 South-East	1.06	140.32	31.1	F	616	924
E - Unnamed Road North-East	0.08	11.33	0.1	B	22	34

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1247	1247	312	0	952	242	2315	0.538	1242	418	0.0	1.2	3.342	A
B - A14 North-West	1046	84	21	952	0	576	1114	0.076	84	856	0.0	0.1	3.497	A
C - A1156 South-West	380	380	95	0	0	1055	944	0.403	378	486	0.0	0.7	6.325	A
D - A14 South-East	505	505	126	0	0	1039	1055	0.479	502	427	0.0	0.9	6.467	A
E - Unnamed Road North-East	18	18	5	0	0	1448	638	0.029	18	36	0.0	0.0	5.811	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1489	1489	372	0	1137	289	2262	0.658	1486	500	1.2	1.9	4.619	A
B - A14 North-West	1249	101	25	1137	0	689	1037	0.097	101	1024	0.1	0.1	3.844	A
C - A1156 South-West	454	454	114	0	0	1261	785	0.579	451	582	0.7	1.3	10.711	B
D - A14 South-East	603	603	151	0	0	1243	905	0.667	599	511	0.9	1.9	11.634	B
E - Unnamed Road North-East	22	22	6	0	0	1732	514	0.043	22	43	0.0	0.0	7.313	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1823	1823	456	0	1393	345	2200	0.829	1812	571	1.9	4.6	9.050	A
B - A14 North-West	1530	123	31	1393	0	793	966	0.128	123	1246	0.1	0.1	4.271	A
C - A1156 South-West	556	556	139	0	0	1509	594	0.937	531	681	1.3	7.8	45.570	E
D - A14 South-East	739	739	185	0	0	1517	703	1.051	673	616	1.9	18.5	70.699	F
E - Unnamed Road North-East	27	27	7	0	0	2106	351	0.077	27	51	0.0	0.1	11.088	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1823	1823	456	0	1393	351	2193	0.831	1822	586	4.6	4.8	9.667	A
B - A14 North-West	1530	123	31	1393	0	813	952	0.130	123	1255	0.1	0.1	4.342	A
C - A1156 South-West	556	556	139	0	0	1524	582	0.955	545	690	7.8	10.6	71.700	F
D - A14 South-East	739	739	185	0	0	1525	697	1.060	689	623	18.5	31.1	140.317	F
E - Unnamed Road North-East	27	27	7	0	0	2121	345	0.078	27	52	0.1	0.1	11.328	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1489	1489	372	0	1137	306	2244	0.663	1500	577	4.8	2.0	4.907	A
B - A14 North-West	1249	101	25	1137	0	782	973	0.104	101	1039	0.1	0.1	4.128	A
C - A1156 South-West	454	454	114	0	0	1331	731	0.621	490	642	10.6	1.7	17.022	C
D - A14 South-East	603	603	151	0	0	1255	896	0.673	719	528	31.1	2.2	34.298	D
E - Unnamed Road North-East	22	22	6	0	0	1760	502	0.044	22	45	0.1	0.0	7.505	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1247	1247	312	0	952	245	2311	0.539	1250	426	2.0	1.2	3.401	A
B - A14 North-West	1046	84	21	952	0	586	1107	0.076	84	862	0.1	0.1	3.521	A
C - A1156 South-West	380	380	95	0	0	1064	937	0.406	384	492	1.7	0.7	6.563	A
D - A14 South-East	505	505	126	0	0	1046	1050	0.481	510	431	2.2	0.9	6.731	A
E - Unnamed Road North-East	18	18	5	0	0	1459	633	0.029	18	36	0.0	0.0	5.858	A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	3.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	39	75.10
B - A14 North-West	231	128.00
C - A1156 South-West	870	80.70
D - A14 South-East	793	131.50
E - Unnamed Road North-East	982	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	926	100.000
B - A14 North-West		ONE HOUR	✓	632	100.000
C - A1156 South-West		ONE HOUR	✓	180	100.000
D - A14 South-East		ONE HOUR	✓	250	100.000
E - Unnamed Road North-East		ONE HOUR	✓	28	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	653	73	199	1
	B - A14 North-West	609	8	5	0	10
	C - A1156 South-West	30	7	0	142	1
	D - A14 South-East	163	0	77	0	11
	E - Unnamed Road North-East	9	18	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	13	88	20	0	11
	C - A1156 South-West	0	0	0	2	100
	D - A14 South-East	7	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.45	2.84	0.8	A	849	1274
B - A14 North-West	0.03	3.82	0.0	A	474	32
C - A1156 South-West	0.19	4.40	0.2	A	165	247
D - A14 South-East	0.23	3.84	0.3	A	230	344
E - Unnamed Road North-East	0.04	4.38	0.0	A	25	38

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	697	697	174	0	459	133	2360	0.295	695	151	0.0	0.4	2.160	A
B - A14 North-West	389	17	4	459	0	267	1037	0.017	17	515	0.0	0.0	3.529	A
C - A1156 South-West	135	135	34	0	0	647	1293	0.105	135	116	0.0	0.1	3.105	A
D - A14 South-East	188	188	47	0	0	575	1477	0.128	188	256	0.0	0.1	2.790	A
E - Unnamed Road North-East	21	21	5	0	0	810	1120	0.019	21	17	0.0	0.0	3.275	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	832	832	208	0	548	159	2329	0.357	832	181	0.4	0.6	2.403	A
B - A14 North-West	464	21	5	548	0	319	1008	0.021	21	616	0.0	0.0	3.646	A
C - A1156 South-West	162	162	40	0	0	774	1176	0.137	161	139	0.1	0.2	3.547	A
D - A14 South-East	225	225	56	0	0	688	1366	0.165	225	307	0.1	0.2	3.153	A
E - Unnamed Road North-East	25	25	6	0	0	969	1007	0.025	25	21	0.0	0.0	3.664	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1019	1019	255	0	671	194	2288	0.445	1018	221	0.6	0.8	2.835	A
B - A14 North-West	569	25	6	671	0	391	967	0.026	25	754	0.0	0.0	3.820	A
C - A1156 South-West	198	198	49	0	0	947	1016	0.195	198	170	0.2	0.2	4.396	A
D - A14 South-East	276	276	69	0	0	842	1214	0.227	275	375	0.2	0.3	3.830	A
E - Unnamed Road North-East	31	31	8	0	0	1187	853	0.036	31	26	0.0	0.0	4.374	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1019	1019	255	0	671	195	2288	0.445	1019	222	0.8	0.8	2.837	A
B - A14 North-West	569	25	6	671	0	391	967	0.026	25	755	0.0	0.0	3.821	A
C - A1156 South-West	198	198	49	0	0	948	1015	0.195	198	170	0.2	0.2	4.404	A
D - A14 South-East	276	276	69	0	0	843	1214	0.227	276	376	0.3	0.3	3.836	A
E - Unnamed Road North-East	31	31	8	0	0	1188	853	0.036	31	26	0.0	0.0	4.379	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	832	832	208	0	548	159	2329	0.357	833	181	0.8	0.6	2.407	A
B - A14 North-West	464	21	5	548	0	320	1007	0.021	21	617	0.0	0.0	3.648	A
C - A1156 South-West	162	162	40	0	0	775	1175	0.138	162	139	0.2	0.2	3.554	A
D - A14 South-East	225	225	56	0	0	689	1365	0.165	225	307	0.3	0.2	3.161	A
E - Unnamed Road North-East	25	25	6	0	0	971	1006	0.025	25	21	0.0	0.0	3.669	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	697	697	174	0	459	133	2359	0.295	697	152	0.6	0.4	2.168	A
B - A14 North-West	389	17	4	459	0	268	1036	0.017	17	517	0.0	0.0	3.531	A
C - A1156 South-West	135	135	34	0	0	649	1291	0.105	135	116	0.2	0.1	3.114	A
D - A14 South-East	188	188	47	0	0	577	1475	0.128	189	257	0.2	0.1	2.797	A
E - Unnamed Road North-East	21	21	5	0	0	813	1118	0.019	21	18	0.0	0.0	3.284	A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	43.19	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	144	75.10
B - A14 North-West	610	128.00
C - A1156 South-West	1662	80.70
D - A14 South-East	1609	131.50
E - Unnamed Road North-East	1877	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1598	100.000
B - A14 North-West		ONE HOUR	✓	1343	100.000
C - A1156 South-West		ONE HOUR	✓	393	100.000
D - A14 South-East		ONE HOUR	✓	563	100.000
E - Unnamed Road North-East		ONE HOUR	✓	48	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1092	234	269	3
	B - A14 North-West	1246	2	65	0	30
	C - A1156 South-West	162	52	0	174	6
	D - A14 South-East	356	3	190	0	14
	E - Unnamed Road North-East	2	41	3	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	10	33
	B - A14 North-West	13	100	6	0	19
	C - A1156 South-West	2	12	0	3	100
	D - A14 South-East	8	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	9.97	4.7	A	1466	2199
B - A14 North-West	0.12	4.48	0.1	A	1246	133
C - A1156 South-West	0.98	100.69	11.8	F	361	541
D - A14 South-East	1.12	200.44	38.4	F	517	775
E - Unnamed Road North-East	0.17	13.85	0.2	B	44	66

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1203	1203	301	0	938	218	2225	0.541	1196	389	0.0	1.2	3.491	A
B - A14 North-West	1022	73	18	938	0	533	1049	0.070	73	892	0.0	0.1	3.686	A
C - A1156 South-West	296	296	74	0	0	1132	808	0.366	294	369	0.0	0.6	6.968	A
D - A14 South-East	424	424	106	0	0	1079	965	0.440	421	332	0.0	0.8	6.587	A
E - Unnamed Road North-East	36	36	9	0	0	1376	645	0.056	36	40	0.0	0.1	5.908	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1436	1436	359	0	1120	260	2177	0.660	1434	464	1.2	1.9	4.826	A
B - A14 North-West	1221	87	22	1120	0	637	981	0.089	87	1067	0.1	0.1	4.029	A
C - A1156 South-West	353	353	88	0	0	1353	640	0.552	351	441	0.6	1.2	12.326	B
D - A14 South-East	506	506	127	0	0	1291	793	0.639	503	397	0.8	1.7	12.255	B
E - Unnamed Road North-East	43	43	11	0	0	1646	504	0.085	43	48	0.1	0.1	7.800	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1759	1759	440	0	1372	305	2125	0.828	1749	512	1.9	4.5	9.326	A
B - A14 North-West	1495	107	27	1372	0	711	932	0.115	107	1298	0.1	0.1	4.360	A
C - A1156 South-West	433	433	108	0	0	1603	451	0.960	405	514	1.2	8.1	59.646	F
D - A14 South-East	620	620	155	0	0	1576	562	1.103	542	474	1.7	21.3	94.244	F
E - Unnamed Road North-East	53	53	13	0	0	1998	320	0.164	52	56	0.1	0.2	13.402	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1759	1759	440	0	1372	312	2118	0.831	1759	523	4.5	4.7	9.971	A
B - A14 North-West	1495	107	27	1372	0	728	921	0.116	107	1307	0.1	0.1	4.421	A
C - A1156 South-West	433	433	108	0	0	1617	441	0.982	418	519	8.1	11.8	100.689	F
D - A14 South-East	620	620	155	0	0	1584	556	1.116	552	482	21.3	38.4	200.445	F
E - Unnamed Road North-East	53	53	13	0	0	2013	312	0.168	53	57	0.2	0.2	13.848	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1436	1436	359	0	1120	284	2151	0.668	1447	576	4.7	2.0	5.196	A
B - A14 North-West	1221	87	22	1120	0	772	891	0.098	87	1083	0.1	0.1	4.481	A
C - A1156 South-West	353	353	88	0	0	1462	558	0.633	393	493	11.8	1.8	26.624	D
D - A14 South-East	506	506	127	0	0	1304	783	0.647	652	418	38.4	2.0	57.912	F
E - Unnamed Road North-East	43	43	11	0	0	1679	488	0.088	43	52	0.2	0.1	8.110	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1203	1203	301	0	938	221	2221	0.542	1206	397	2.0	1.2	3.563	A
B - A14 North-West	1022	73	18	938	0	545	1042	0.070	73	899	0.1	0.1	3.719	A
C - A1156 South-West	296	296	74	0	0	1143	800	0.370	301	373	1.8	0.6	7.288	A
D - A14 South-East	424	424	106	0	0	1087	959	0.442	429	337	2.0	0.8	6.855	A
E - Unnamed Road North-East	36	36	9	0	0	1387	639	0.056	36	40	0.1	0.1	5.973	A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	219.26	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	165	75.10
B - A14 North-West	818	128.00
C - A1156 South-West	1919	80.70
D - A14 South-East	2135	131.50
E - Unnamed Road North-East	2475	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1830	100.000
B - A14 North-West		FLAT	✓	1601	100.000
C - A1156 South-West		FLAT	✓	605	100.000
D - A14 South-East		FLAT	✓	639	100.000
E - Unnamed Road North-East		FLAT	✓	83	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1113	344	370	3
	B - A14 North-West	1466	6	119	0	10
	C - A1156 South-West	265	75	0	263	2
	D - A14 South-East	371	0	253	0	14
	E - Unnamed Road North-East	9	51	19	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	10	5	9	0
	B - A14 North-West	13	67	3	0	0
	C - A1156 South-West	7	7	0	1	0
	D - A14 South-East	9	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	17.01	8.5	C	1830	2745
B - A14 North-West	0.15	4.66	0.2	A	1709	202
C - A1156 South-West	1.14	725.08	114.7	F	605	908
D - A14 South-East	1.19	938.25	151.4	F	639	958
E - Unnamed Road North-East	0.30	18.81	0.4	C	83	125

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	1830	457	0	1466	375	2045	0.895	1800	548	0.0	7.4	13.430	B
B - A14 North-West	1709	135	34	1466	0	788	915	0.148	134	1216	0.0	0.2	4.610	A
C - A1156 South-West	605	605	151	0	0	1483	546	1.108	521	687	0.0	21.0	88.998	F
D - A14 South-East	639	639	160	0	0	1635	556	1.148	536	594	0.0	25.8	102.043	F
E - Unnamed Road North-East	83	83	21	0	0	2148	289	0.288	82	27	0.0	0.4	17.230	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	1830	457	0	1466	379	2040	0.897	1827	553	7.4	8.0	16.479	C
B - A14 North-West	1709	135	34	1466	0	797	909	0.149	135	1235	0.2	0.2	4.650	A
C - A1156 South-West	605	605	151	0	0	1502	532	1.137	529	694	21.0	40.0	223.948	F
D - A14 South-East	639	639	160	0	0	1659	540	1.183	538	603	25.8	51.0	272.048	F
E - Unnamed Road North-East	83	83	21	0	0	2179	276	0.302	83	27	0.4	0.4	18.661	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	1830	457	0	1466	379	2040	0.897	1829	553	8.0	8.2	16.784	C
B - A14 North-West	1709	135	34	1466	0	798	908	0.149	135	1236	0.2	0.2	4.655	A
C - A1156 South-West	605	605	151	0	0	1503	531	1.139	530	695	40.0	58.8	348.997	F
D - A14 South-East	639	639	160	0	0	1660	539	1.185	538	604	51.0	76.1	437.448	F
E - Unnamed Road North-East	83	83	21	0	0	2181	275	0.303	83	27	0.4	0.4	18.761	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	1830	457	0	1466	380	2040	0.897	1829	554	8.2	8.3	16.904	C
B - A14 North-West	1709	135	34	1466	0	798	908	0.149	135	1236	0.2	0.2	4.656	A
C - A1156 South-West	605	605	151	0	0	1504	531	1.139	530	695	58.8	77.5	474.207	F
D - A14 South-East	639	639	160	0	0	1660	539	1.186	538	604	76.1	101.2	603.974	F
E - Unnamed Road North-East	83	83	21	0	0	2181	275	0.303	83	27	0.4	0.4	18.789	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	1830	457	0	1466	380	2040	0.897	1830	554	8.3	8.4	16.967	C
B - A14 North-West	1709	135	34	1466	0	798	908	0.149	135	1236	0.2	0.2	4.657	A
C - A1156 South-West	605	605	151	0	0	1504	531	1.139	531	695	77.5	96.1	599.598	F
D - A14 South-East	639	639	160	0	0	1661	538	1.186	538	604	101.2	126.3	771.002	F
E - Unnamed Road North-East	83	83	21	0	0	2182	275	0.303	83	27	0.4	0.4	18.803	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	1830	457	0	1466	380	2040	0.897	1830	554	8.4	8.5	17.006	C
B - A14 North-West	1709	135	34	1466	0	798	908	0.149	135	1236	0.2	0.2	4.657	A
C - A1156 South-West	605	605	151	0	0	1504	531	1.139	531	695	96.1	114.7	725.084	F
D - A14 South-East	639	639	160	0	0	1661	538	1.186	538	605	126.3	151.4	938.253	F
E - Unnamed Road North-East	83	83	21	0	0	2182	275	0.303	83	27	0.4	0.4	18.808	C

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	98.02	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	104	75.10
B - A14 North-West	811	128.00
C - A1156 South-West	1620	80.70
D - A14 South-East	1891	131.50
E - Unnamed Road North-East	2225	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1692	100.000
B - A14 North-West		ONE HOUR	✓	1223	100.000
C - A1156 South-West		ONE HOUR	✓	555	100.000
D - A14 South-East		ONE HOUR	✓	642	100.000
E - Unnamed Road North-East		ONE HOUR	✓	36	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1058	314	316	3
	B - A14 North-West	1138	4	43	0	38
	C - A1156 South-West	292	80	4	174	4
	D - A14 South-East	375	0	266	0	1
	E - Unnamed Road North-East	6	24	2	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	10	4	7	33
	B - A14 North-West	9	0	7	0	12
	C - A1156 South-West	2	4	0	1	0
	D - A14 South-East	7	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	11.26	5.6	B	1553	2330
B - A14 North-West	0.10	5.03	0.1	A	1124	117
C - A1156 South-West	1.21	311.91	56.4	F	509	764
D - A14 South-East	1.25	343.76	74.3	F	590	884
E - Unnamed Road North-East	0.12	12.76	0.1	B	33	49

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1274	1274	319	0	857	201	2246	0.567	1269	503	0.0	1.3	3.664	A
B - A14 North-West	922	64	16	857	0	641	989	0.065	64	874	0.0	0.1	3.889	A
C - A1156 South-West	418	418	104	0	0	1101	853	0.490	414	471	0.0	0.9	8.136	A
D - A14 South-East	484	484	121	0	0	1092	957	0.506	480	369	0.0	1.0	15.887	A
E - Unnamed Road North-East	27	27	7	0	0	1435	637	0.042	27	35	0.0	0.0	5.892	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1522	1522	380	0	1023	239	2204	0.690	1518	599	1.3	2.2	5.219	A
B - A14 North-West	1101	76	19	1023	0	763	911	0.084	76	1046	0.1	0.1	4.312	A
C - A1156 South-West	499	499	125	0	0	1315	682	0.732	493	563	0.9	2.5	18.443	C
D - A14 South-East	578	578	144	0	0	1307	792	0.729	571	441	1.0	2.5	15.887	C
E - Unnamed Road North-East	32	32	8	0	0	1716	499	0.064	32	42	0.0	0.1	7.708	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1863	1863	466	0	1253	260	2181	0.854	1850	601	2.2	5.4	10.491	B
B - A14 North-West	1349	93	23	1253	0	767	908	0.103	93	1261	0.1	0.1	4.417	A
C - A1156 South-West	611	611	153	0	0	1526	513	1.191	502	630	2.5	29.9	134.547	F
D - A14 South-East	707	707	177	0	0	1592	573	1.235	563	507	2.5	38.5	147.445	F
E - Unnamed Road North-East	39	39	10	0	0	2060	328	0.120	39	50	0.1	0.1	12.451	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1863	1863	466	0	1253	261	2180	0.855	1863	603	5.4	5.6	11.263	B
B - A14 North-West	1349	93	23	1253	0	770	906	0.103	93	1269	0.1	0.1	4.428	A
C - A1156 South-West	611	611	153	0	0	1534	507	1.207	505	633	29.9	56.4	311.909	F
D - A14 South-East	707	707	177	0	0	1602	565	1.252	564	510	38.5	74.3	343.764	F
E - Unnamed Road North-East	39	39	10	0	0	2073	321	0.122	39	50	0.1	0.1	12.762	B

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1522	1522	380	0	1023	266	2176	0.699	1535	757	5.6	2.4	5.722	A
B - A14 North-West	1101	76	19	1023	0	947	792	0.096	76	1068	0.1	0.1	5.032	A
C - A1156 South-West	499	499	125	0	0	1443	582	0.858	572	649	56.4	38.2	290.144	F
D - A14 South-East	578	578	144	0	0	1321	781	0.739	771	469	74.3	26.0	236.312	F
E - Unnamed Road North-East	32	32	8	0	0	1758	479	0.067	32	43	0.1	0.1	8.067	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1274	1274	319	0	857	252	2192	0.581	1278	644	2.4	1.4	3.955	A
B - A14 North-West	922	64	16	857	0	832	868	0.074	64	902	0.1	0.1	4.482	A
C - A1156 South-West	418	418	104	0	0	1167	801	0.522	566	517	38.2	1.1	29.621	D
D - A14 South-East	484	484	121	0	0	1101	950	0.509	583	419	26.0	1.1	12.964	B
E - Unnamed Road North-East	27	27	7	0	0	1493	610	0.044	27	37	0.1	0.0	6.174	A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	70.90	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	153	75.10
B - A14 North-West	730	128.00
C - A1156 South-West	1609	80.70
D - A14 South-East	1820	131.50
E - Unnamed Road North-East	2261	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1669	100.000
B - A14 North-West		ONE HOUR	✓	1355	100.000
C - A1156 South-West		ONE HOUR	✓	571	100.000
D - A14 South-East		ONE HOUR	✓	698	100.000
E - Unnamed Road North-East		ONE HOUR	✓	24	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1050	224	392	1
	B - A14 North-West	1243	3	89	0	20
	C - A1156 South-West	237	82	0	226	27
	D - A14 South-East	348	0	351	0	0
	E - Unnamed Road North-East	0	18	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	3	2	0
	B - A14 North-West	4	33	0	0	11
	C - A1156 South-West	0	1	0	1	0
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	12.27	6.0	B	1531	2297
B - A14 North-West	0.13	4.87	0.1	A	1260	154
C - A1156 South-West	1.10	191.68	36.2	F	524	786
D - A14 South-East	1.17	249.45	59.5	F	641	961
E - Unnamed Road North-East	0.09	13.02	0.1	B	22	34

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1256	1256	314	0	936	272	2237	0.562	1251	437	0.0	1.3	3.632	A
B - A14 North-West	1034	84	21	936	0	626	1074	0.079	84	864	0.0	0.1	3.635	A
C - A1156 South-West	430	430	108	0	0	1063	919	0.468	427	501	0.0	0.9	7.263	A
D - A14 South-East	526	526	131	0	0	1043	1036	0.507	522	463	0.0	1.0	6.939	A
E - Unnamed Road North-East	18	18	5	0	0	1488	610	0.030	18	36	0.0	0.0	6.083	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1500	1500	375	0	1117	325	2179	0.689	1497	522	1.3	2.2	5.247	A
B - A14 North-West	1235	101	25	1117	0	746	992	0.101	101	1033	0.1	0.1	4.036	A
C - A1156 South-West	513	513	128	0	0	1271	755	0.680	509	599	0.9	2.0	14.350	B
D - A14 South-East	628	628	157	0	0	1247	878	0.715	622	554	1.0	2.4	13.789	B
E - Unnamed Road North-East	22	22	6	0	0	1779	477	0.046	22	43	0.0	0.0	7.907	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1837	1837	459	0	1368	369	2131	0.862	1823	556	2.2	5.7	11.201	B
B - A14 North-West	1512	123	31	1368	0	802	955	0.129	123	1250	0.1	0.1	4.327	A
C - A1156 South-West	629	629	157	0	0	1496	578	1.088	556	677	2.0	20.2	89.918	F
D - A14 South-East	769	769	192	0	0	1520	667	1.153	652	649	2.4	31.6	109.500	F
E - Unnamed Road North-East	27	27	7	0	0	2143	311	0.087	27	49	0.0	0.1	12.654	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1837	1837	459	0	1368	373	2127	0.864	1836	562	5.7	6.0	12.270	B
B - A14 North-West	1512	123	31	1368	0	812	948	0.130	123	1259	0.1	0.1	4.362	A
C - A1156 South-West	629	629	157	0	0	1506	569	1.105	565	681	20.2	36.2	191.685	F
D - A14 South-East	769	769	192	0	0	1531	659	1.167	657	656	31.6	59.5	249.445	F
E - Unnamed Road North-East	27	27	7	0	0	2159	304	0.089	27	50	0.1	0.1	13.015	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1500	1500	375	0	1117	382	2117	0.709	1514	688	6.0	2.5	6.107	A
B - A14 North-West	1235	101	25	1117	0	970	841	0.120	101	1063	0.1	0.1	4.867	A
C - A1156 South-West	513	513	128	0	0	1396	658	0.781	637	716	36.2	5.3	124.343	F
D - A14 South-East	628	628	157	0	0	1261	867	0.724	609	609	59.5	4.0	140.264	F
E - Unnamed Road North-East	22	22	6	0	0	1848	447	0.049	22	49	0.1	0.1	8.486	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1256	1256	314	0	936	282	2226	0.564	1261	454	2.5	1.3	3.749	A
B - A14 North-West	1034	84	21	936	0	652	1057	0.080	85	873	0.1	0.1	3.702	A
C - A1156 South-West	430	430	108	0	0	1077	908	0.474	448	511	5.3	0.9	8.115	A
D - A14 South-East	526	526	131	0	0	1051	1030	0.510	537	474	4.0	1.1	7.474	A
E - Unnamed Road North-East	18	18	5	0	0	1506	602	0.031	19	37	0.1	0.0	6.176	A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	2.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	38	75.10
B - A14 North-West	229	128.00
C - A1156 South-West	893	80.70
D - A14 South-East	811	131.50
E - Unnamed Road North-East	1003	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	877	100.000
B - A14 North-West		ONE HOUR	✓	567	100.000
C - A1156 South-West		ONE HOUR	✓	38	100.000
D - A14 South-East		ONE HOUR	✓	238	100.000
E - Unnamed Road North-East		ONE HOUR	✓	29	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	601	77	198	1
	B - A14 North-West	545	8	3	0	11
	C - A1156 South-West	30	7	0	0	1
	D - A14 South-East	154	0	73	0	12
	E - Unnamed Road North-East	9	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	11	88	0	0	11
	C - A1156 South-West	0	0	0	0	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.39	2.41	0.6	A	804	1207
B - A14 North-West	0.02	3.43	0.0	A	422	30
C - A1156 South-West	0.04	3.51	0.0	A	35	53
D - A14 South-East	0.20	3.54	0.3	A	218	327
E - Unnamed Road North-East	0.03	3.73	0.0	A	27	40

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	660	660	165	0	411	26	2475	0.267	659	145	0.0	0.4	1.979	A
B - A14 North-West	346	16	4	411	0	154	1113	0.015	16	477	0.0	0.0	3.280	A
C - A1156 South-West	29	29	7	0	0	602	1323	0.022	29	115	0.0	0.0	2.779	A
D - A14 South-East	179	179	45	0	0	538	1526	0.117	178	149	0.0	0.1	2.669	A
E - Unnamed Road North-East	22	22	5	0	0	666	1216	0.018	22	18	0.0	0.0	3.015	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	788	788	197	0	490	31	2468	0.319	788	173	0.4	0.5	2.142	A
B - A14 North-West	413	19	5	490	0	185	1096	0.018	19	570	0.0	0.0	3.342	A
C - A1156 South-West	34	34	9	0	0	721	1216	0.028	34	137	0.0	0.0	3.046	A
D - A14 South-East	214	214	53	0	0	644	1422	0.150	214	179	0.1	0.2	2.979	A
E - Unnamed Road North-East	26	26	7	0	0	796	1123	0.023	26	22	0.0	0.0	3.281	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	965	965	241	0	601	38	2459	0.393	964	212	0.5	0.6	2.408	A
B - A14 North-West	506	24	6	601	0	226	1072	0.022	24	698	0.0	0.0	3.431	A
C - A1156 South-West	42	42	11	0	0	882	1068	0.039	42	168	0.0	0.0	3.507	A
D - A14 South-East	262	262	65	0	0	789	1278	0.205	262	219	0.2	0.3	3.540	A
E - Unnamed Road North-East	32	32	8	0	0	975	996	0.032	32	27	0.0	0.0	3.733	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	965	965	241	0	601	38	2459	0.393	965	212	0.6	0.6	2.410	A
B - A14 North-West	506	24	6	601	0	227	1072	0.022	24	699	0.0	0.0	3.432	A
C - A1156 South-West	42	42	11	0	0	883	1068	0.039	42	168	0.0	0.0	3.509	A
D - A14 South-East	262	262	65	0	0	789	1278	0.205	262	219	0.3	0.3	3.542	A
E - Unnamed Road North-East	32	32	8	0	0	976	996	0.032	32	27	0.0	0.0	3.735	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	788	788	197	0	490	31	2468	0.319	789	174	0.6	0.5	2.144	A
B - A14 North-West	413	19	5	490	0	185	1096	0.018	19	571	0.0	0.0	3.346	A
C - A1156 South-West	34	34	9	0	0	722	1215	0.028	34	137	0.0	0.0	3.049	A
D - A14 South-East	214	214	53	0	0	645	1421	0.150	214	179	0.3	0.2	2.983	A
E - Unnamed Road North-East	26	26	7	0	0	798	1122	0.023	26	22	0.0	0.0	3.286	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	660	660	165	0	411	26	2475	0.267	660	145	0.5	0.4	1.985	A
B - A14 North-West	346	16	4	411	0	155	1113	0.015	16	478	0.0	0.0	3.284	A
C - A1156 South-West	29	29	7	0	0	604	1322	0.022	29	115	0.0	0.0	2.785	A
D - A14 South-East	179	179	45	0	0	540	1525	0.117	179	150	0.2	0.1	2.677	A
E - Unnamed Road North-East	22	22	5	0	0	668	1214	0.018	22	18	0.0	0.0	3.021	A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	16.61	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	155	75.10
B - A14 North-West	628	128.00
C - A1156 South-West	1721	80.70
D - A14 South-East	1656	131.50
E - Unnamed Road North-East	1931	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1543	100.000
B - A14 North-West		ONE HOUR	✓	1300	100.000
C - A1156 South-West		ONE HOUR	✓	282	100.000
D - A14 South-East		ONE HOUR	✓	543	100.000
E - Unnamed Road North-East		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1080	191	269	4
	B - A14 North-West	1207	2	60	0	32
	C - A1156 South-West	162	52	0	63	6
	D - A14 South-East	331	3	194	0	15
	E - Unnamed Road North-East	2	43	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	10	33
	B - A14 North-West	10	100	5	0	19
	C - A1156 South-West	2	12	0	8	100
	D - A14 South-East	5	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	6.67	3.1	A	1416	2124
B - A14 North-West	0.10	4.06	0.1	A	1176	129
C - A1156 South-West	0.70	26.24	2.2	D	259	389
D - A14 South-East	0.96	73.24	11.7	F	498	747
E - Unnamed Road North-East	0.14	10.26	0.2	B	46	69

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1162	1162	290	0	909	133	2312	0.503	1158	370	0.0	1.0	3.110	A
B - A14 North-West	965	70	18	909	0	433	1118	0.063	70	885	0.0	0.1	3.435	A
C - A1156 South-West	213	213	53	0	0	1107	817	0.260	211	336	0.0	0.3	5.928	A
D - A14 South-East	409	409	102	0	0	1037	1019	0.401	406	249	0.0	0.7	5.855	A
E - Unnamed Road North-East	38	38	9	0	0	1249	707	0.053	38	42	0.0	0.1	5.375	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1387	1387	347	0	1085	159	2281	0.608	1385	443	1.0	1.5	4.010	A
B - A14 North-West	1152	84	21	1085	0	518	1062	0.079	84	1059	0.1	0.1	3.678	A
C - A1156 South-West	254	254	63	0	0	1324	659	0.385	253	402	0.3	0.6	8.828	A
D - A14 South-East	488	488	122	0	0	1240	852	0.573	486	298	0.7	1.3	9.753	A
E - Unnamed Road North-East	45	45	11	0	0	1494	581	0.078	45	50	0.1	0.1	6.719	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1699	1699	425	0	1329	193	2240	0.758	1693	524	1.5	3.0	6.505	A
B - A14 North-West	1411	103	26	1329	0	614	999	0.103	103	1293	0.1	0.1	4.015	A
C - A1156 South-West	311	311	78	0	0	1602	458	0.680	306	482	0.6	2.0	22.925	C
D - A14 South-East	598	598	149	0	0	1516	627	0.954	568	364	1.3	8.8	47.163	E
E - Unnamed Road North-East	55	55	14	0	0	1825	410	0.135	55	61	0.1	0.2	10.144	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1699	1699	425	0	1329	195	2238	0.759	1699	538	3.0	3.1	6.665	A
B - A14 North-West	1411	103	26	1329	0	630	989	0.104	103	1299	0.1	0.1	4.062	A
C - A1156 South-West	311	311	78	0	0	1618	446	0.697	310	490	2.0	2.2	26.240	D
D - A14 South-East	598	598	149	0	0	1521	623	0.960	587	366	8.8	11.7	73.240	F
E - Unnamed Road North-East	55	55	14	0	0	1832	406	0.136	55	61	0.2	0.2	10.264	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1387	1387	347	0	1085	162	2277	0.609	1393	474	3.1	1.6	4.102	A
B - A14 North-West	1152	84	21	1085	0	552	1040	0.081	84	1066	0.1	0.1	3.767	A
C - A1156 South-West	254	254	63	0	0	1358	635	0.400	260	419	2.2	0.7	9.740	A
D - A14 South-East	488	488	122	0	0	1248	846	0.577	529	301	11.7	1.4	12.821	B
E - Unnamed Road North-East	45	45	11	0	0	1504	575	0.078	45	52	0.2	0.1	6.794	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1162	1162	290	0	909	134	2310	0.503	1164	375	1.6	1.0	3.146	A
B - A14 North-West	965	70	18	909	0	439	1114	0.063	70	890	0.1	0.1	3.450	A
C - A1156 South-West	213	213	53	0	0	1115	811	0.262	214	339	0.7	0.4	6.038	A
D - A14 South-East	409	409	102	0	0	1042	1014	0.403	412	251	1.4	0.7	6.006	A
E - Unnamed Road North-East	38	38	9	0	0	1256	704	0.054	38	42	0.1	0.1	5.408	A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	119.84	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	168	75.10
B - A14 North-West	888	128.00
C - A1156 South-West	1941	80.70
D - A14 South-East	2164	131.50
E - Unnamed Road North-East	2497	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1854	100.000
B - A14 North-West		FLAT	✓	1615	100.000
C - A1156 South-West		FLAT	✓	463	100.000
D - A14 South-East		FLAT	✓	624	100.000
E - Unnamed Road North-East		FLAT	✓	88	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1167	316	368	4
	B - A14 North-West	1486	6	113	0	11
	C - A1156 South-West	263	74	0	124	2
	D - A14 South-East	352	0	257	0	15
	E - Unnamed Road North-East	9	54	20	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	5	8	0
	B - A14 North-West	9	67	0	0	0
	C - A1156 South-West	7	5	0	1	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	11.26	5.7	B	1854	2781
B - A14 North-West	0.13	4.26	0.2	A	1701	194
C - A1156 South-West	0.92	75.78	9.3	F	463	695
D - A14 South-East	1.16	807.00	130.1	F	624	936
E - Unnamed Road North-East	0.28	15.64	0.4	C	88	131

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1854	1854	464	0	1486	262	2180	0.850	1833	558	0.0	5.3	9.847	A
B - A14 North-West	1701	130	32	1486	0	691	991	0.131	129	1283	0.0	0.1	4.173	A
C - A1156 South-West	463	463	116	0	0	1534	520	0.891	441	663	0.0	5.6	38.677	E
D - A14 South-East	624	624	156	0	0	1666	553	1.299	530	486	0.0	23.5	95.538	F
E - Unnamed Road North-East	88	88	22	0	0	2066	329	0.266	86	29	0.0	0.4	14.735	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1854	1854	464	0	1486	267	2175	0.853	1853	571	5.3	5.5	11.109	B
B - A14 North-West	1701	130	32	1486	0	709	979	0.132	129	1299	0.1	0.2	4.236	A
C - A1156 South-West	463	463	116	0	0	1552	507	0.914	456	670	5.6	7.3	60.725	F
D - A14 South-East	624	624	156	0	0	1684	540	1.155	538	494	23.5	45.1	245.158	F
E - Unnamed Road North-East	88	88	22	0	0	2091	319	0.275	87	29	0.4	0.4	15.563	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1854	1854	464	0	1486	268	2174	0.853	1854	574	5.5	5.6	11.202	B
B - A14 North-West	1701	130	32	1486	0	712	977	0.133	129	1300	0.2	0.2	4.248	A
C - A1156 South-West	463	463	116	0	0	1553	506	0.915	460	671	7.3	8.1	67.986	F
D - A14 South-East	624	624	156	0	0	1685	540	1.156	539	495	45.1	66.4	385.326	F
E - Unnamed Road North-East	88	88	22	0	0	2092	318	0.275	88	29	0.4	0.4	15.615	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1854	1854	464	0	1486	268	2173	0.853	1854	575	5.6	5.7	11.235	B
B - A14 North-West	1701	130	32	1486	0	714	976	0.133	130	1301	0.2	0.2	4.252	A
C - A1156 South-West	463	463	116	0	0	1553	506	0.916	461	671	8.1	8.7	71.766	F
D - A14 South-East	624	624	156	0	0	1685	540	1.156	539	496	66.4	87.7	525.716	F
E - Unnamed Road North-East	88	88	22	0	0	2093	318	0.275	88	29	0.4	0.4	15.631	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1854	1854	464	0	1486	268	2173	0.853	1854	575	5.7	5.7	11.253	B
B - A14 North-West	1701	130	32	1486	0	714	975	0.133	130	1301	0.2	0.2	4.255	A
C - A1156 South-West	463	463	116	0	0	1553	506	0.916	462	671	8.7	9.0	74.139	F
D - A14 South-East	624	624	156	0	0	1685	540	1.156	539	496	87.7	108.9	666.305	F
E - Unnamed Road North-East	88	88	22	0	0	2093	318	0.275	88	29	0.4	0.4	15.638	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1854	1854	464	0	1486	269	2173	0.853	1854	576	5.7	5.7	11.264	B
B - A14 North-West	1701	130	32	1486	0	715	975	0.133	130	1301	0.2	0.2	4.256	A
C - A1156 South-West	463	463	116	0	0	1553	506	0.916	462	671	9.0	9.3	75.781	F
D - A14 South-East	624	624	156	0	0	1685	540	1.157	540	496	108.9	130.1	806.999	F
E - Unnamed Road North-East	88	88	22	0	0	2093	318	0.276	88	29	0.4	0.4	15.643	C

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	21.84	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	118	75.10
B - A14 North-West	915	128.00
C - A1156 South-West	1719	80.70
D - A14 South-East	1958	131.50
E - Unnamed Road North-East	2309	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1560	100.000
B - A14 North-West		ONE HOUR	✓	1304	100.000
C - A1156 South-West		ONE HOUR	✓	487	100.000
D - A14 South-East		ONE HOUR	✓	620	100.000
E - Unnamed Road North-East		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	912	339	304	4
	B - A14 North-West	1218	4	42	0	40
	C - A1156 South-West	291	79	4	108	5
	D - A14 South-East	368	0	250	0	1
	E - Unnamed Road North-East	6	26	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	4	5	33
	B - A14 North-West	6	0	5	0	12
	C - A1156 South-West	2	3	0	1	0
	D - A14 South-East	6	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	6.69	3.1	A	1431	2147
B - A14 North-West	0.11	4.74	0.1	A	1179	118
C - A1156 South-West	0.89	45.22	6.3	E	447	671
D - A14 South-East	0.98	80.59	14.9	F	569	853
E - Unnamed Road North-East	0.10	9.21	0.1	A	34	52

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1174	1174	294	0	917	153	2333	0.503	1170	498	0.0	1.0	3.086	A
B - A14 North-West	967	65	16	917	0	587	1020	0.063	64	766	0.0	0.1	3.765	A
C - A1156 South-West	367	367	92	0	0	988	951	0.386	364	478	0.0	0.6	6.116	A
D - A14 South-East	466	466	117	0	0	1003	1047	0.446	463	312	0.0	0.8	6.139	A
E - Unnamed Road North-East	28	28	7	0	0	1286	717	0.039	28	37	0.0	0.0	5.222	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1402	1402	351	0	1095	183	2300	0.610	1400	596	1.0	1.5	3.992	A
B - A14 North-West	1155	77	19	1095	0	702	948	0.081	77	916	0.1	0.1	4.134	A
C - A1156 South-West	438	438	110	0	0	1182	803	0.546	436	571	0.6	1.2	9.754	A
D - A14 South-East	557	557	139	0	0	1200	899	0.620	554	373	0.8	1.6	10.340	B
E - Unnamed Road North-East	34	34	8	0	0	1539	597	0.056	34	44	0.0	0.1	6.387	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1717	1717	429	0	1342	221	2257	0.761	1711	702	1.5	3.1	6.515	A
B - A14 North-West	1414	94	24	1342	0	829	868	0.109	94	1118	0.1	0.1	4.653	A
C - A1156 South-West	537	537	134	0	0	1426	617	0.870	521	686	1.2	5.2	33.256	D
D - A14 South-East	682	682	171	0	0	1466	699	0.976	645	453	1.6	10.8	49.411	E
E - Unnamed Road North-East	41	41	10	0	0	1878	436	0.095	41	54	0.1	0.1	9.111	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1717	1717	429	0	1342	224	2254	0.762	1717	721	3.1	3.1	6.694	A
B - A14 North-West	1414	94	24	1342	0	851	854	0.111	94	1123	0.1	0.1	4.737	A
C - A1156 South-West	537	537	134	0	0	1442	605	0.887	532	695	5.2	6.3	45.225	E
D - A14 South-East	682	682	171	0	0	1471	695	0.981	666	457	10.8	14.9	80.587	F
E - Unnamed Road North-East	41	41	10	0	0	1887	432	0.096	41	54	0.1	0.1	9.212	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1402	1402	351	0	1095	188	2293	0.611	1408	643	3.1	1.6	4.094	A
B - A14 North-West	1155	77	19	1095	0	754	915	0.084	77	925	0.1	0.1	4.297	A
C - A1156 South-West	438	438	110	0	0	1221	774	0.566	458	596	6.3	1.3	12.076	B
D - A14 South-East	557	557	139	0	0	1207	893	0.623	610	379	14.9	1.7	15.065	C
E - Unnamed Road North-East	34	34	8	0	0	1552	591	0.057	34	45	0.1	0.1	6.463	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1174	1174	294	0	917	154	2331	0.504	1176	506	1.6	1.0	3.125	A
B - A14 North-West	967	65	16	917	0	595	1015	0.064	65	770	0.1	0.1	3.790	A
C - A1156 South-West	367	367	92	0	0	996	945	0.388	370	482	1.3	0.6	6.293	A
D - A14 South-East	466	466	117	0	0	1008	1042	0.447	470	314	1.7	0.8	6.329	A
E - Unnamed Road North-East	28	28	7	0	0	1294	714	0.040	28	37	0.1	0.0	5.253	A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	40.90	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	155	75.10
B - A14 North-West	761	128.00
C - A1156 South-West	1709	80.70
D - A14 South-East	1995	131.50
E - Unnamed Road North-East	2406	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1624	100.000
B - A14 North-West		ONE HOUR	✓	1514	100.000
C - A1156 South-West		ONE HOUR	✓	519	100.000
D - A14 South-East		ONE HOUR	✓	717	100.000
E - Unnamed Road North-East		ONE HOUR	✓	26	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	986	260	375	1
	B - A14 North-West	1401	3	89	0	21
	C - A1156 South-West	247	77	0	167	28
	D - A14 South-East	387	0	331	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	4	2	1	0
	B - A14 North-West	4	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	8.52	4.1	A	1490	2235
B - A14 North-West	0.14	4.58	0.2	A	1397	156
C - A1156 South-West	0.94	62.46	9.3	F	476	714
D - A14 South-East	1.10	177.99	43.2	F	658	987
E - Unnamed Road North-East	0.08	10.50	0.1	B	24	35

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1223	1223	306	0	1055	230	2326	0.526	1218	474	0.0	1.1	3.235	A
B - A14 North-West	1146	85	21	1055	0	620	1075	0.079	85	814	0.0	0.1	3.636	A
C - A1156 South-West	390	390	98	0	0	1046	950	0.411	388	514	0.0	0.7	6.376	A
D - A14 South-East	540	540	135	0	0	1023	1067	0.506	536	407	0.0	1.0	6.731	A
E - Unnamed Road North-East	19	19	5	0	0	1411	653	0.030	19	38	0.0	0.0	5.679	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1460	1460	365	0	1259	276	2276	0.641	1457	566	1.1	1.8	4.383	A
B - A14 North-West	1368	102	25	1259	0	740	994	0.102	102	973	0.1	0.1	4.033	A
C - A1156 South-West	466	466	117	0	0	1250	795	0.586	463	614	0.7	1.4	10.789	B
D - A14 South-East	645	645	161	0	0	1224	921	0.700	640	487	1.0	2.2	12.607	B
E - Unnamed Road North-East	23	23	6	0	0	1688	534	0.043	23	45	0.0	0.0	7.040	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1788	1788	447	0	1542	330	2215	0.807	1779	640	1.8	4.0	8.093	A
B - A14 North-West	1676	125	31	1542	0	845	924	0.135	124	1185	0.1	0.2	4.500	A
C - A1156 South-West	571	571	143	0	0	1483	619	0.923	548	713	1.4	7.2	41.782	E
D - A14 South-East	790	790	197	0	0	1495	724	1.091	701	588	2.2	24.4	83.908	F
E - Unnamed Road North-East	28	28	7	0	0	2055	377	0.075	28	54	0.0	0.1	10.323	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1788	1788	447	0	1542	336	2209	0.809	1787	654	4.0	4.1	8.517	A
B - A14 North-West	1676	125	31	1542	0	865	911	0.137	124	1193	0.2	0.2	4.576	A
C - A1156 South-West	571	571	143	0	0	1495	609	0.937	562	720	7.2	9.3	62.465	F
D - A14 South-East	790	790	197	0	0	1502	719	1.099	714	595	24.4	43.2	177.991	F
E - Unnamed Road North-East	28	28	7	0	0	2068	371	0.076	28	55	0.1	0.1	10.501	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1460	1460	365	0	1259	288	2262	0.645	1469	672	4.1	1.8	4.591	A
B - A14 North-West	1368	102	25	1259	0	858	914	0.111	102	985	0.2	0.1	4.432	A
C - A1156 South-West	466	466	117	0	0	1347	721	0.646	496	693	9.3	1.9	17.868	C
D - A14 South-East	645	645	161	0	0	1234	914	0.706	807	500	43.2	2.7	67.823	F
E - Unnamed Road North-East	23	23	6	0	0	1710	525	0.044	23	47	0.1	0.0	7.181	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1223	1223	306	0	1055	234	2322	0.526	1225	483	1.8	1.1	3.289	A
B - A14 North-West	1146	85	21	1055	0	632	1067	0.080	85	819	0.1	0.1	3.667	A
C - A1156 South-West	390	390	98	0	0	1056	942	0.414	395	520	1.9	0.7	6.642	A
D - A14 South-East	540	540	135	0	0	1029	1062	0.508	546	411	2.7	1.0	7.064	A
E - Unnamed Road North-East	19	19	5	0	0	1421	649	0.030	19	38	0.0	0.0	5.719	A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	3.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	72	75.10
B - A14 North-West	258	128.00
C - A1156 South-West	916	80.70
D - A14 South-East	855	131.50
E - Unnamed Road North-East	1047	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	879	100.000
B - A14 North-West		ONE HOUR	✓	720	100.000
C - A1156 South-West		ONE HOUR	✓	60	100.000
D - A14 South-East		ONE HOUR	✓	247	100.000
E - Unnamed Road North-East		ONE HOUR	✓	29	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	603	77	198	1
	B - A14 North-West	650	8	51	0	11
	C - A1156 South-West	52	7	0	0	1
	D - A14 South-East	167	0	69	0	12
	E - Unnamed Road North-East	9	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	9	88	94	0	11
	C - A1156 South-West	41	0	0	0	100
	D - A14 South-East	5	0	0	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.41	2.62	0.7	A	806	1209
B - A14 North-West	0.10	5.04	0.1	A	425	96
C - A1156 South-West	0.08	4.99	0.1	A	55	83
D - A14 South-East	0.23	3.97	0.3	A	226	340
E - Unnamed Road North-East	0.03	4.04	0.0	A	27	40

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	661	661	165	0	490	62	2391	0.277	660	171	0.0	0.4	2.077	A
B - A14 North-West	348	52	13	490	0	181	831	0.063	52	478	0.0	0.1	4.622	A
C - A1156 South-West	45	45	11	0	0	614	981	0.046	45	147	0.0	0.0	3.844	A
D - A14 South-East	186	186	46	0	0	576	1456	0.128	185	149	0.0	0.1	2.831	A
E - Unnamed Road North-East	22	22	5	0	0	703	1163	0.019	22	18	0.0	0.0	3.155	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	790	790	197	0	585	74	2369	0.333	789	205	0.4	0.5	2.279	A
B - A14 North-West	416	62	16	585	0	216	814	0.077	62	572	0.1	0.1	4.789	A
C - A1156 South-West	54	54	14	0	0	734	900	0.060	54	177	0.0	0.1	4.257	A
D - A14 South-East	222	222	55	0	0	689	1339	0.166	222	179	0.1	0.2	3.222	A
E - Unnamed Road North-East	26	26	7	0	0	841	1061	0.025	26	22	0.0	0.0	3.476	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	967	967	242	0	716	91	2399	0.414	967	251	0.5	0.7	2.622	A
B - A14 North-West	510	77	19	716	0	265	791	0.097	76	700	0.1	0.1	5.034	A
C - A1156 South-West	66	66	17	0	0	899	788	0.084	66	216	0.1	0.1	4.987	A
D - A14 South-East	272	272	68	0	0	844	1178	0.231	271	219	0.2	0.3	3.967	A
E - Unnamed Road North-East	32	32	8	0	0	1030	923	0.035	32	27	0.0	0.0	4.040	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	967	967	242	0	716	91	2339	0.414	967	251	0.7	0.7	2.625	A
B - A14 North-West	510	77	19	716	0	265	791	0.097	77	701	0.1	0.1	5.036	A
C - A1156 South-West	66	66	17	0	0	900	787	0.084	66	216	0.1	0.1	4.991	A
D - A14 South-East	272	272	68	0	0	844	1178	0.231	272	219	0.3	0.3	3.973	A
E - Unnamed Road North-East	32	32	8	0	0	1031	922	0.035	32	27	0.0	0.0	4.043	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	790	790	197	0	585	74	2369	0.333	791	205	0.7	0.5	2.284	A
B - A14 North-West	416	62	16	585	0	217	814	0.077	63	573	0.1	0.1	4.794	A
C - A1156 South-West	54	54	14	0	0	735	899	0.060	54	177	0.1	0.1	4.264	A
D - A14 South-East	222	222	55	0	0	690	1338	0.166	222	179	0.3	0.2	3.230	A
E - Unnamed Road North-East	26	26	7	0	0	843	1060	0.025	26	22	0.0	0.0	3.480	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	661	661	165	0	490	62	2391	0.277	662	172	0.5	0.4	2.082	A
B - A14 North-West	348	52	13	490	0	181	830	0.063	52	480	0.1	0.1	4.629	A
C - A1156 South-West	45	45	11	0	0	616	980	0.046	45	148	0.1	0.0	3.852	A
D - A14 South-East	186	186	46	0	0	578	1454	0.128	186	150	0.2	0.1	2.841	A
E - Unnamed Road North-East	22	22	5	0	0	706	1161	0.019	22	18	0.0	0.0	3.162	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	34.32	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	158	75.10
B - A14 North-West	650	128.00
C - A1156 South-West	1750	80.70
D - A14 South-East	1697	131.50
E - Unnamed Road North-East	1946	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1532	100.000
B - A14 North-West		ONE HOUR	✓	1378	100.000
C - A1156 South-West		ONE HOUR	✓	328	100.000
D - A14 South-East		ONE HOUR	✓	551	100.000
E - Unnamed Road North-East		ONE HOUR	✓	50	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1069	191	269	4
	B - A14 North-West	1240	2	105	0	32
	C - A1156 South-West	215	52	0	56	6
	D - A14 South-East	339	3	194	0	15
	E - Unnamed Road North-East	2	43	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	8	3	10	33
	B - A14 North-West	10	100	45	0	19
	C - A1156 South-West	27	12	0	9	100
	D - A14 South-East	5	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	7.93	3.6	A	1406	2109
B - A14 North-West	0.21	6.10	0.3	A	1018	191
C - A1156 South-West	0.88	61.90	5.8	F	301	452
D - A14 South-East	1.08	170.22	31.4	F	506	758
E - Unnamed Road North-East	0.15	11.50	0.2	B	46	69

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1153	1153	288	0	933	161	2242	0.515	1149	416	0.0	1.1	3.283	A
B - A14 North-West	835	104	26	933	0	473	849	0.123	104	876	0.0	0.1	4.830	A
C - A1156 South-West	247	247	62	0	0	1104	714	0.346	245	370	0.0	0.5	7.643	A
D - A14 South-East	415	415	104	0	0	1062	973	0.426	412	244	0.0	0.7	6.380	A
E - Unnamed Road North-East	38	38	9	0	0	1268	681	0.056	38	42	0.0	0.1	5.598	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1377	1377	344	0	1115	193	2198	0.627	1375	497	1.1	1.7	4.361	A
B - A14 North-West	997	125	31	1115	0	565	797	0.156	124	1049	0.1	0.2	5.351	A
C - A1156 South-West	295	295	74	0	0	1321	578	0.511	293	442	0.5	1.0	12.568	B
D - A14 South-East	495	495	124	0	0	1271	799	0.620	492	292	0.7	1.6	11.583	B
E - Unnamed Road North-East	45	45	11	0	0	1518	549	0.082	45	50	0.1	0.1	7.138	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1687	1687	422	0	1365	232	2143	0.787	1679	562	1.7	3.6	7.639	A
B - A14 North-West	1221	152	38	1365	0	642	753	0.203	152	1279	0.2	0.3	5.993	A
C - A1156 South-West	362	362	90	0	0	1574	417	0.866	347	519	1.0	4.6	44.437	E
D - A14 South-East	607	607	152	0	0	1552	565	1.074	540	355	1.6	18.2	83.828	F
E - Unnamed Road North-East	55	55	14	0	0	1852	373	0.148	55	60	0.1	0.2	11.306	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1687	1687	422	0	1365	235	2140	0.788	1687	577	3.6	3.6	7.925	A
B - A14 North-West	1221	152	38	1365	0	659	743	0.205	152	1286	0.3	0.3	6.096	A
C - A1156 South-West	362	362	90	0	0	1588	409	0.885	357	525	4.6	5.8	61.896	F
D - A14 South-East	607	607	152	0	0	1559	560	1.084	554	358	18.2	31.4	170.220	F
E - Unnamed Road North-East	55	55	14	0	0	1861	368	0.150	55	60	0.2	0.2	11.500	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1377	1377	344	0	1115	200	2189	0.629	1385	585	3.6	1.7	4.517	A
B - A14 North-West	997	125	31	1115	0	660	746	0.167	125	1060	0.3	0.2	5.797	A
C - A1156 South-West	295	295	74	0	0	1407	524	0.563	313	487	5.8	1.3	18.322	C
D - A14 South-East	495	495	124	0	0	1280	792	0.625	495	297	31.4	1.8	35.805	E
E - Unnamed Road North-East	45	45	11	0	0	1531	542	0.083	45	54	0.2	0.1	7.256	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1153	1153	288	0	933	163	2239	0.515	1156	423	1.7	1.1	3.333	A
B - A14 North-West	835	104	26	933	0	482	844	0.124	105	882	0.2	0.1	4.874	A
C - A1156 South-West	247	247	62	0	0	1114	708	0.349	250	374	1.3	0.5	7.917	A
D - A14 South-East	415	415	104	0	0	1068	968	0.429	419	246	1.8	0.8	6.604	A
E - Unnamed Road North-East	38	38	9	0	0	1277	676	0.056	38	42	0.1	0.1	5.643	A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	183.13	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	182	75.10
B - A14 North-West	946	128.00
C - A1156 South-West	1978	80.70
D - A14 South-East	2187	131.50
E - Unnamed Road North-East	2519	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1825	100.000
B - A14 North-West		FLAT	✓	1614	100.000
C - A1156 South-West		FLAT	✓	497	100.000
D - A14 South-East		FLAT	✓	626	100.000
E - Unnamed Road North-East		FLAT	✓	88	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1153	298	371	4
	B - A14 North-West	1457	6	141	0	11
	C - A1156 South-West	318	74	0	103	2
	D - A14 South-East	362	0	249	0	15
	E - Unnamed Road North-East	9	54	20	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	9	6	10	0
	B - A14 North-West	9	67	20	0	0
	C - A1156 South-West	23	5	0	1	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	11.95	6.0	B	1825	2738
B - A14 North-West	0.20	5.59	0.2	A	1481	236
C - A1156 South-West	1.06	410.18	55.3	F	497	746
D - A14 South-East	1.20	1005.18	157.5	F	626	939
E - Unnamed Road North-East	0.28	15.63	0.4	C	88	131

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1825	1825	456	0	1457	263	2131	0.856	1803	593	0.0	5.5	10.362	B
B - A14 North-West	1481	158	39	1457	0	699	814	0.193	157	1265	0.0	0.2	5.464	A
C - A1156 South-West	497	497	124	0	0	1519	479	1.038	445	660	0.0	13.1	71.999	F
D - A14 South-East	626	626	157	0	0	1661	536	1.167	517	463	0.0	27.2	110.029	F
E - Unnamed Road North-East	88	88	22	0	0	2038	326	0.268	86	29	0.0	0.4	14.903	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1825	1825	456	0	1457	267	2127	0.858	1824	604	5.5	5.8	11.782	B
B - A14 North-West	1481	158	39	1457	0	714	805	0.196	157	1281	0.2	0.2	5.559	A
C - A1156 South-West	497	497	124	0	0	1536	468	1.062	460	666	13.1	22.5	158.213	F
D - A14 South-East	626	626	157	0	0	1680	523	1.197	522	470	27.2	53.4	293.490	F
E - Unnamed Road North-East	88	88	22	0	0	2063	316	0.277	87	29	0.4	0.4	15.756	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1825	1825	456	0	1457	268	2126	0.858	1825	607	5.8	5.9	11.880	B
B - A14 North-West	1481	158	39	1457	0	717	803	0.196	157	1282	0.2	0.2	5.576	A
C - A1156 South-West	497	497	124	0	0	1536	468	1.063	463	666	22.5	31.1	225.055	F
D - A14 South-East	626	626	157	0	0	1680	523	1.198	522	471	53.4	79.5	470.552	F
E - Unnamed Road North-East	88	88	22	0	0	2064	315	0.278	88	29	0.4	0.4	15.805	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1825	1825	456	0	1457	268	2126	0.859	1825	608	5.9	5.9	11.919	B
B - A14 North-West	1481	158	39	1457	0	719	802	0.196	157	1282	0.2	0.2	5.583	A
C - A1156 South-West	497	497	124	0	0	1537	468	1.064	464	666	31.1	39.4	288.211	F
D - A14 South-East	626	626	157	0	0	1681	523	1.198	522	471	79.5	105.5	648.441	F
E - Unnamed Road North-East	88	88	22	0	0	2064	315	0.278	88	29	0.4	0.4	15.821	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1825	1825	456	0	1457	269	2126	0.859	1825	608	5.9	6.0	11.938	B
B - A14 North-West	1481	158	39	1457	0	720	802	0.196	158	1282	0.2	0.2	5.588	A
C - A1156 South-West	497	497	124	0	0	1537	467	1.064	465	666	39.4	47.4	349.684	F
D - A14 South-East	626	626	157	0	0	1681	523	1.199	522	471	105.5	131.5	826.720	F
E - Unnamed Road North-East	88	88	22	0	0	2065	315	0.278	88	29	0.4	0.4	15.828	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1825	1825	456	0	1457	269	2125	0.859	1825	609	6.0	6.0	11.949	B
B - A14 North-West	1481	158	39	1457	0	720	801	0.197	158	1282	0.2	0.2	5.590	A
C - A1156 South-West	497	497	124	0	0	1537	467	1.064	466	666	47.4	55.3	410.183	F
D - A14 South-East	626	626	157	0	0	1681	523	1.199	522	472	131.5	157.5	1005.182	F
E - Unnamed Road North-East	88	88	22	0	0	2065	315	0.278	88	29	0.4	0.4	15.833	C

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	37.62	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	116	75.10
B - A14 North-West	940	128.00
C - A1156 South-West	1816	80.70
D - A14 South-East	2071	131.50
E - Unnamed Road North-East	2422	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1548	100.000
B - A14 North-West		ONE HOUR	✓	1277	100.000
C - A1156 South-West		ONE HOUR	✓	525	100.000
D - A14 South-East		ONE HOUR	✓	621	100.000
E - Unnamed Road North-East		ONE HOUR	✓	37	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	907	324	312	4
	B - A14 North-West	1176	4	57	0	40
	C - A1156 South-West	334	79	4	103	5
	D - A14 South-East	369	0	250	0	1
	E - Unnamed Road North-East	6	26	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	11	4	7	33
	B - A14 North-West	6	0	30	0	12
	C - A1156 South-West	15	3	0	1	0
	D - A14 South-East	6	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	7.38	3.4	A	1420	2130
B - A14 North-West	0.15	5.88	0.2	A	1033	139
C - A1156 South-West	1.05	134.47	22.7	F	482	723
D - A14 South-East	1.01	98.81	18.9	F	569	854
E - Unnamed Road North-East	0.10	9.48	0.1	A	34	52

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1165	1165	291	0	886	160	2270	0.513	1161	531	0.0	1.0	3.233	A
B - A14 North-West	848	76	19	886	0	615	866	0.088	76	762	0.0	0.1	4.551	A
C - A1156 South-West	396	396	99	0	0	985	866	0.457	392	478	0.0	0.8	7.546	A
D - A14 South-East	467	467	117	0	0	999	1027	0.455	464	314	0.0	0.8	6.354	A
E - Unnamed Road North-East	28	28	7	0	0	1284	700	0.040	28	37	0.0	0.0	5.353	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1391	1391	348	0	1058	192	2234	0.623	1389	634	1.0	1.6	4.250	A
B - A14 North-West	1012	91	23	1058	0	735	796	0.114	91	911	0.1	0.1	5.101	A
C - A1156 South-West	472	472	118	0	0	1178	731	0.646	469	571	0.8	1.8	13.532	B
D - A14 South-East	558	558	139	0	0	1195	881	0.634	554	375	0.8	1.7	10.926	B
E - Unnamed Road North-East	34	34	8	0	0	1536	582	0.058	34	44	0.0	0.1	6.567	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1704	1704	426	0	1295	225	2193	0.777	1697	725	1.6	3.4	7.153	A
B - A14 North-West	1240	111	28	1295	0	840	736	0.151	111	1107	0.1	0.2	5.761	A
C - A1156 South-West	579	579	145	0	0	1416	564	1.026	531	682	1.8	13.7	70.183	F
D - A14 South-East	683	683	171	0	0	1460	683	1.001	639	450	1.7	12.8	56.531	F
E - Unnamed Road North-East	41	41	10	0	0	1869	425	0.097	41	54	0.1	0.1	9.369	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1704	1704	426	0	1295	228	2191	0.778	1704	745	3.4	3.4	7.383	A
B - A14 North-West	1240	111	28	1295	0	862	723	0.154	111	1113	0.2	0.2	5.881	A
C - A1156 South-West	579	579	145	0	0	1432	553	1.046	542	692	13.7	22.7	134.475	F
D - A14 South-East	683	683	171	0	0	1465	678	1.007	659	454	12.8	18.9	98.812	F
E - Unnamed Road North-East	41	41	10	0	0	1878	421	0.098	41	54	0.1	0.1	9.480	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1391	1391	348	0	1058	210	2214	0.628	1398	732	3.4	1.7	4.451	A
B - A14 North-West	1012	91	23	1058	0	851	729	0.124	91	930	0.2	0.1	5.647	A
C - A1156 South-West	472	472	118	0	0	1227	698	0.677	554	603	22.7	2.3	37.976	E
D - A14 South-East	558	558	139	0	0	1203	874	0.638	626	394	18.9	1.8	18.640	C
E - Unnamed Road North-East	34	34	8	0	0	1563	570	0.059	34	45	0.1	0.1	6.719	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1165	1165	291	0	886	163	2268	0.514	1168	541	1.7	1.1	3.280	A
B - A14 North-West	848	76	19	886	0	627	859	0.088	76	767	0.1	0.1	4.599	A
C - A1156 South-West	396	396	99	0	0	993	860	0.460	401	482	2.3	0.9	7.935	A
D - A14 South-East	467	467	117	0	0	1005	1023	0.457	471	317	1.8	0.9	6.573	A
E - Unnamed Road North-East	28	28	7	0	0	1293	696	0.041	28	37	0.1	0.0	5.392	A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	31.87	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	158	75.10
B - A14 North-West	773	128.00
C - A1156 South-West	1718	80.70
D - A14 South-East	2020	131.50
E - Unnamed Road North-East	2453	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1553	100.000
B - A14 North-West		ONE HOUR	✓	1488	100.000
C - A1156 South-West		ONE HOUR	✓	527	100.000
D - A14 South-East		ONE HOUR	✓	718	100.000
E - Unnamed Road North-East		ONE HOUR	✓	26	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	917	246	387	1
	B - A14 North-West	1372	3	92	0	21
	C - A1156 South-West	259	77	0	163	28
	D - A14 South-East	388	0	331	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	2	2	0
	B - A14 North-West	4	33	3	0	11
	C - A1156 South-West	5	0	0	0	0
	D - A14 South-East	4	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	7.93	3.7	A	1425	2137
B - A14 North-West	0.15	4.91	0.2	A	1343	160
C - A1156 South-West	0.94	63.24	9.6	F	483	725
D - A14 South-East	1.04	119.36	27.7	F	659	989
E - Unnamed Road North-East	0.07	9.89	0.1	A	24	35

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1169	1169	292	0	1033	230	2278	0.513	1165	484	0.0	1.0	3.222	A
B - A14 North-West	1102	87	22	1033	0	627	1037	0.084	87	762	0.0	0.1	3.791	A
C - A1156 South-West	396	396	99	0	0	995	951	0.417	394	505	0.0	0.7	6.432	A
D - A14 South-East	541	541	135	0	0	963	1094	0.494	537	413	0.0	1.0	6.420	A
E - Unnamed Road North-East	19	19	5	0	0	1357	665	0.029	19	38	0.0	0.0	5.579	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1396	1396	349	0	1233	275	2228	0.626	1394	578	1.0	1.7	4.298	A
B - A14 North-West	1315	104	26	1233	0	749	956	0.109	104	911	0.1	0.1	4.227	A
C - A1156 South-West	473	473	118	0	0	1190	804	0.589	471	604	0.7	1.4	10.711	B
D - A14 South-East	646	646	161	0	0	1152	954	0.677	641	494	1.0	2.0	11.363	B
E - Unnamed Road North-East	23	23	6	0	0	1623	550	0.042	23	45	0.0	0.0	6.834	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1710	1710	427	0	1510	329	2168	0.789	1702	668	1.7	3.6	7.596	A
B - A14 North-West	1611	128	32	1510	0	870	876	0.146	128	1110	0.1	0.2	4.809	A
C - A1156 South-West	580	580	145	0	0	1424	627	0.924	556	714	1.4	7.3	41.632	E
D - A14 South-East	791	791	198	0	0	1408	765	1.033	730	597	2.0	17.3	62.832	F
E - Unnamed Road North-East	28	28	7	0	0	1977	397	0.071	28	54	0.0	0.1	9.750	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1710	1710	427	0	1510	334	2163	0.791	1709	686	3.6	3.7	7.926	A
B - A14 North-West	1611	128	32	1510	0	892	861	0.148	128	1117	0.2	0.2	4.909	A
C - A1156 South-West	580	580	145	0	0	1439	616	0.941	570	724	7.3	9.6	63.237	F
D - A14 South-East	791	791	198	0	0	1414	761	1.039	749	604	17.3	27.7	119.360	F
E - Unnamed Road North-East	28	28	7	0	0	1989	392	0.072	28	55	0.1	0.1	9.890	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1396	1396	349	0	1233	287	2215	0.630	1404	652	3.7	1.7	4.481	A
B - A14 North-West	1315	104	26	1233	0	835	899	0.116	105	923	0.2	0.1	4.535	A
C - A1156 South-West	473	473	118	0	0	1253	757	0.625	505	655	9.6	1.7	15.931	C
D - A14 South-East	646	646	161	0	0	1161	948	0.681	747	507	27.7	2.3	27.495	D
E - Unnamed Road North-East	23	23	6	0	0	1644	541	0.043	23	47	0.1	0.0	6.958	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1169	1169	292	0	1033	233	2275	0.514	1172	492	1.7	1.1	3.272	A
B - A14 North-West	1102	87	22	1033	0	637	1030	0.085	88	767	0.1	0.1	3.823	A
C - A1156 South-West	396	396	99	0	0	1004	944	0.420	400	511	1.7	0.7	6.674	A
D - A14 South-East	541	541	135	0	0	969	1090	0.496	546	417	2.3	1.0	6.677	A
E - Unnamed Road North-East	19	19	5	0	0	1366	661	0.029	19	38	0.0	0.0	5.615	A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	2.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	39	75.10
B - A14 North-West	235	128.00
C - A1156 South-West	954	80.70
D - A14 South-East	867	131.50
E - Unnamed Road North-East	1068	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	904	100.000
B - A14 North-West		ONE HOUR	✓	591	100.000
C - A1156 South-West		ONE HOUR	✓	38	100.000
D - A14 South-East		ONE HOUR	✓	240	100.000
E - Unnamed Road North-East		ONE HOUR	✓	30	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	622	77	204	1
	B - A14 North-West	569	8	3	0	11
	C - A1156 South-West	30	7	0	0	1
	D - A14 South-East	158	0	71	0	12
	E - Unnamed Road North-East	10	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	11	88	0	0	11
	C - A1156 South-West	0	0	0	0	100
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.40	2.46	0.7	A	829	1244
B - A14 North-West	0.02	3.43	0.0	A	441	30
C - A1156 South-West	0.04	3.62	0.0	A	35	53
D - A14 South-East	0.21	3.65	0.3	A	220	331
E - Unnamed Road North-East	0.03	3.84	0.0	A	28	42

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	680	680	170	0	429	26	2475	0.275	679	148	0.0	0.4	2.002	A
B - A14 North-West	362	16	4	429	0	158	1114	0.015	16	493	0.0	0.0	3.278	A
C - A1156 South-West	29	29	7	0	0	622	1298	0.022	29	113	0.0	0.0	2.836	A
D - A14 South-East	181	181	45	0	0	555	1503	0.120	180	154	0.0	0.1	2.720	A
E - Unnamed Road North-East	23	23	6	0	0	686	1194	0.019	23	19	0.0	0.0	3.073	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	812	812	203	0	512	32	2468	0.329	812	177	0.4	0.5	2.174	A
B - A14 North-West	432	20	5	512	0	189	1097	0.018	20	590	0.0	0.0	3.342	A
C - A1156 South-West	34	34	9	0	0	744	1188	0.029	34	135	0.0	0.0	3.119	A
D - A14 South-East	216	216	54	0	0	664	1396	0.155	216	184	0.1	0.2	3.049	A
E - Unnamed Road North-East	27	27	7	0	0	821	1100	0.025	27	23	0.0	0.0	3.355	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	995	995	249	0	627	39	2458	0.405	994	217	0.5	0.7	2.458	A
B - A14 North-West	529	24	6	627	0	232	1072	0.022	24	722	0.0	0.0	3.433	A
C - A1156 South-West	42	42	11	0	0	911	1038	0.041	42	166	0.0	0.0	3.614	A
D - A14 South-East	265	265	66	0	0	813	1250	0.212	264	225	0.2	0.3	3.651	A
E - Unnamed Road North-East	33	33	8	0	0	1005	971	0.034	33	28	0.0	0.0	3.837	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	995	995	249	0	627	39	2458	0.405	995	217	0.7	0.7	2.460	A
B - A14 North-West	529	24	6	627	0	232	1072	0.022	24	723	0.0	0.0	3.434	A
C - A1156 South-West	42	42	11	0	0	912	1037	0.041	42	166	0.0	0.0	3.616	A
D - A14 South-East	265	265	66	0	0	814	1250	0.212	265	225	0.3	0.3	3.653	A
E - Unnamed Road North-East	33	33	8	0	0	1006	971	0.034	33	28	0.0	0.0	3.840	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	812	812	203	0	512	32	2468	0.329	813	178	0.7	0.5	2.176	A
B - A14 North-West	432	20	5	512	0	190	1096	0.018	20	590	0.0	0.0	3.343	A
C - A1156 South-West	34	34	9	0	0	746	1187	0.029	34	136	0.0	0.0	3.125	A
D - A14 South-East	216	216	54	0	0	665	1395	0.155	216	184	0.3	0.2	3.053	A
E - Unnamed Road North-East	27	27	7	0	0	822	1099	0.025	27	23	0.0	0.0	3.360	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	680	680	170	0	429	27	2475	0.275	681	149	0.5	0.4	2.008	A
B - A14 North-West	362	16	4	429	0	159	1114	0.015	16	494	0.0	0.0	3.282	A
C - A1156 South-West	29	29	7	0	0	624	1296	0.022	29	113	0.0	0.0	2.840	A
D - A14 South-East	181	181	45	0	0	557	1501	0.120	181	154	0.2	0.1	2.728	A
E - Unnamed Road North-East	23	23	6	0	0	688	1193	0.019	23	19	0.0	0.0	3.077	A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	18.54	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	173	75.10
B - A14 North-West	671	128.00
C - A1156 South-West	1782	80.70
D - A14 South-East	1755	131.50
E - Unnamed Road North-East	2057	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1558	100.000
B - A14 North-West		ONE HOUR	✓	1338	100.000
C - A1156 South-West		ONE HOUR	✓	301	100.000
D - A14 South-East		ONE HOUR	✓	563	100.000
E - Unnamed Road North-East		ONE HOUR	✓	52	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1090	191	274	4
	B - A14 North-West	1243	2	60	0	33
	C - A1156 South-West	162	52	0	81	6
	D - A14 South-East	338	3	206	0	16
	E - Unnamed Road North-East	2	45	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	9	33
	B - A14 North-West	9	100	5	0	19
	C - A1156 South-West	2	12	0	4	100
	D - A14 South-East	4	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	6.96	3.3	A	1430	2145
B - A14 North-West	0.11	4.16	0.1	A	1199	130
C - A1156 South-West	0.73	29.14	2.5	D	276	414
D - A14 South-East	0.98	82.74	13.9	F	516	774
E - Unnamed Road North-East	0.14	10.40	0.2	B	48	72

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1173	1173	293	0	936	148	2312	0.507	1169	376	0.0	1.0	3.137	A
B - A14 North-West	983	71	18	936	0	452	1100	0.065	71	894	0.0	0.1	3.497	A
C - A1156 South-West	226	226	57	0	0	1121	820	0.276	225	345	0.0	0.4	6.032	A
D - A14 South-East	424	424	106	0	0	1046	1021	0.415	421	267	0.0	0.7	5.974	A
E - Unnamed Road North-East	39	39	10	0	0	1273	697	0.056	39	44	0.0	0.1	5.468	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1401	1401	350	0	1117	177	2278	0.615	1399	449	1.0	1.6	4.082	A
B - A14 North-West	1174	85	21	1117	0	541	1043	0.082	85	1069	0.1	0.1	3.756	A
C - A1156 South-West	270	270	68	0	0	1341	663	0.408	269	413	0.4	0.7	9.110	A
D - A14 South-East	506	506	126	0	0	1251	858	0.590	503	319	0.7	1.4	10.068	B
E - Unnamed Road North-East	47	47	12	0	0	1523	574	0.082	47	52	0.1	0.1	6.829	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1716	1716	429	0	1368	214	2232	0.768	1709	529	1.6	3.2	6.773	A
B - A14 North-West	1438	104	26	1368	0	639	980	0.106	104	1306	0.1	0.1	4.110	A
C - A1156 South-West	331	331	83	0	0	1620	463	0.714	325	494	0.7	2.3	24.836	C
D - A14 South-East	619	619	155	0	0	1529	638	0.972	585	389	1.4	10.1	50.819	F
E - Unnamed Road North-East	57	57	14	0	0	1861	407	0.141	57	63	0.1	0.2	10.275	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1401	1401	429	0	1368	216	2232	0.769	1715	543	3.2	3.3	6.965	A
B - A14 North-West	1438	104	26	1368	0	656	969	0.108	104	1311	0.1	0.1	4.161	A
C - A1156 South-West	331	331	83	0	0	1637	451	0.733	330	502	2.3	2.5	29.143	D
D - A14 South-East	619	619	155	0	0	1534	633	0.978	604	391	10.1	13.9	82.736	F
E - Unnamed Road North-East	57	57	14	0	0	1868	403	0.142	57	64	0.2	0.2	10.405	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1401	1401	350	0	1117	181	2273	0.616	1407	485	3.3	1.6	4.187	A
B - A14 North-West	1174	85	21	1117	0	581	1017	0.084	85	1077	0.1	0.1	3.863	A
C - A1156 South-West	270	270	68	0	0	1381	635	0.426	277	433	2.5	0.8	10.258	B
D - A14 South-East	506	506	126	0	0	1259	852	0.594	555	323	13.9	1.5	14.198	B
E - Unnamed Road North-East	47	47	12	0	0	1534	568	0.082	47	54	0.2	0.1	6.914	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1173	1173	293	0	936	149	2310	0.508	1175	381	1.6	1.0	3.180	A
B - A14 North-West	983	71	18	936	0	459	1096	0.065	71	899	0.1	0.1	3.511	A
C - A1156 South-West	226	226	57	0	0	1130	814	0.278	228	348	0.8	0.4	6.154	A
D - A14 South-East	424	424	106	0	0	1051	1016	0.417	427	269	1.5	0.7	6.142	A
E - Unnamed Road North-East	39	39	10	0	0	1281	694	0.057	39	44	0.1	0.1	5.503	A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	187.03	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	177	75.10
B - A14 North-West	971	128.00
C - A1156 South-West	2035	80.70
D - A14 South-East	2308	131.50
E - Unnamed Road North-East	2658	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1933	100.000
B - A14 North-West		FLAT	✓	1611	100.000
C - A1156 South-West		FLAT	✓	484	100.000
D - A14 South-East		FLAT	✓	646	100.000
E - Unnamed Road North-East		FLAT	✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1226	341	363	4
	B - A14 North-West	1481	6	113	0	11
	C - A1156 South-West	261	74	0	147	2
	D - A14 South-East	358	0	272	0	16
	E - Unnamed Road North-East	10	56	21	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	5	8	0
	B - A14 North-West	8	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	6	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	14.68	7.7	B	1933	2900
B - A14 North-West	0.13	4.29	0.2	A	1687	195
C - A1156 South-West	0.97	132.82	17.1	F	484	727
D - A14 South-East	1.25	1248.47	194.0	F	646	969
E - Unnamed Road North-East	0.30	17.04	0.4	C	91	136

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1933	1933	483	0	1481	282	2186	0.884	1906	540	0.0	6.8	11.890	B
B - A14 North-West	1687	130	32	1481	0	693	983	0.132	129	1339	0.0	0.2	4.213	A
C - A1156 South-West	484	484	121	0	0	1578	513	0.945	454	686	0.0	7.7	48.063	E
D - A14 South-East	646	646	161	0	0	1748	533	1.213	517	500	0.0	32.3	127.110	F
E - Unnamed Road North-East	91	91	23	0	0	2158	316	0.287	89	29	0.0	0.4	15.774	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1933	1933	483	0	1481	288	2180	0.887	1931	550	6.8	7.3	14.221	B
B - A14 North-West	1687	130	32	1481	0	707	973	0.133	130	1359	0.2	0.2	4.267	A
C - A1156 South-West	484	484	121	0	0	1595	501	0.967	471	692	7.7	11.0	85.544	F
D - A14 South-East	646	646	161	0	0	1770	518	1.248	517	510	32.3	64.6	352.136	F
E - Unnamed Road North-East	91	91	23	0	0	2189	304	0.299	91	29	0.4	0.4	16.887	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1933	1933	483	0	1481	289	2178	0.887	1932	552	7.3	7.5	14.471	B
B - A14 North-West	1687	130	32	1481	0	711	971	0.134	130	1360	0.2	0.2	4.281	A
C - A1156 South-West	484	484	121	0	0	1596	500	0.968	476	692	11.0	13.2	103.475	F
D - A14 South-East	646	646	161	0	0	1771	517	1.249	517	512	64.6	96.9	574.781	F
E - Unnamed Road North-East	91	91	23	0	0	2192	303	0.300	91	29	0.4	0.4	16.981	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1933	1933	483	0	1481	290	2177	0.888	1933	553	7.5	7.6	14.580	B
B - A14 North-West	1687	130	32	1481	0	713	970	0.134	130	1361	0.2	0.2	4.287	A
C - A1156 South-West	484	484	121	0	0	1596	500	0.968	478	692	13.2	14.8	115.768	F
D - A14 South-East	646	646	161	0	0	1772	517	1.250	517	512	96.9	129.3	798.883	F
E - Unnamed Road North-East	91	91	23	0	0	2193	302	0.300	91	30	0.4	0.4	17.012	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1933	1933	483	0	1481	290	2177	0.888	1933	554	7.6	7.7	14.641	B
B - A14 North-West	1687	130	32	1481	0	714	969	0.134	130	1361	0.2	0.2	4.290	A
C - A1156 South-West	484	484	121	0	0	1596	500	0.969	479	692	14.8	16.0	125.191	F
D - A14 South-East	646	646	161	0	0	1772	517	1.250	517	513	129.3	161.6	1023.516	F
E - Unnamed Road North-East	91	91	23	0	0	2194	302	0.301	91	30	0.4	0.4	17.031	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1933	1933	483	0	1481	291	2177	0.888	1933	555	7.7	7.7	14.679	B
B - A14 North-West	1687	130	32	1481	0	715	968	0.134	130	1361	0.2	0.2	4.293	A
C - A1156 South-West	484	484	121	0	0	1596	500	0.969	480	692	16.0	17.1	132.816	F
D - A14 South-East	646	646	161	0	0	1772	517	1.250	517	513	161.6	194.0	1248.466	F
E - Unnamed Road North-East	91	91	23	0	0	2194	302	0.301	91	30	0.4	0.4	17.041	C

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	45.18	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	138	75.10
B - A14 North-West	1026	128.00
C - A1156 South-West	1785	80.70
D - A14 South-East	2100	131.50
E - Unnamed Road North-East	2484	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1621	100.000
B - A14 North-West		ONE HOUR	✓	1363	100.000
C - A1156 South-West		ONE HOUR	✓	528	100.000
D - A14 South-East		ONE HOUR	✓	694	100.000
E - Unnamed Road North-East		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	908	398	310	4
	B - A14 North-West	1275	4	42	0	41
	C - A1156 South-West	314	79	4	125	5
	D - A14 South-East	398	0	294	0	1
	E - Unnamed Road North-East	6	27	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	4	33
	B - A14 North-West	5	0	5	0	12
	C - A1156 South-West	2	3	0	0	0
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	7.65	3.7	A	1487	2231
B - A14 North-West	0.12	4.94	0.1	A	1222	120
C - A1156 South-West	0.92	55.10	8.3	F	484	726
D - A14 South-East	1.13	210.29	49.6	F	636	955
E - Unnamed Road North-East	0.10	9.71	0.1	A	36	54

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1220	1220	305	0	960	167	2339	0.522	1216	538	0.0	1.1	3.193	A
B - A14 North-West	1002	66	16	960	0	639	975	0.067	65	763	0.0	0.1	3.958	A
C - A1156 South-West	397	397	99	0	0	1008	945	0.420	394	555	0.0	0.7	6.507	A
D - A14 South-East	522	522	131	0	0	1045	1027	0.508	518	329	0.0	1.0	7.025	A
E - Unnamed Road North-East	29	29	7	0	0	1344	693	0.042	29	38	0.0	0.0	5.423	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1457	1457	364	0	1147	200	2303	0.633	1455	642	1.1	1.7	4.230	A
B - A14 North-West	1197	79	20	1147	0	764	899	0.087	78	913	0.1	0.1	4.388	A
C - A1156 South-West	474	474	119	0	0	1205	798	0.594	471	663	0.7	1.4	10.929	B
D - A14 South-East	624	624	156	0	0	1250	880	0.708	618	393	1.0	2.3	13.481	B
E - Unnamed Road North-East	35	35	9	0	0	1608	575	0.061	35	46	0.0	0.1	6.660	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1785	1785	446	0	1404	240	2258	0.790	1777	722	1.7	3.6	7.362	A
B - A14 North-West	1466	96	24	1404	0	866	836	0.115	96	1113	0.1	0.1	4.862	A
C - A1156 South-West	581	581	145	0	0	1419	638	0.910	560	771	1.4	6.7	38.768	E
D - A14 South-East	764	764	191	0	0	1527	682	1.120	664	477	2.3	27.3	96.272	F
E - Unnamed Road North-East	43	43	11	0	0	1961	419	0.102	43	56	0.1	0.1	9.573	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1785	1785	446	0	1404	244	2254	0.792	1784	737	3.6	3.7	7.649	A
B - A14 North-West	1466	96	24	1404	0	885	825	0.117	96	1120	0.1	0.1	4.938	A
C - A1156 South-West	581	581	145	0	0	1430	630	0.921	574	778	6.7	8.3	55.099	F
D - A14 South-East	764	764	191	0	0	1533	677	1.127	674	481	27.3	49.6	210.292	F
E - Unnamed Road North-East	43	43	11	0	0	1972	414	0.104	43	56	0.1	0.1	9.706	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1457	1457	364	0	1147	207	2295	0.635	1465	769	3.7	1.8	4.379	A
B - A14 North-West	1197	79	20	1147	0	898	816	0.096	79	923	0.1	0.1	4.885	A
C - A1156 South-West	474	474	119	0	0	1322	712	0.666	499	747	8.3	2.1	18.633	C
D - A14 South-East	624	624	156	0	0	1259	874	0.713	810	402	49.6	2.9	98.475	F
E - Unnamed Road North-East	35	35	9	0	0	1625	588	0.062	35	47	0.1	0.1	6.762	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1220	1220	305	0	960	169	2337	0.522	1223	549	1.8	1.1	3.239	A
B - A14 North-West	1002	66	16	960	0	653	966	0.068	66	769	0.1	0.1	3.998	A
C - A1156 South-West	397	397	99	0	0	1019	937	0.424	403	562	2.1	0.7	6.805	A
D - A14 South-East	522	522	131	0	0	1051	1023	0.510	530	332	2.9	1.1	7.404	A
E - Unnamed Road North-East	29	29	7	0	0	1354	689	0.043	29	39	0.1	0.0	5.462	A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	46.28	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	162	75.10
B - A14 North-West	901	128.00
C - A1156 South-West	1885	80.70
D - A14 South-East	2153	131.50
E - Unnamed Road North-East	2578	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1680	100.000
B - A14 North-West		ONE HOUR	✓	1605	100.000
C - A1156 South-West		ONE HOUR	✓	549	100.000
D - A14 South-East		ONE HOUR	✓	712	100.000
E - Unnamed Road North-East		ONE HOUR	✓	27	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1001	300	376	1
	B - A14 North-West	1491	3	89	0	22
	C - A1156 South-West	246	77	0	197	29
	D - A14 South-East	398	0	315	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	2	2	0	0
	B - A14 North-West	3	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	3	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	10.33	5.1	B	1542	2312
B - A14 North-West	0.14	4.79	0.2	A	1467	157
C - A1156 South-West	0.98	83.59	13.7	F	503	755
D - A14 South-East	1.12	197.96	47.9	F	653	980
E - Unnamed Road North-East	0.08	11.06	0.1	B	25	37

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1265	1265	316	0	1122	254	2322	0.545	1260	481	0.0	1.2	3.373	A
B - A14 North-West	1204	86	21	1122	0	650	1036	0.083	85	825	0.0	0.1	3.786	A
C - A1156 South-West	413	413	103	0	0	1065	939	0.440	410	532	0.0	0.8	6.766	A
D - A14 South-East	536	536	134	0	0	1065	1045	0.513	532	430	0.0	1.0	13.967	A
E - Unnamed Road North-East	20	20	5	0	0	1475	630	0.032	20	39	0.0	0.0	5.898	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1510	1510	378	0	1340	304	2266	0.666	1507	575	1.2	2.0	4.720	A
B - A14 North-West	1437	102	26	1340	0	777	954	0.107	102	987	0.1	0.1	4.225	A
C - A1156 South-West	493	493	123	0	0	1274	790	0.624	490	635	0.8	1.6	11.852	B
D - A14 South-East	640	640	160	0	0	1274	901	0.711	635	514	1.0	2.3	13.299	B
E - Unnamed Road North-East	24	24	6	0	0	1764	514	0.047	24	47	0.0	0.0	7.348	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1850	1850	462	0	1641	361	2203	0.840	1838	641	2.0	4.9	9.572	A
B - A14 North-West	1760	125	31	1641	0	877	890	0.141	125	1200	0.1	0.2	4.707	A
C - A1156 South-West	604	604	151	0	0	1505	625	0.966	572	737	1.6	9.6	50.701	F
D - A14 South-East	784	784	196	0	0	1554	707	1.108	688	618	2.3	26.4	91.035	F
E - Unnamed Road North-East	29	29	7	0	0	2143	362	0.081	29	56	0.0	0.1	10.829	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1850	1850	462	0	1641	367	2195	0.843	1849	654	4.9	5.1	10.330	B
B - A14 North-West	1760	125	31	1641	0	896	877	0.143	125	1209	0.2	0.2	4.788	A
C - A1156 South-West	604	604	151	0	0	1517	617	0.980	588	744	9.6	13.7	83.590	F
D - A14 South-East	784	784	196	0	0	1563	701	1.118	698	626	26.4	47.9	197.963	F
E - Unnamed Road North-East	29	29	7	0	0	2159	355	0.083	29	57	0.1	0.1	11.060	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1510	1510	378	0	1340	324	2244	0.673	1522	700	5.1	2.1	5.071	A
B - A14 North-West	1437	102	26	1340	0	921	860	0.119	103	1003	0.2	0.1	4.756	A
C - A1156 South-West	493	493	123	0	0	1386	710	0.695	538	720	13.7	2.4	25.755	D
D - A14 South-East	640	640	160	0	0	1286	892	0.718	820	535	47.9	2.9	90.538	F
E - Unnamed Road North-East	24	24	6	0	0	1797	501	0.048	24	49	0.1	0.1	7.555	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1265	1265	316	0	1122	259	2317	0.546	1268	492	2.1	1.2	3.442	A
B - A14 North-West	1204	86	21	1122	0	665	1027	0.084	86	832	0.1	0.1	3.829	A
C - A1156 South-West	413	413	103	0	0	1077	931	0.444	420	539	2.4	0.8	7.131	A
D - A14 South-East	536	536	134	0	0	1072	1040	0.516	544	435	2.9	1.1	7.361	A
E - Unnamed Road North-East	20	20	5	0	0	1487	625	0.032	20	40	0.1	0.0	5.951	A

2034 Operational Forecast, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	2.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	39	75.10
B - A14 North-West	235	128.00
C - A1156 South-West	954	80.70
D - A14 South-East	867	131.50
E - Unnamed Road North-East	1068	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Forecast	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	904	100.000
B - A14 North-West		ONE HOUR	✓	591	100.000
C - A1156 South-West		ONE HOUR	✓	38	100.000
D - A14 South-East		ONE HOUR	✓	240	100.000
E - Unnamed Road North-East		ONE HOUR	✓	30	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	622	77	204	1
	B - A14 North-West	569	8	3	0	11
	C - A1156 South-West	30	7	0	0	1
	D - A14 South-East	158	0	71	0	12
	E - Unnamed Road North-East	10	19	0	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	6	5	9	0
	B - A14 North-West	11	88	0	0	11
	C - A1156 South-West	0	0	0	0	100
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	6	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.40	2.46	0.7	A	829	1244
B - A14 North-West	0.02	3.43	0.0	A	441	30
C - A1156 South-West	0.04	3.62	0.0	A	35	53
D - A14 South-East	0.21	3.65	0.3	A	220	331
E - Unnamed Road North-East	0.03	3.84	0.0	A	28	42

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	680	680	170	0	429	26	2475	0.275	679	148	0.0	0.4	2.002	A
B - A14 North-West	362	16	4	429	0	158	1114	0.015	16	493	0.0	0.0	3.278	A
C - A1156 South-West	29	29	7	0	0	622	1298	0.022	29	113	0.0	0.0	2.836	A
D - A14 South-East	181	181	45	0	0	555	1503	0.120	180	154	0.0	0.1	2.720	A
E - Unnamed Road North-East	23	23	6	0	0	686	1194	0.019	23	19	0.0	0.0	3.073	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	812	812	203	0	512	32	2468	0.329	812	177	0.4	0.5	2.174	A
B - A14 North-West	432	20	5	512	0	189	1097	0.018	20	590	0.0	0.0	3.342	A
C - A1156 South-West	34	34	9	0	0	744	1188	0.029	34	135	0.0	0.0	3.119	A
D - A14 South-East	216	216	54	0	0	664	1396	0.155	216	184	0.1	0.2	3.049	A
E - Unnamed Road North-East	27	27	7	0	0	821	1100	0.025	27	23	0.0	0.0	3.355	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	995	995	249	0	627	39	2468	0.405	994	217	0.5	0.7	2.458	A
B - A14 North-West	529	24	6	627	0	232	1072	0.022	24	722	0.0	0.0	3.433	A
C - A1156 South-West	42	42	11	0	0	911	1038	0.041	42	166	0.0	0.0	3.614	A
D - A14 South-East	265	265	66	0	0	813	1250	0.212	264	225	0.2	0.3	3.651	A
E - Unnamed Road North-East	33	33	8	0	0	1005	971	0.034	33	28	0.0	0.0	3.838	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	995	995	249	0	627	39	2458	0.405	995	217	0.7	0.7	2.460	A
B - A14 North-West	529	24	6	627	0	232	1072	0.022	24	723	0.0	0.0	3.434	A
C - A1156 South-West	42	42	11	0	0	912	1037	0.041	42	166	0.0	0.0	3.616	A
D - A14 South-East	265	265	66	0	0	814	1250	0.212	265	225	0.3	0.3	3.653	A
E - Unnamed Road North-East	33	33	8	0	0	1006	971	0.034	33	28	0.0	0.0	3.840	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	812	812	203	0	512	32	2468	0.329	813	178	0.7	0.5	2.176	A
B - A14 North-West	432	20	5	512	0	190	1096	0.018	20	590	0.0	0.0	3.343	A
C - A1156 South-West	34	34	9	0	0	746	1187	0.029	34	136	0.0	0.0	3.125	A
D - A14 South-East	216	216	54	0	0	665	1395	0.155	216	184	0.3	0.2	3.056	A
E - Unnamed Road North-East	27	27	7	0	0	822	1099	0.025	27	23	0.0	0.0	3.360	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	680	680	170	0	429	27	2475	0.275	681	149	0.5	0.4	2.007	A
B - A14 North-West	362	16	4	429	0	159	1114	0.015	16	494	0.0	0.0	3.279	A
C - A1156 South-West	29	29	7	0	0	624	1296	0.022	29	113	0.0	0.0	2.840	A
D - A14 South-East	181	181	45	0	0	557	1501	0.120	181	154	0.2	0.1	2.728	A
E - Unnamed Road North-East	23	23	6	0	0	688	1192	0.019	23	19	0.0	0.0	3.077	A

2034 Operational Forecast, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	19.99	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	174	75.10
B - A14 North-West	673	128.00
C - A1156 South-West	1781	80.70
D - A14 South-East	1754	131.50
E - Unnamed Road North-East	2057	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Forecast	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1570	100.000
B - A14 North-West		ONE HOUR	✓	1339	100.000
C - A1156 South-West		ONE HOUR	✓	301	100.000
D - A14 South-East		ONE HOUR	✓	563	100.000
E - Unnamed Road North-East		ONE HOUR	✓	52	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1100	191	276	4
	B - A14 North-West	1244	2	60	0	33
	C - A1156 South-West	162	52	0	81	6
	D - A14 South-East	338	3	206	0	16
	E - Unnamed Road North-East	2	45	4	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	9	33
	B - A14 North-West	9	100	5	0	19
	C - A1156 South-West	2	12	0	4	100
	D - A14 South-East	4	33	2	0	0
	E - Unnamed Road North-East	0	14	33	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	7.15	3.4	A	1441	2161
B - A14 North-West	0.11	4.15	0.1	A	1201	130
C - A1156 South-West	0.74	30.64	2.7	D	276	414
D - A14 South-East	0.99	91.93	15.7	F	516	774
E - Unnamed Road North-East	0.14	10.60	0.2	B	48	72

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1182	1182	296	0	936	148	2312	0.511	1178	376	0.0	1.0	3.163	A
B - A14 North-West	985	71	18	936	0	452	1100	0.065	71	901	0.0	0.1	3.498	A
C - A1156 South-West	226	226	57	0	0	1129	815	0.278	225	345	0.0	0.4	6.084	A
D - A14 South-East	424	424	106	0	0	1053	1015	0.417	421	268	0.0	0.7	6.023	A
E - Unnamed Road North-East	39	39	10	0	0	1282	693	0.057	39	44	0.0	0.1	5.505	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1412	1412	353	0	1118	177	2278	0.620	1409	449	1.0	1.6	4.133	A
B - A14 North-West	1177	85	21	1118	0	541	1043	0.082	85	1078	0.1	0.1	3.757	A
C - A1156 South-West	270	270	68	0	0	1350	657	0.412	269	413	0.4	0.7	9.258	A
D - A14 South-East	506	506	126	0	0	1260	851	0.595	503	321	0.7	1.4	10.267	B
E - Unnamed Road North-East	47	47	12	0	0	1534	568	0.082	47	52	0.1	0.1	6.898	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1729	1729	432	0	1370	214	2278	0.774	1722	526	1.6	3.3	6.936	A
B - A14 North-West	1441	104	26	1370	0	636	981	0.106	104	1316	0.1	0.1	4.103	A
C - A1156 South-West	331	331	83	0	0	1628	457	0.724	324	492	0.7	2.4	25.889	D
D - A14 South-East	619	619	155	0	0	1540	629	0.985	581	391	1.4	11.0	54.466	F
E - Unnamed Road North-East	57	57	14	0	0	1873	401	0.143	57	63	0.1	0.2	10.461	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1729	1729	432	0	1370	216	2232	0.775	1729	541	3.3	3.4	7.146	A
B - A14 North-West	1441	104	26	1370	0	653	971	0.107	104	1322	0.1	0.1	4.155	A
C - A1156 South-West	331	331	83	0	0	1646	445	0.744	330	500	2.4	2.7	30.645	D
D - A14 South-East	619	619	155	0	0	1545	624	0.992	601	393	11.0	15.7	91.925	F
E - Unnamed Road North-East	57	57	14	0	0	1882	397	0.144	57	63	0.2	0.2	10.602	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1412	1412	353	0	1118	181	2273	0.621	1418	490	3.4	1.7	4.247	A
B - A14 North-West	1177	85	21	1118	0	586	1014	0.084	85	1087	0.1	0.1	3.875	A
C - A1156 South-West	270	270	68	0	0	1395	625	0.432	278	436	2.7	0.8	10.574	B
D - A14 South-East	506	506	126	0	0	1268	844	0.599	562	325	15.7	1.5	15.396	C
E - Unnamed Road North-East	47	47	12	0	0	1546	563	0.083	47	54	0.2	0.1	6.988	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1182	1182	296	0	936	149	2310	0.512	1185	381	1.7	1.1	3.206	A
B - A14 North-West	985	71	18	936	0	459	1096	0.065	71	907	0.1	0.1	3.515	A
C - A1156 South-West	226	226	57	0	0	1137	809	0.280	228	348	0.8	0.4	6.213	A
D - A14 South-East	424	424	106	0	0	1059	1010	0.419	427	270	1.5	0.7	6.205	A
E - Unnamed Road North-East	39	39	10	0	0	1290	689	0.057	39	44	0.1	0.1	5.541	A

2034 Operational Forecast, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	208.63	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	163	75.10
B - A14 North-West	957	128.00
C - A1156 South-West	2034	80.70
D - A14 South-East	2301	131.50
E - Unnamed Road North-East	2637	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D33	2034 Operational Forecast	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1952	100.000
B - A14 North-West		FLAT	✓	1645	100.000
C - A1156 South-West		FLAT	✓	493	100.000
D - A14 South-East		FLAT	✓	647	100.000
E - Unnamed Road North-East		FLAT	✓	91	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	1222	359	368	4
	B - A14 North-West	1515	6	113	0	11
	C - A1156 South-West	261	74	0	156	2
	D - A14 South-East	359	0	272	0	16
	E - Unnamed Road North-East	10	56	21	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	5	8	0
	B - A14 North-West	8	67	0	0	0
	C - A1156 South-West	7	5	0	0	0
	D - A14 South-East	7	0	2	0	8
	E - Unnamed Road North-East	0	26	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	16.59	8.8	C	1952	2928
B - A14 North-West	0.13	4.29	0.2	A	1721	195
C - A1156 South-West	0.98	144.12	18.9	F	493	740
D - A14 South-East	1.28	1411.20	214.0	F	647	970
E - Unnamed Road North-East	0.32	18.26	0.5	C	91	136

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1952	1952	488	0	1515	290	2177	0.897	1922	534	0.0	7.5	12.897	B
B - A14 North-West	1721	130	32	1515	0	695	983	0.132	129	1333	0.0	0.2	4.213	A
C - A1156 South-West	493	493	123	0	0	1567	518	0.953	461	699	0.0	8.1	49.215	E
D - A14 South-East	647	647	162	0	0	1759	521	1.241	507	512	0.0	35.0	138.749	F
E - Unnamed Road North-East	91	91	23	0	0	2183	303	0.299	89	29	0.0	0.4	16.681	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1952	1952	488	0	1515	296	2170	0.900	1950	542	7.5	8.2	15.897	C
B - A14 North-West	1721	130	32	1515	0	708	974	0.133	130	1354	0.2	0.2	4.262	A
C - A1156 South-West	493	493	123	0	0	1584	506	0.975	479	704	8.1	11.8	89.141	F
D - A14 South-East	647	647	162	0	0	1784	505	1.281	504	523	35.0	70.7	391.762	F
E - Unnamed Road North-East	91	91	23	0	0	2216	290	0.313	91	29	0.4	0.4	18.040	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1952	1952	488	0	1515	297	2169	0.900	1951	545	8.2	8.5	16.268	C
B - A14 North-West	1721	130	32	1515	0	712	972	0.134	130	1356	0.2	0.2	4.275	A
C - A1156 South-West	493	493	123	0	0	1585	506	0.976	484	704	11.8	14.2	109.203	F
D - A14 South-East	647	647	162	0	0	1785	504	1.283	504	525	70.7	106.5	644.882	F
E - Unnamed Road North-East	91	91	23	0	0	2219	289	0.314	91	29	0.4	0.5	18.168	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1952	1952	488	0	1515	298	2168	0.901	1952	546	8.5	8.6	16.431	C
B - A14 North-West	1721	130	32	1515	0	714	971	0.134	130	1357	0.2	0.2	4.281	A
C - A1156 South-West	493	493	123	0	0	1585	506	0.976	486	704	14.2	16.1	123.489	F
D - A14 South-East	647	647	162	0	0	1785	504	1.284	504	526	106.5	142.3	899.791	F
E - Unnamed Road North-East	91	91	23	0	0	2220	288	0.315	91	29	0.5	0.5	18.215	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1952	1952	488	0	1515	299	2167	0.901	1952	547	8.6	8.7	16.524	C
B - A14 North-West	1721	130	32	1515	0	715	970	0.134	130	1357	0.2	0.2	4.285	A
C - A1156 South-West	493	493	123	0	0	1585	505	0.976	487	704	16.1	17.6	134.766	F
D - A14 South-East	647	647	162	0	0	1786	504	1.284	504	526	142.3	178.2	1155.313	F
E - Unnamed Road North-East	91	91	23	0	0	2221	288	0.315	91	29	0.5	0.5	18.238	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1952	1952	488	0	1515	299	2167	0.901	1952	547	8.7	8.8	16.586	C
B - A14 North-West	1721	130	32	1515	0	716	969	0.134	130	1357	0.2	0.2	4.288	A
C - A1156 South-West	493	493	123	0	0	1585	505	0.976	488	704	17.6	18.9	144.115	F
D - A14 South-East	647	647	162	0	0	1786	504	1.285	503	527	178.2	214.0	1411.202	F
E - Unnamed Road North-East	91	91	23	0	0	2222	288	0.315	91	29	0.5	0.5	18.255	C

2034 Operational Forecast, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	43.93	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	137	75.10
B - A14 North-West	1028	128.00
C - A1156 South-West	1786	80.70
D - A14 South-East	2097	131.50
E - Unnamed Road North-East	2479	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Forecast	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1614	100.000
B - A14 North-West		ONE HOUR	✓	1361	100.000
C - A1156 South-West		ONE HOUR	✓	531	100.000
D - A14 South-East		ONE HOUR	✓	694	100.000
E - Unnamed Road North-East		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	902	396	311	4
	B - A14 North-West	1273	4	42	0	41
	C - A1156 South-West	318	79	4	124	5
	D - A14 South-East	398	0	294	0	1
	E - Unnamed Road North-East	6	27	2	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	7	3	4	33
	B - A14 North-West	5	0	5	0	12
	C - A1156 South-West	2	3	0	0	0
	D - A14 South-East	5	0	1	0	0
	E - Unnamed Road North-East	0	14	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	7.54	3.7	A	1481	2221
B - A14 North-West	0.12	4.96	0.1	A	1220	120
C - A1156 South-West	0.92	55.95	8.5	F	487	730
D - A14 South-East	1.12	201.68	47.5	F	636	955
E - Unnamed Road North-East	0.10	9.63	0.1	A	36	54

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1215	1215	304	0	959	166	2338	0.520	1211	541	0.0	1.1	3.181	A
B - A14 North-West	1001	66	16	959	0	641	973	0.068	65	759	0.0	0.1	3.965	A
C - A1156 South-West	399	399	100	0	0	1004	947	0.422	397	553	0.0	0.7	6.506	A
D - A14 South-East	522	522	131	0	0	1039	1031	0.507	518	329	0.0	1.0	13.269	A
E - Unnamed Road North-East	29	29	7	0	0	1338	695	0.042	29	38	0.0	0.0	5.404	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1451	1451	363	0	1145	199	2302	0.630	1448	646	1.1	1.7	4.205	A
B - A14 North-West	1195	79	20	1145	0	766	897	0.088	78	908	0.1	0.1	4.399	A
C - A1156 South-West	477	477	119	0	0	1200	801	0.596	474	661	0.7	1.4	10.921	B
D - A14 South-East	624	624	156	0	0	1243	884	0.705	618	393	1.0	2.3	13.289	B
E - Unnamed Road North-East	35	35	9	0	0	1601	578	0.061	35	46	0.0	0.1	6.630	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1777	1777	444	0	1402	239	2257	0.787	1769	729	1.7	3.6	7.263	A
B - A14 North-West	1464	96	24	1402	0	871	833	0.115	96	1107	0.1	0.1	4.884	A
C - A1156 South-West	584	584	146	0	0	1415	640	0.913	563	770	1.4	6.8	39.082	E
D - A14 South-East	764	764	191	0	0	1518	687	1.112	667	477	2.3	26.4	93.132	F
E - Unnamed Road North-East	43	43	11	0	0	1952	421	0.102	43	56	0.1	0.1	9.503	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1777	1777	444	0	1402	242	2253	0.789	1776	744	3.6	3.7	7.535	A
B - A14 North-West	1464	96	24	1402	0	890	821	0.117	96	1113	0.1	0.1	4.963	A
C - A1156 South-West	584	584	146	0	0	1426	632	0.924	577	777	6.8	8.5	55.953	F
D - A14 South-East	764	764	191	0	0	1524	682	1.119	679	481	26.4	47.5	201.677	F
E - Unnamed Road North-East	43	43	11	0	0	1963	417	0.103	43	56	0.1	0.1	9.632	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1451	1451	363	0	1145	206	2294	0.632	1458	769	3.7	1.7	4.347	A
B - A14 North-West	1195	79	20	1145	0	897	816	0.096	79	918	0.1	0.1	4.879	A
C - A1156 South-West	477	477	119	0	0	1312	719	0.664	503	742	8.5	2.1	18.424	C
D - A14 South-East	624	624	156	0	0	1251	878	0.710	802	402	47.5	2.8	89.196	F
E - Unnamed Road North-East	35	35	9	0	0	1618	570	0.061	35	47	0.1	0.1	6.727	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1215	1215	304	0	959	169	2336	0.520	1218	552	1.7	1.1	3.229	A
B - A14 North-West	1001	66	16	959	0	655	965	0.068	66	764	0.1	0.1	4.004	A
C - A1156 South-West	399	399	100	0	0	1014	939	0.425	405	560	2.1	0.7	6.800	A
D - A14 South-East	522	522	131	0	0	1045	1027	0.509	529	332	2.8	1.1	7.339	A
E - Unnamed Road North-East	29	29	7	0	0	1347	691	0.042	29	39	0.1	0.0	5.443	A

2034 Operational Forecast, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	D - A14 South-East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J21	A12/ A14 / A1156 Seven Hills Interchange	Large Roundabout		A, E, D, C, B	46.26	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

[same as above]

Roundabout Geometry

[same as above]

Large Roundabout Data

Arm	Circulating flow (PCU/hr)	Entry-to-exit separation (m)
A - A12 North	164	75.10
B - A14 North-West	909	128.00
C - A1156 South-West	1886	80.70
D - A14 South-East	2154	131.50
E - Unnamed Road North-East	2582	37.20

Bypass

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Forecast	5-6 PM	ONE HOUR	16.45	18.15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1679	100.000
B - A14 North-West		ONE HOUR	✓	1606	100.000
C - A1156 South-West		ONE HOUR	✓	550	100.000
D - A14 South-East		ONE HOUR	✓	712	100.000
E - Unnamed Road North-East		ONE HOUR	✓	27	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	1	1001	299	376	1
	B - A14 North-West	1492	3	89	0	22
	C - A1156 South-West	246	77	0	198	29
	D - A14 South-East	398	0	315	0	0
	E - Unnamed Road North-East	0	19	6	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - A12 North	B - A14 North-West	C - A1156 South-West	D - A14 South-East	E - Unnamed Road North-East
From	A - A12 North	0	2	2	0	0
	B - A14 North-West	3	33	0	0	11
	C - A1156 South-West	0	0	0	0	0
	D - A14 South-East	3	0	1	0	0
	E - Unnamed Road North-East	0	19	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	10.34	5.1	B	1541	2311
B - A14 North-West	0.14	4.80	0.2	A	1468	157
C - A1156 South-West	0.98	84.92	13.9	F	504	757
D - A14 South-East	1.12	196.71	47.6	F	653	980
E - Unnamed Road North-East	0.08	11.05	0.1	B	25	37

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1264	1264	316	0	1123	255	2321	0.545	1259	481	0.0	1.2	3.375	A
B - A14 North-West	1204	86	21	1123	0	651	1035	0.083	85	825	0.0	0.1	3.792	A
C - A1156 South-West	414	414	103	0	0	1065	939	0.441	411	531	0.0	0.8	6.776	A
D - A14 South-East	536	536	134	0	0	1064	1045	0.513	532	431	0.0	1.0	6.961	A
E - Unnamed Road North-East	20	20	5	0	0	1475	630	0.032	20	39	0.0	0.0	5.899	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1509	1509	377	0	1341	305	2265	0.666	1506	575	1.2	2.0	4.724	A
B - A14 North-West	1438	102	26	1341	0	777	953	0.107	102	987	0.1	0.1	4.232	A
C - A1156 South-West	494	494	124	0	0	1274	790	0.625	491	635	0.8	1.6	11.887	B
D - A14 South-East	640	640	160	0	0	1273	901	0.710	635	515	1.0	2.3	13.274	B
E - Unnamed Road North-East	24	24	6	0	0	1764	514	0.047	24	47	0.0	0.0	7.347	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1849	1849	462	0	1341	361	2201	0.840	1837	641	2.0	4.9	9.579	A
B - A14 North-West	1761	125	31	1643	0	878	888	0.141	125	1200	0.1	0.2	4.716	A
C - A1156 South-West	605	605	151	0	0	1505	625	0.968	573	736	1.6	9.8	51.210	F
D - A14 South-East	784	784	196	0	0	1553	708	1.107	688	619	2.3	26.3	90.577	F
E - Unnamed Road North-East	29	29	7	0	0	2142	362	0.081	29	56	0.0	0.1	10.817	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1849	1849	462	0	1643	368	2194	0.843	1848	655	4.9	5.1	10.341	B
B - A14 North-West	1761	125	31	1643	0	897	876	0.143	125	1209	0.2	0.2	4.797	A
C - A1156 South-West	605	605	151	0	0	1518	616	0.982	589	743	9.8	13.9	84.916	F
D - A14 South-East	784	784	196	0	0	1562	702	1.117	699	627	26.3	47.6	196.707	F
E - Unnamed Road North-East	29	29	7	0	0	2159	355	0.083	29	57	0.1	0.1	11.048	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1509	1509	377	0	1341	325	2242	0.673	1522	700	5.1	2.1	5.080	A
B - A14 North-West	1438	102	26	1341	0	923	858	0.119	103	1003	0.2	0.1	4.764	A
C - A1156 South-West	494	494	124	0	0	1386	710	0.696	540	719	13.9	2.4	26.131	D
D - A14 South-East	640	640	160	0	0	1285	893	0.717	819	536	47.6	2.9	89.222	F
E - Unnamed Road North-East	24	24	6	0	0	1797	501	0.048	24	49	0.1	0.1	7.559	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction demand (Veh/hr)	Junction Arrivals (Veh)	Bypass demand (Veh/hr)	Bypass exit flow (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1264	1264	316	0	1123	259	2316	0.546	1268	492	2.1	1.2	3.447	A
B - A14 North-West	1204	86	21	1123	0	666	1025	0.084	86	832	0.1	0.1	3.835	A
C - A1156 South-West	414	414	103	0	0	1077	931	0.445	420	538	2.4	0.8	7.143	A
D - A14 South-East	536	536	134	0	0	1071	1040	0.515	544	436	2.9	1.1	7.353	A
E - Unnamed Road North-East	20	20	5	0	0	1487	625	0.032	20	40	0.1	0.0	5.950	A

Basic Results Summary
Basic Results Summary

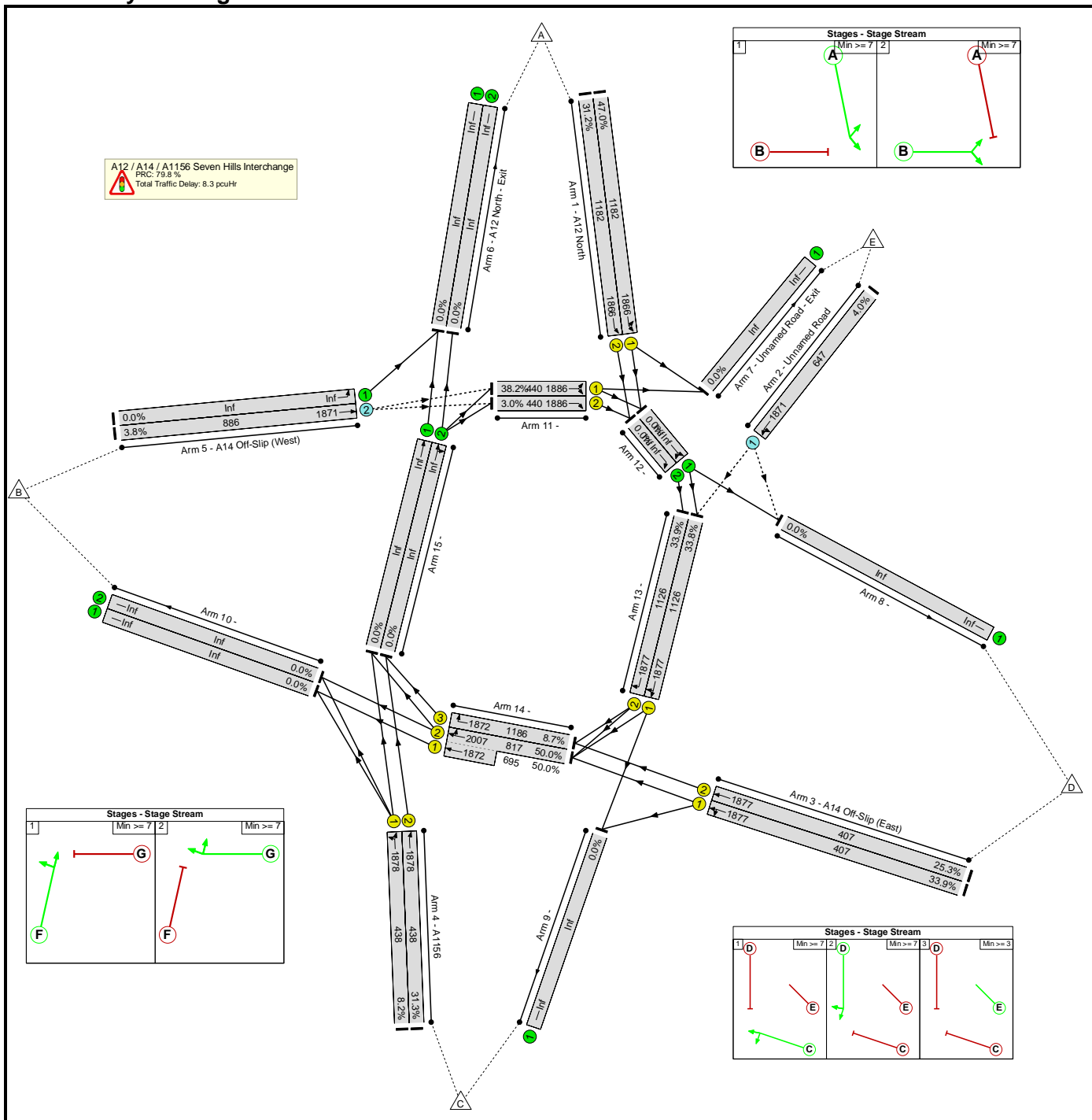
User and Project Details

Project:	Sizewell C
Title:	Junction 21 mitigation measures
Location:	
Site Ref(s):	A12 / A14
Additional detail:	
File name:	2019.10.17 J21_Model_v11 fixed.lsg3x
Author:	Chris Rice
Company:	WSP
Address:	Keble House, Southernhay Gardens, Exeter

Basic Results Summary

Scenario 1: 'BY 06:00-07:00' (FG1: 'BY 06:00-07:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

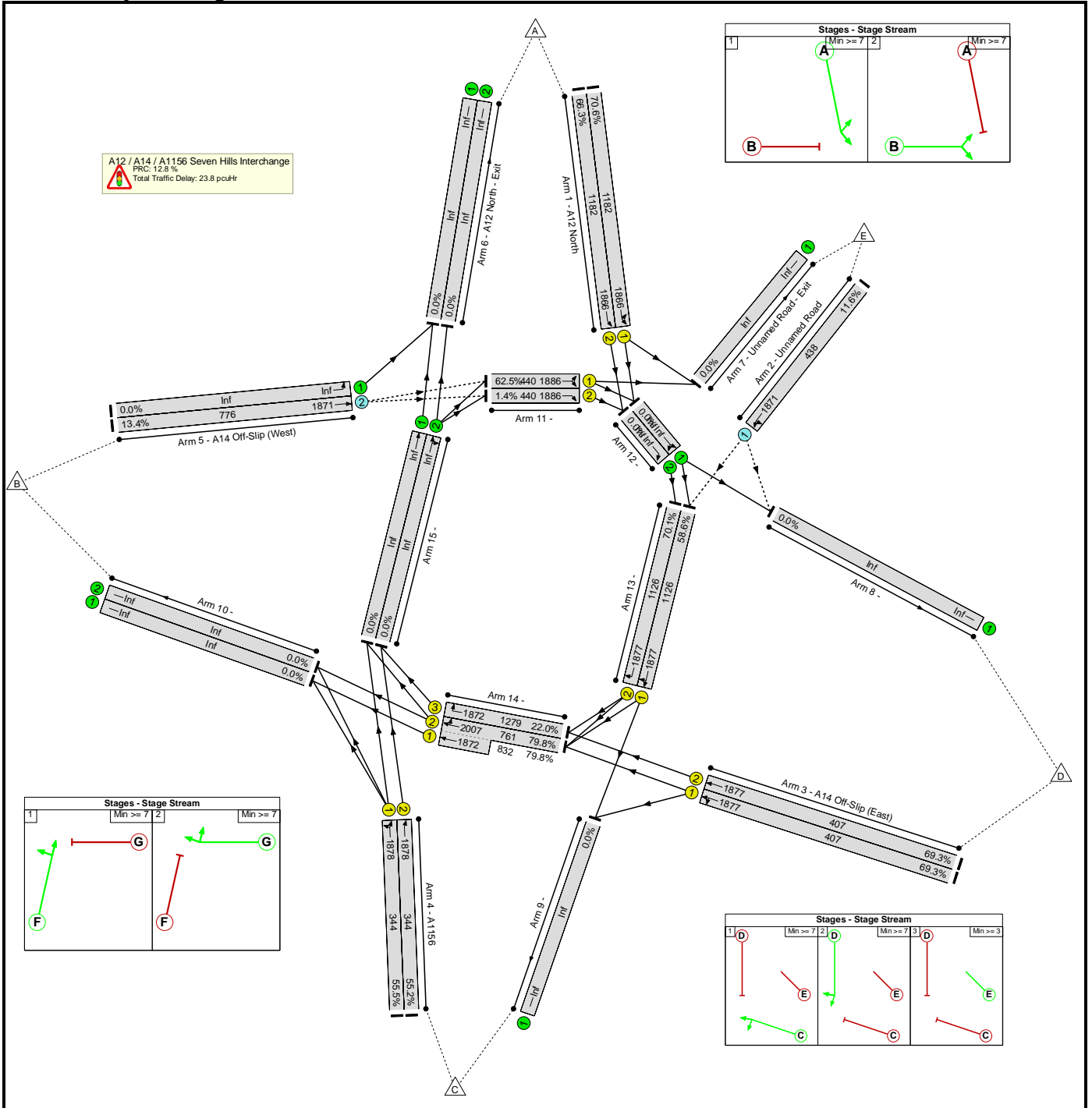
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	50.0%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	50.0%																												
1/1	A12 North Left Ahead	5.2	8.6	47.0%																												
1/2	A12 North Ahead	3.0	7.2	31.2%																												
2/1	Unnamed Road Left Ahead	0.1	3.1	4.0%																												
3/1	A14 Off-Slip (East) Left Ahead	2.2	26.6	33.9%																												
3/2	A14 Off-Slip (East) Ahead	1.6	25.4	25.3%																												
4/1	A1156 Left Ahead	0.5	22.5	8.2%																												
4/2	A1156 Ahead	2.1	25.0	31.3%																												
5/2	A14 Off-Slip (West) Ahead	0.0	2.1	3.8%																												
11/1	Left Right	2.8	17.8	38.2%																												
11/2	Right	0.2	22.2	3.0%																												
13/1	Ahead Right	1.4	5.3	33.8%																												
13/2	Right	1.4	5.2	33.9%																												
14/2+14/1	Ahead Right	6.3	3.8 (4.8:2.7)	50.0 : 50.0%																												
14/3	Right	1.8	14.4	8.7%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>91.3</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>2.99</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>165.2</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>2.86</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>79.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>2.40</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>79.8</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>8.28</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	91.3	Total Delay for Signalled Lanes (pcuHr):	2.99	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	165.2	Total Delay for Signalled Lanes (pcuHr):	2.86	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	79.8	Total Delay for Signalled Lanes (pcuHr):	2.40	Cycle Time (s):	60		PRC Over All Lanes (%)	79.8	Total Delay Over All Lanes(pcuHr):	8.28		
C1	Stream: 1 PRC for Signalled Lanes (%)	91.3	Total Delay for Signalled Lanes (pcuHr):	2.99	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	165.2	Total Delay for Signalled Lanes (pcuHr):	2.86	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	79.8	Total Delay for Signalled Lanes (pcuHr):	2.40	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	79.8	Total Delay Over All Lanes(pcuHr):	8.28																												

Basic Results Summary

Scenario 2: 'BY 07:00-08:00' (FG2: 'BY 07:00-08:00', Plan 1: 'Network Control Plan 1')

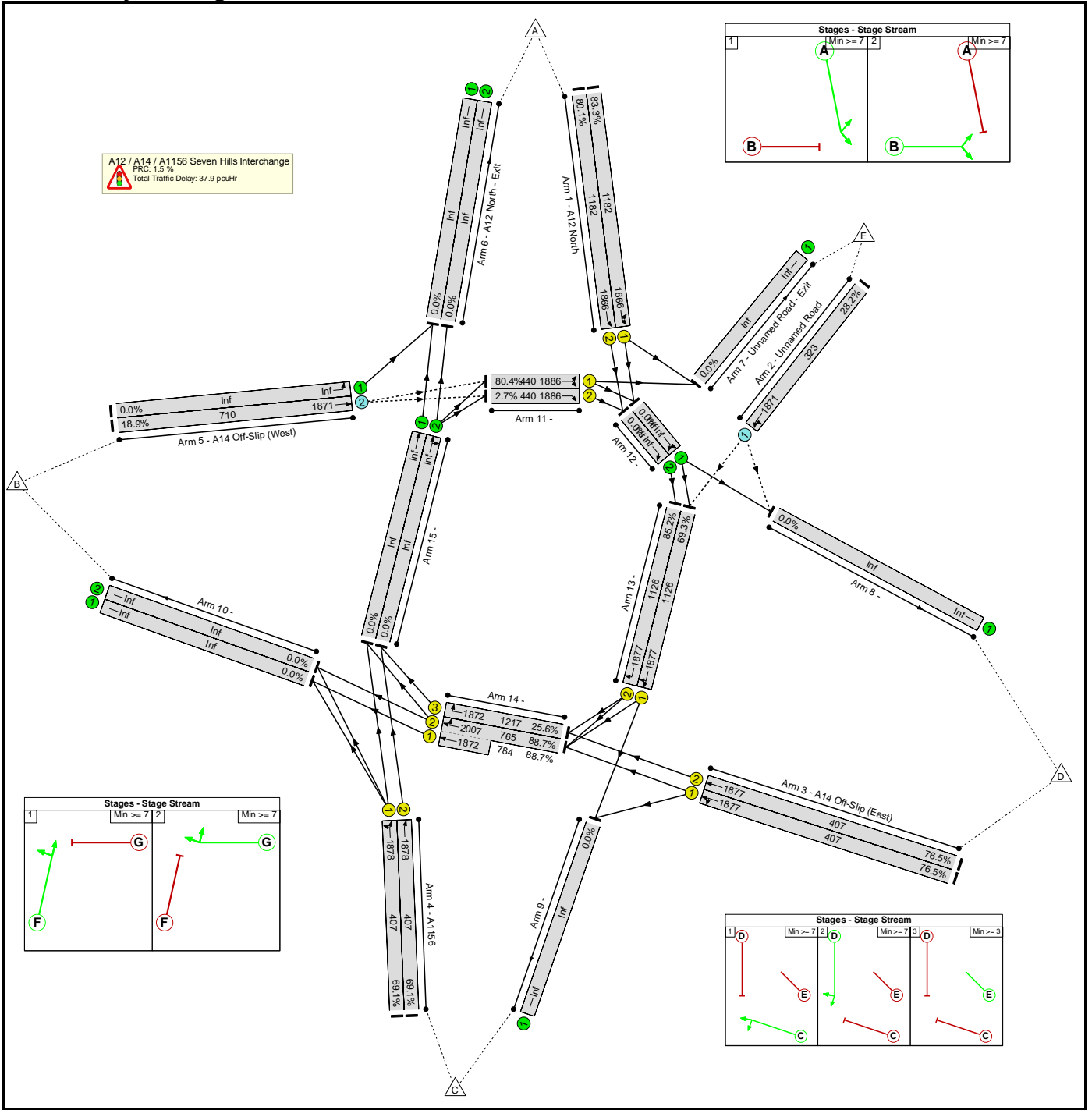
Network Layout Diagram



Basic Results Summary

Scenario 3: 'BY 08:00-09:00' (FG3: 'BY 08:00-09:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

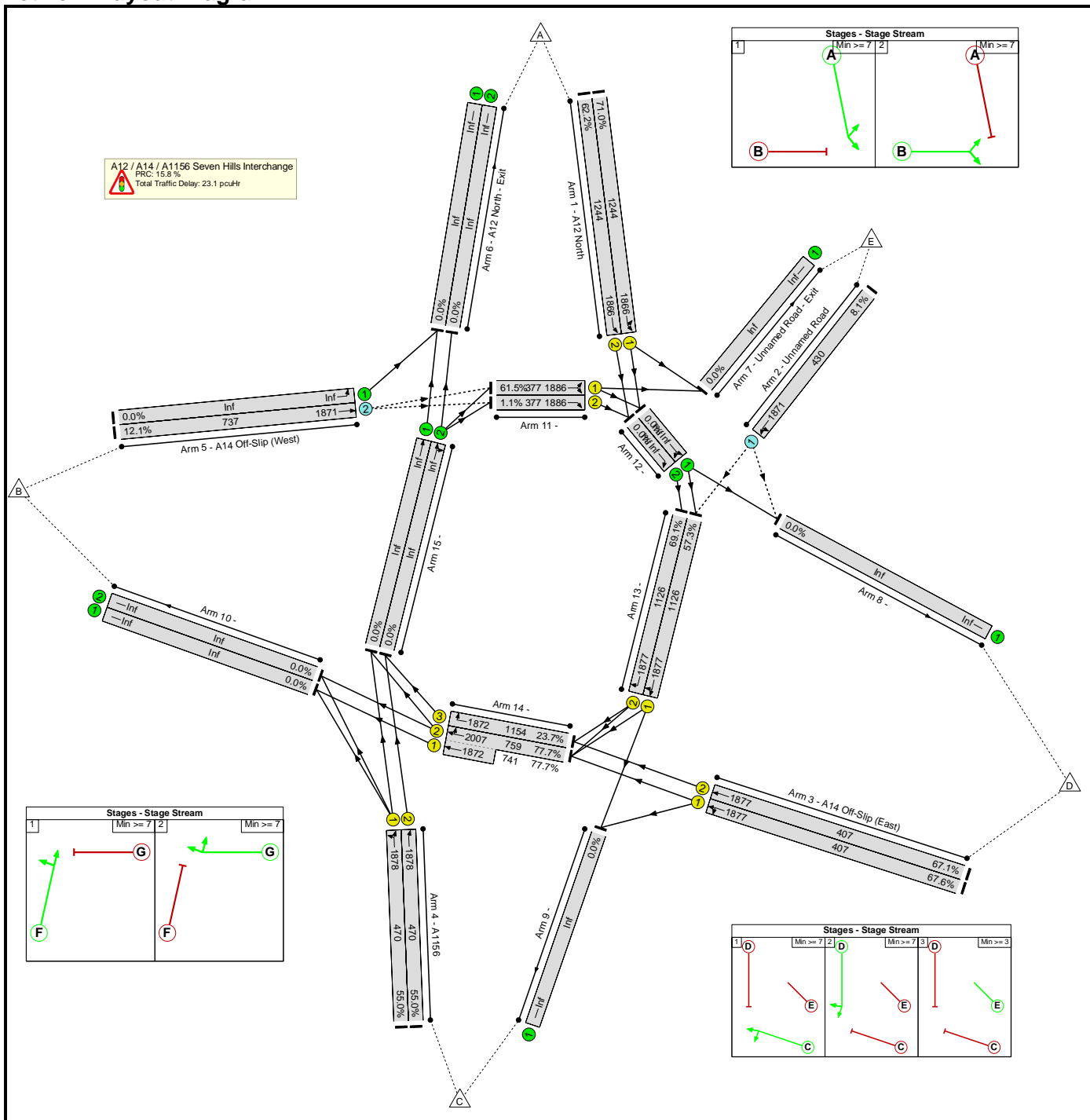
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	88.7%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	88.7%																												
1/1	A12 North Left Ahead	15.0	17.5	83.3%																												
1/2	A12 North Ahead	13.6	15.7	80.1%																												
2/1	Unnamed Road Left Ahead	1.0	14.1	28.2%																												
3/1	A14 Off-Slip (East) Left Ahead	6.4	40.3	76.5%																												
3/2	A14 Off-Slip (East) Ahead	6.4	40.3	76.5%																												
4/1	A1156 Left Ahead	5.4	35.7	69.1%																												
4/2	A1156 Ahead	5.4	35.7	69.1%																												
5/2	A14 Off-Slip (West) Ahead	0.1	3.1	18.9%																												
11/1	Left Right	7.5	33.6	80.4%																												
11/2	Right	0.2	22.2	2.7%																												
13/1	Ahead Right	7.6	10.8	69.3%																												
13/2	Right	7.0	13.1	85.2%																												
14/2+14/1	Ahead Right	27.6	13.6 (14.2:13.0)	88.7 : 88.7%																												
14/3	Right	5.4	18.4	25.6%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>8.0</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>12.29</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>5.7</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>12.78</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>1.5</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>12.36</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>1.5</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>37.91</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	8.0	Total Delay for Signalled Lanes (pcuHr):	12.29	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	5.7	Total Delay for Signalled Lanes (pcuHr):	12.78	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	1.5	Total Delay for Signalled Lanes (pcuHr):	12.36	Cycle Time (s):	60		PRC Over All Lanes (%)	1.5	Total Delay Over All Lanes(pcuHr):	37.91		
C1	Stream: 1 PRC for Signalled Lanes (%)	8.0	Total Delay for Signalled Lanes (pcuHr):	12.29	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	5.7	Total Delay for Signalled Lanes (pcuHr):	12.78	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	1.5	Total Delay for Signalled Lanes (pcuHr):	12.36	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	1.5	Total Delay Over All Lanes(pcuHr):	37.91																												

Basic Results Summary

Scenario 4: 'BY 15:00-16:00' (FG4: 'BY 15:00-16:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

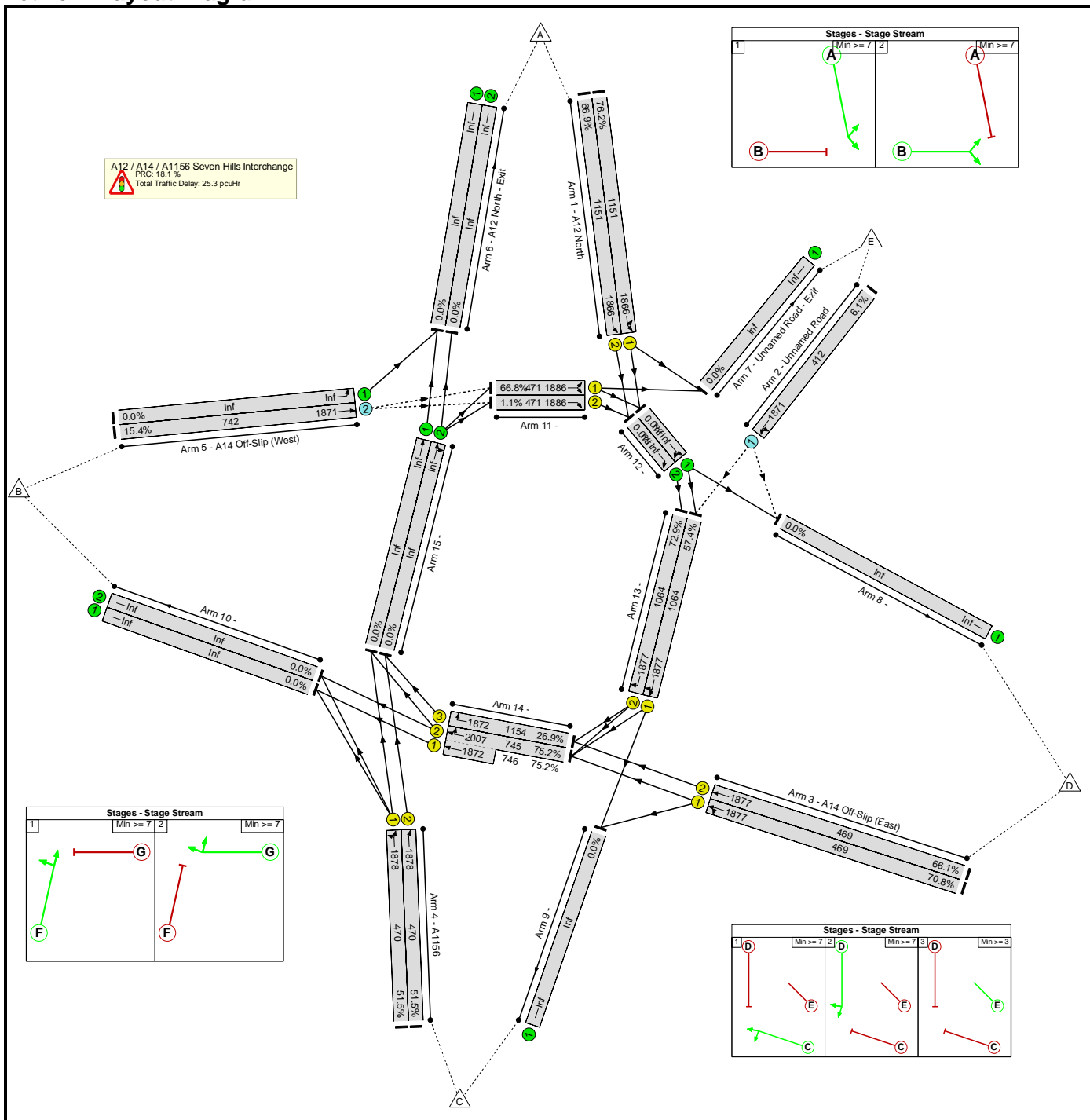
Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	-	77.7%
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	77.7%
1/1	A12 North Left Ahead	10.3	11.3	71.0%
1/2	A12 North Ahead	8.1	9.5	62.2%
2/1	Unnamed Road Left Ahead	0.2	6.8	8.1%
3/1	A14 Off-Slip (East) Left Ahead	5.2	35.0	67.6%
3/2	A14 Off-Slip (East) Ahead	5.1	34.8	67.1%
4/1	A1156 Left Ahead	4.3	28.0	55.0%
4/2	A1156 Ahead	4.3	28.0	55.0%
5/2	A14 Off-Slip (West) Ahead	0.1	2.8	12.1%
11/1	Left Right	4.5	28.8	61.5%
11/2	Right	0.1	24.4	1.1%
13/1	Ahead Right	3.9	8.0	57.3%
13/2	Right	4.0	9.0	69.1%
14/2+14/1	Ahead Right	20.0	7.2 (8.1:6.4)	77.7 : 77.7%
14/3	Right	4.7	16.4	23.7%

C1	Stream: 1	PRC for Signalled Lanes (%)	26.8	Total Delay for Signalled Lanes (pcuHr):	6.70	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%)	30.3	Total Delay for Signalled Lanes (pcuHr):	8.71	Cycle Time (s):	60
C1	Stream: 3	PRC for Signalled Lanes (%)	15.8	Total Delay for Signalled Lanes (pcuHr):	7.61	Cycle Time (s):	60
		PRC Over All Lanes (%)	15.8	Total Delay Over All Lanes(pcuHr):	23.15		

Basic Results Summary

Scenario 5: 'BY 17:00-18:00' (FG5: 'BY 17:00-18:00', Plan 1: 'Network Control Plan 1')

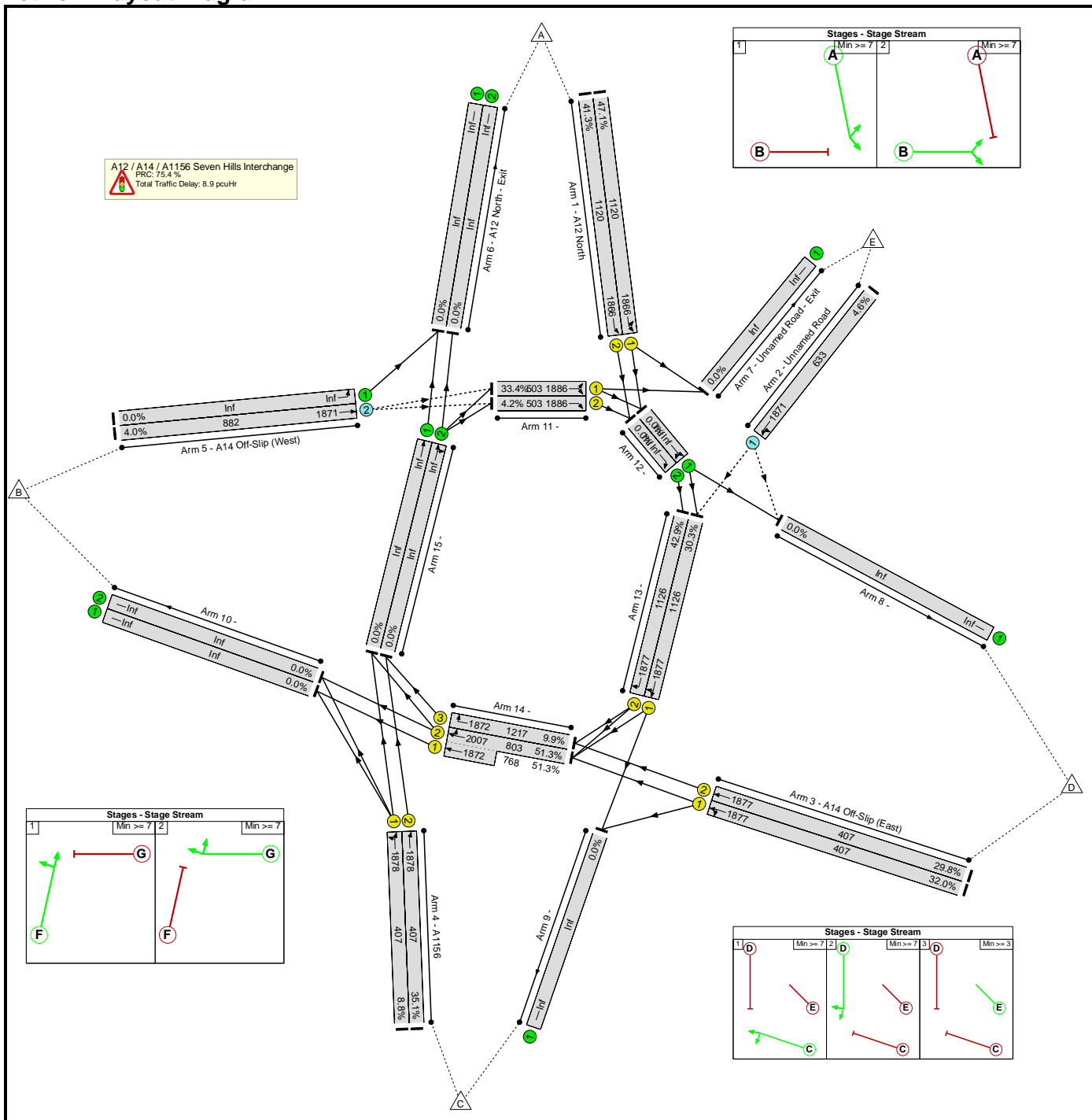
Network Layout Diagram



Basic Results Summary

Scenario 6: '23RC 06:00-07:00' (FG6: '23RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

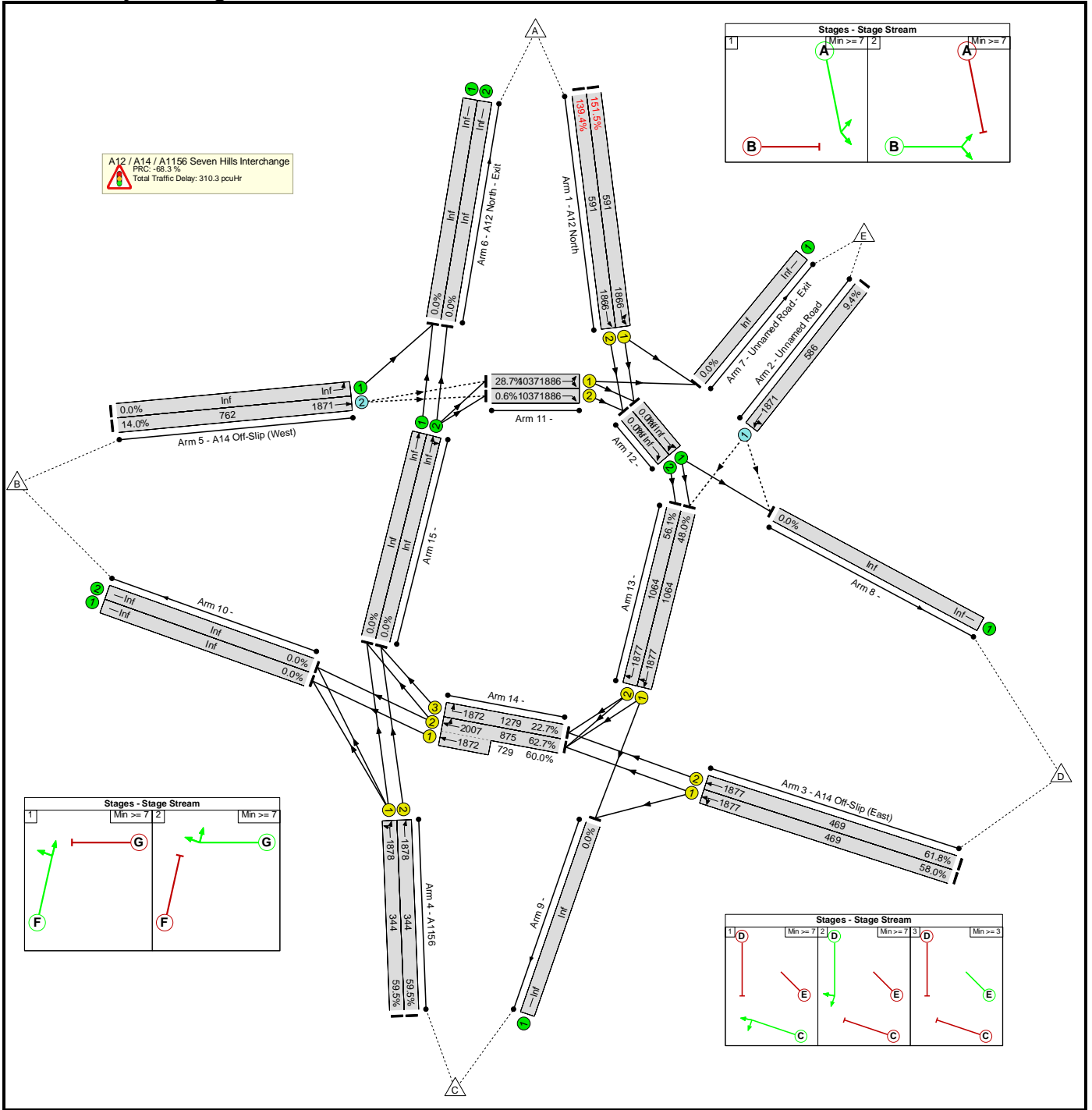
Network Layout Diagram



Basic Results Summary

Scenario 7: '23RC 07:00-08:00' (FG7: '23RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

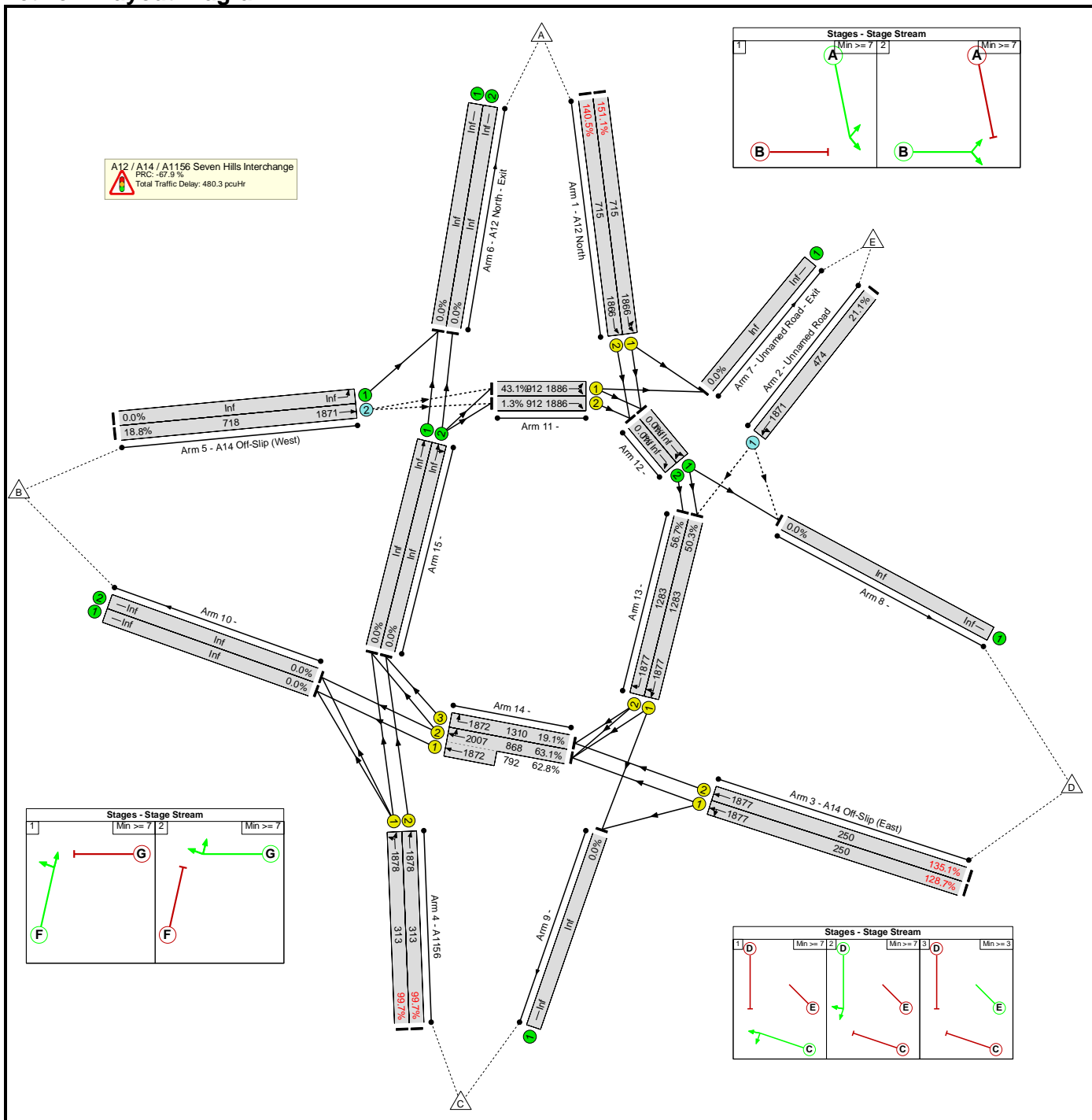
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	151.5%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	151.5%																												
1/1	A12 North Left Ahead	173.5	673.3	151.5%																												
1/2	A12 North Ahead	135.9	566.7	139.4%																												
2/1	Unnamed Road Left Ahead	0.3	6.1	9.4%																												
3/1	A14 Off-Slip (East) Left Ahead	4.6	28.8	58.0%																												
3/2	A14 Off-Slip (East) Ahead	5.1	29.9	61.8%																												
4/1	A1156 Left Ahead	3.9	35.2	59.5%																												
4/2	A1156 Ahead	3.9	35.2	59.5%																												
5/2	A14 Off-Slip (West) Ahead	0.1	2.7	14.0%																												
11/1	Left Right	1.1	5.3	28.7%																												
11/2	Right	0.0	8.0	0.6%																												
13/1	Ahead Right	1.8	5.1	48.0%																												
13/2	Right	0.9	4.1	56.1%																												
14/2+14/1	Ahead Right	17.5	4.8 (5.4:4.1)	62.7 : 60.0%																												
14/3	Right	5.0	15.1	22.7%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>-68.3</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>297.56</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>45.6</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>5.99</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>43.6</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>6.56</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>-68.3</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>310.28</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	-68.3	Total Delay for Signalled Lanes (pcuHr):	297.56	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	45.6	Total Delay for Signalled Lanes (pcuHr):	5.99	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	43.6	Total Delay for Signalled Lanes (pcuHr):	6.56	Cycle Time (s):	60		PRC Over All Lanes (%)	-68.3	Total Delay Over All Lanes(pcuHr):	310.28		
C1	Stream: 1 PRC for Signalled Lanes (%)	-68.3	Total Delay for Signalled Lanes (pcuHr):	297.56	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	45.6	Total Delay for Signalled Lanes (pcuHr):	5.99	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	43.6	Total Delay for Signalled Lanes (pcuHr):	6.56	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	-68.3	Total Delay Over All Lanes(pcuHr):	310.28																												

Basic Results Summary

Scenario 8: '23RC 08:00-09:00' (FG8: '23RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

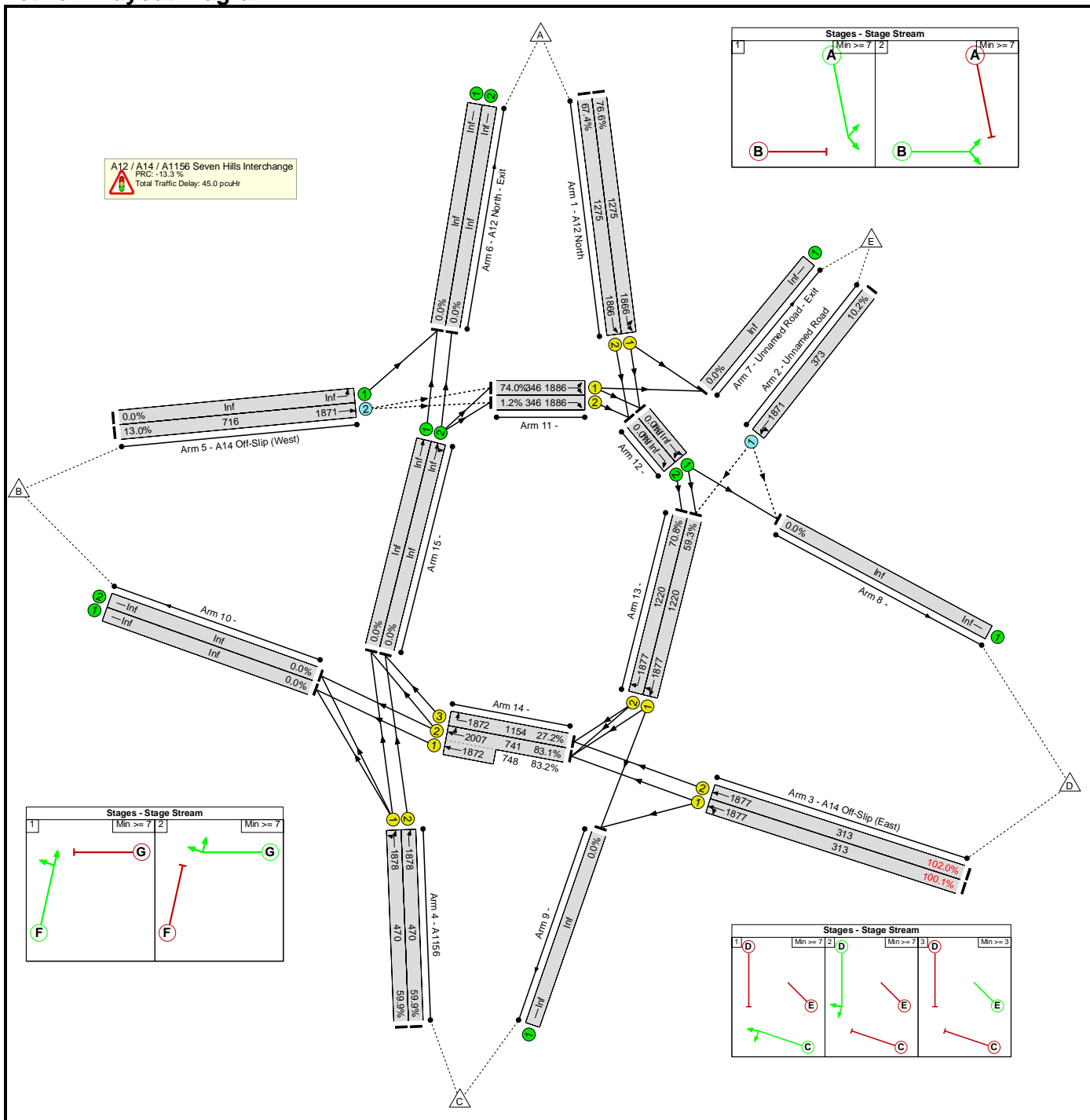
Network Layout Diagram



Basic Results Summary

Scenario 9: '23RC 15:00-16:00' (FG9: '23RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

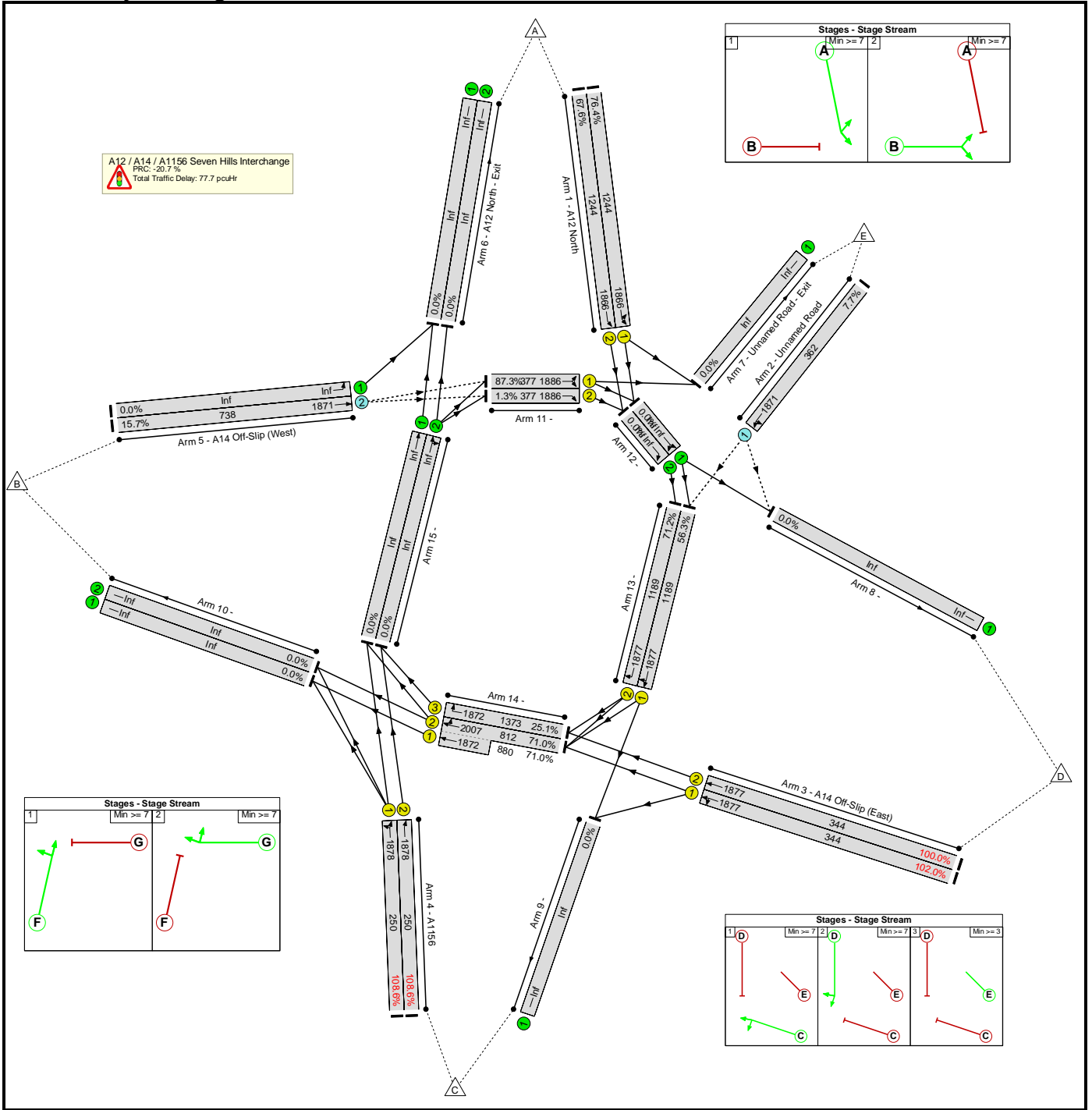
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	102.0%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	102.0%																												
1/1	A12 North Left Ahead	12.2	12.3	76.6%																												
1/2	A12 North Ahead	9.4	9.9	67.4%																												
2/1	Unnamed Road Left Ahead	0.3	8.6	10.2%																												
3/1	A14 Off-Slip (East) Left Ahead	14.1	127.3	100.1%																												
3/2	A14 Off-Slip (East) Ahead	16.0	146.8	102.0%																												
4/1	A1156 Left Ahead	4.8	29.3	59.9%																												
4/2	A1156 Ahead	4.8	29.3	59.9%																												
5/2	A14 Off-Slip (West) Ahead	0.1	2.9	13.0%																												
11/1	Left Right	5.5	36.5	74.0%																												
11/2	Right	0.1	25.7	1.2%																												
13/1	Ahead Right	3.9	7.2	59.3%																												
13/2	Right	4.1	8.3	70.8%																												
14/2+14/1	Ahead Right	16.8	8.6 (9.3:7.9)	83.1 : 83.2%																												
14/3	Right	5.4	16.7	27.2%																												
<table> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>17.5</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>8.32</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>-13.3</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>27.52</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>8.2</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>8.99</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>-13.3</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>45.00</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	17.5	Total Delay for Signalled Lanes (pcuHr):	8.32	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	-13.3	Total Delay for Signalled Lanes (pcuHr):	27.52	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	8.2	Total Delay for Signalled Lanes (pcuHr):	8.99	Cycle Time (s):	60		PRC Over All Lanes (%)	-13.3	Total Delay Over All Lanes(pcuHr):	45.00		
C1	Stream: 1 PRC for Signalled Lanes (%)	17.5	Total Delay for Signalled Lanes (pcuHr):	8.32	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	-13.3	Total Delay for Signalled Lanes (pcuHr):	27.52	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	8.2	Total Delay for Signalled Lanes (pcuHr):	8.99	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	-13.3	Total Delay Over All Lanes(pcuHr):	45.00																												

Basic Results Summary

Scenario 10: '23RC 17:00-18:00' (FG10: '23RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

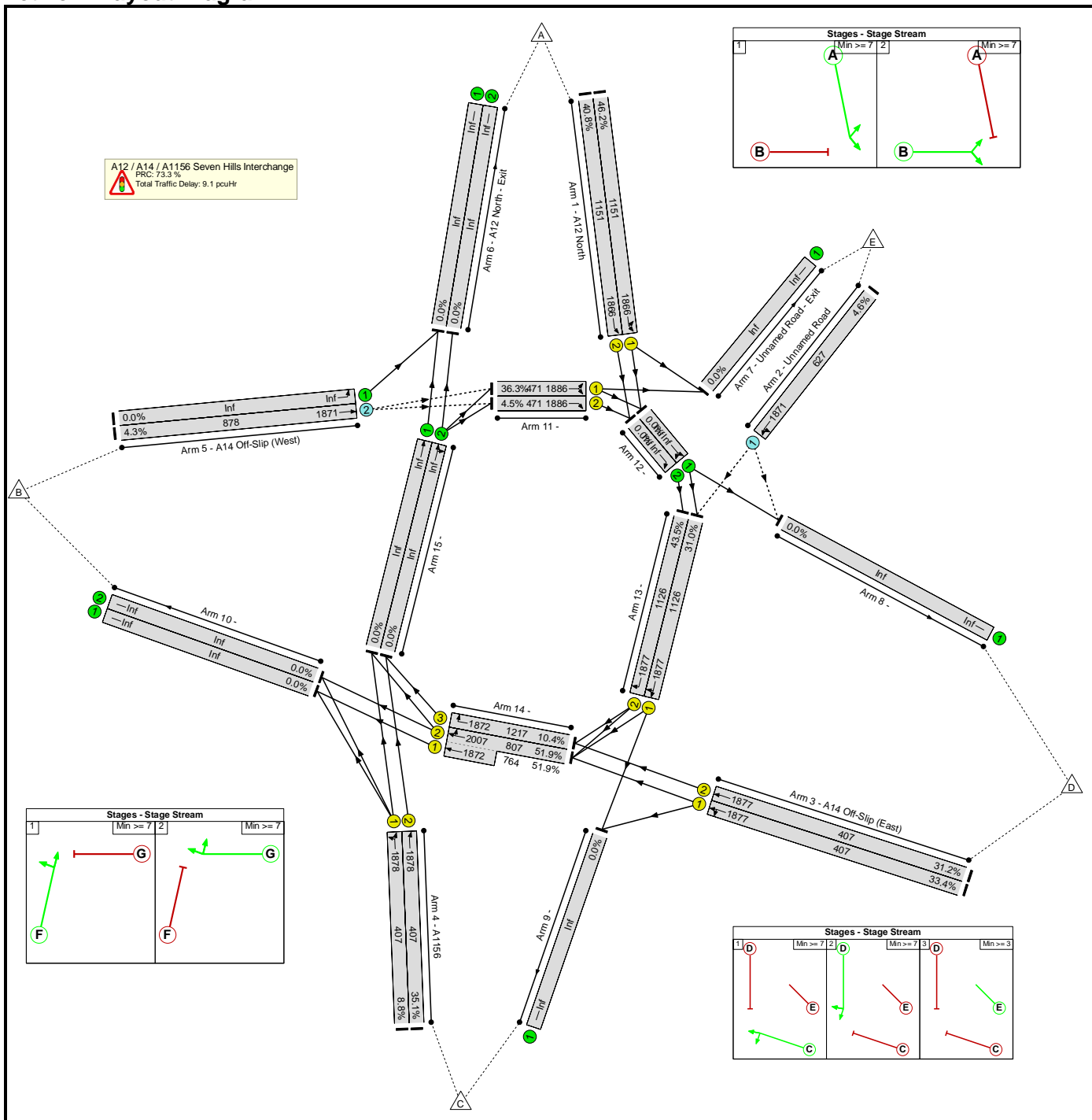
Network Layout Diagram



Basic Results Summary

Scenario 11: '23EY 06:00-07:00' (FG11: '23EY 06:00-07:00', Plan 1: 'Network Control Plan 1')

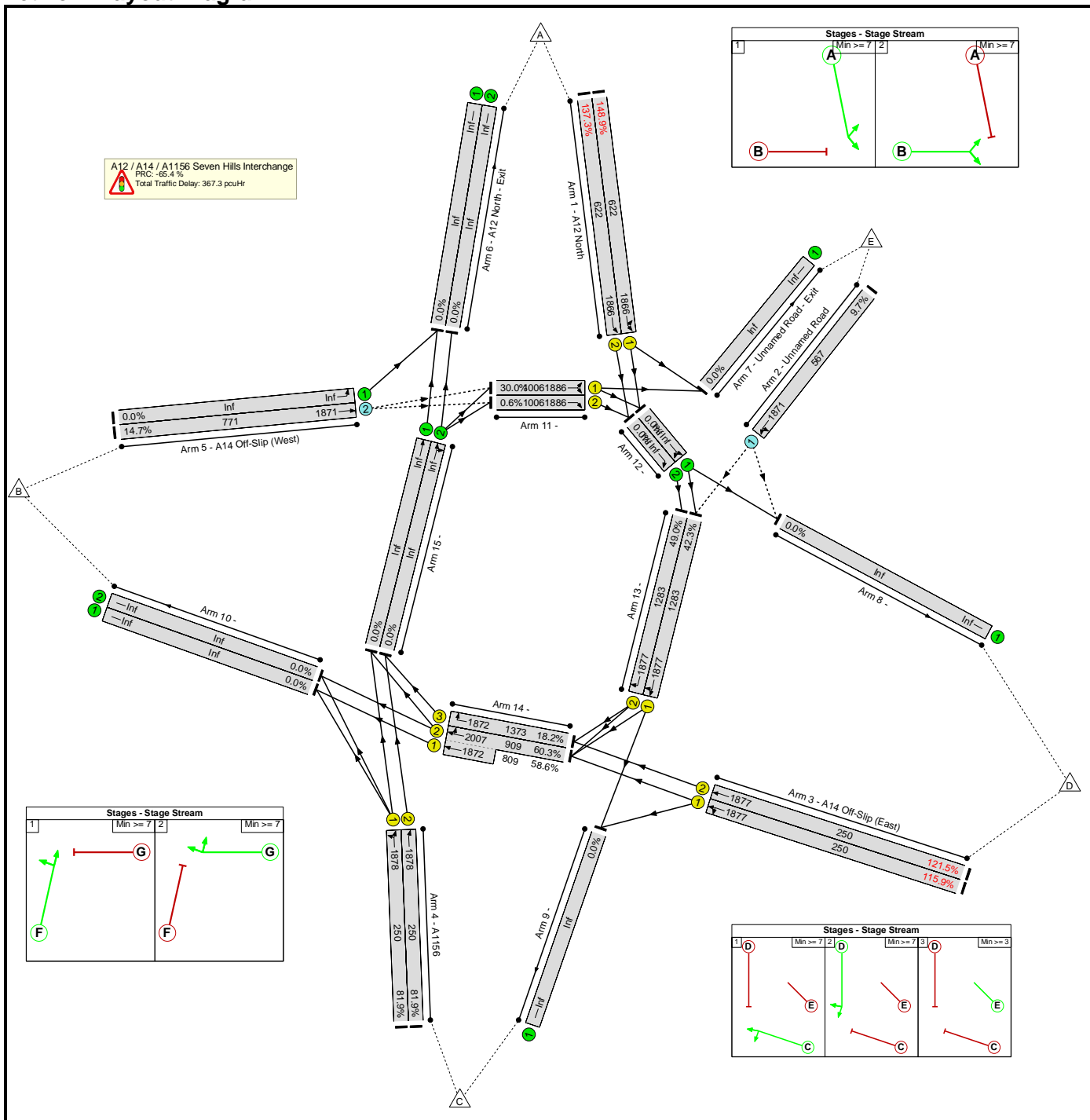
Network Layout Diagram



Basic Results Summary

Scenario 12: '23EY 07:00-08:00' (FG12: '23EY 07:00-08:00', Plan 1: 'Network Control Plan 1')

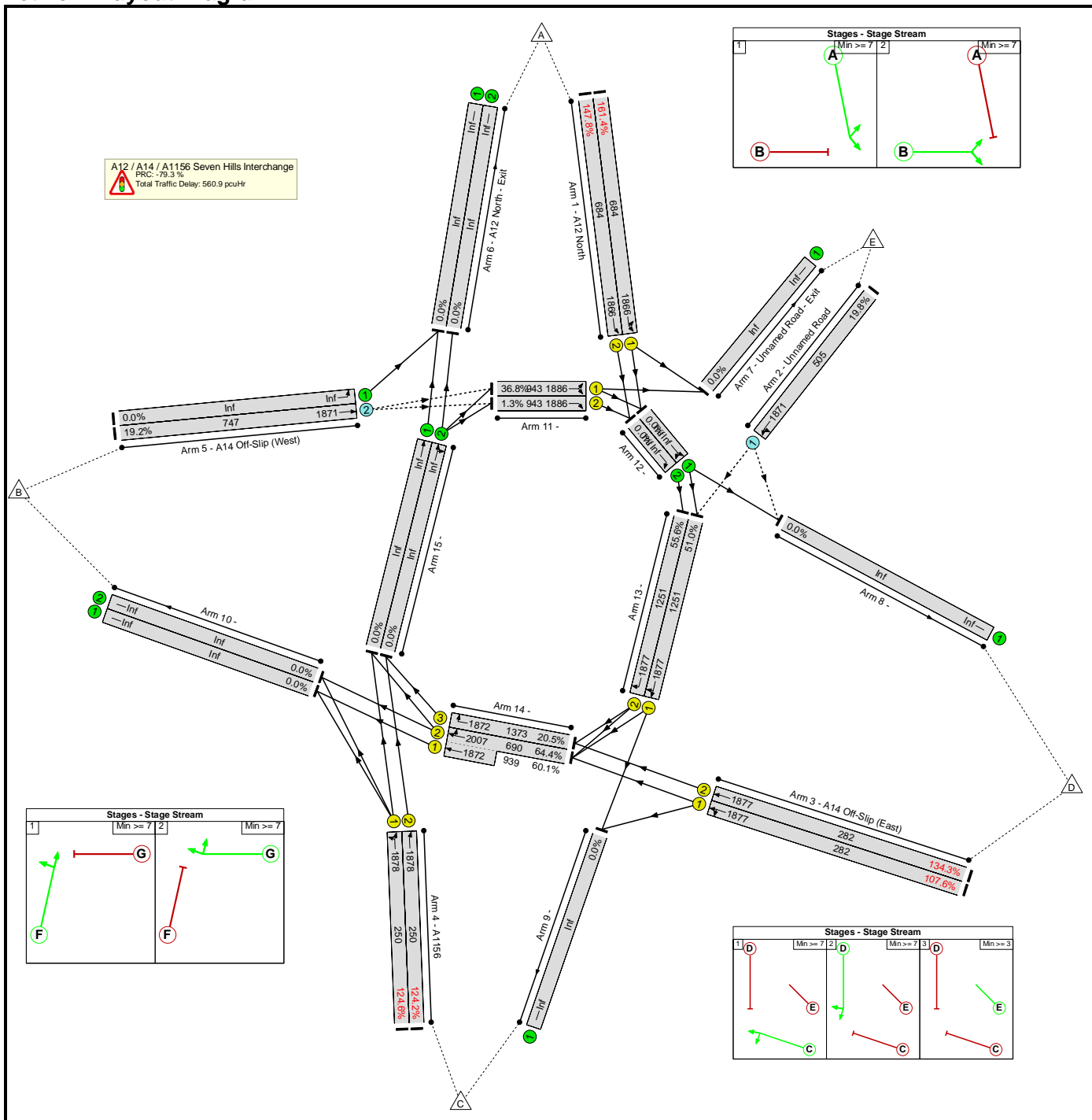
Network Layout Diagram



Basic Results Summary

Scenario 13: '23EY 08:00-09:00' (FG13: '23EY 08:00-09:00', Plan 1: 'Network Control Plan 1')

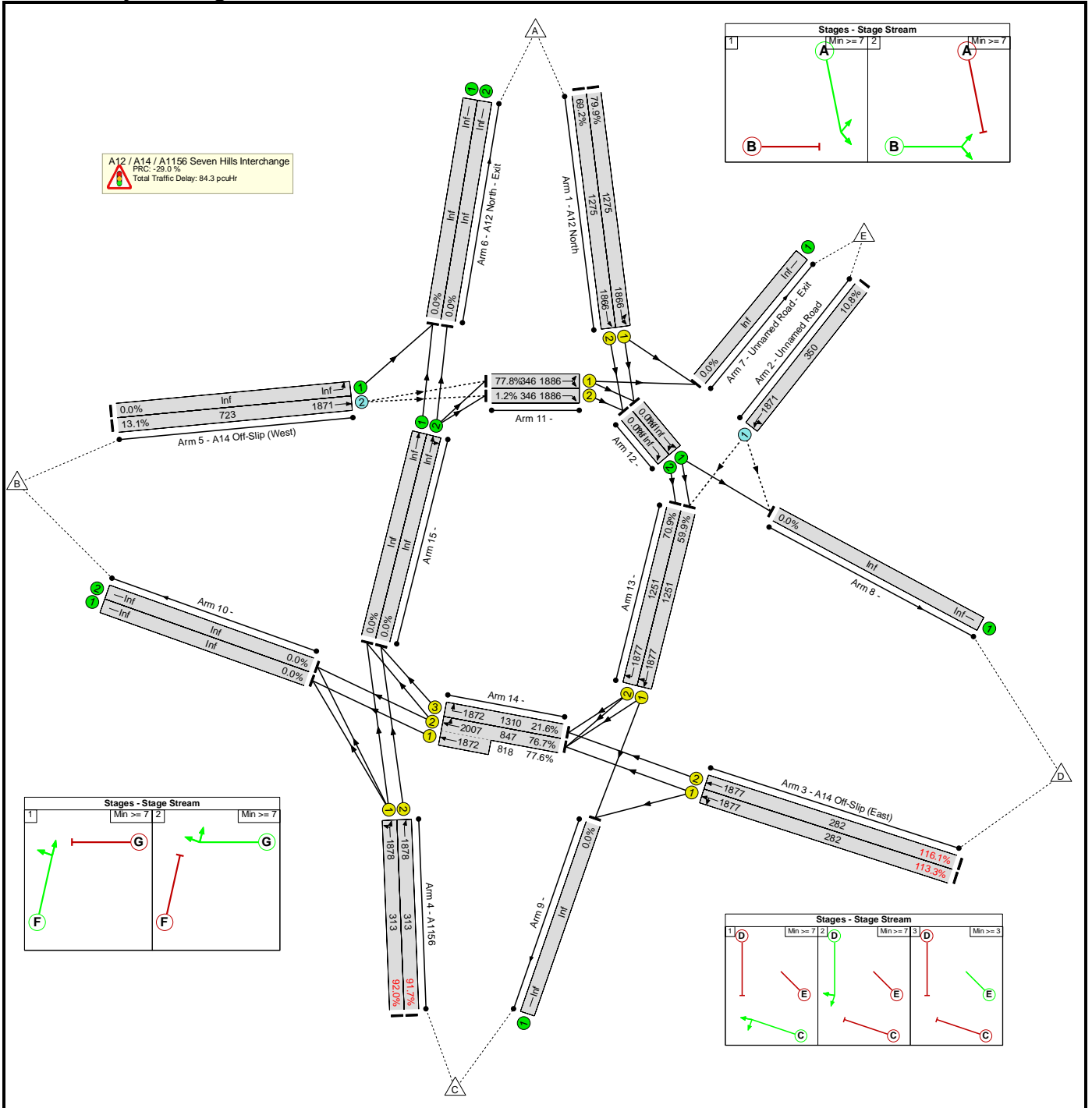
Network Layout Diagram



Basic Results Summary

Scenario 14: '23EY 15:00-16:00' (FG14: '23EY 15:00-16:00', Plan 1: 'Network Control Plan 1')

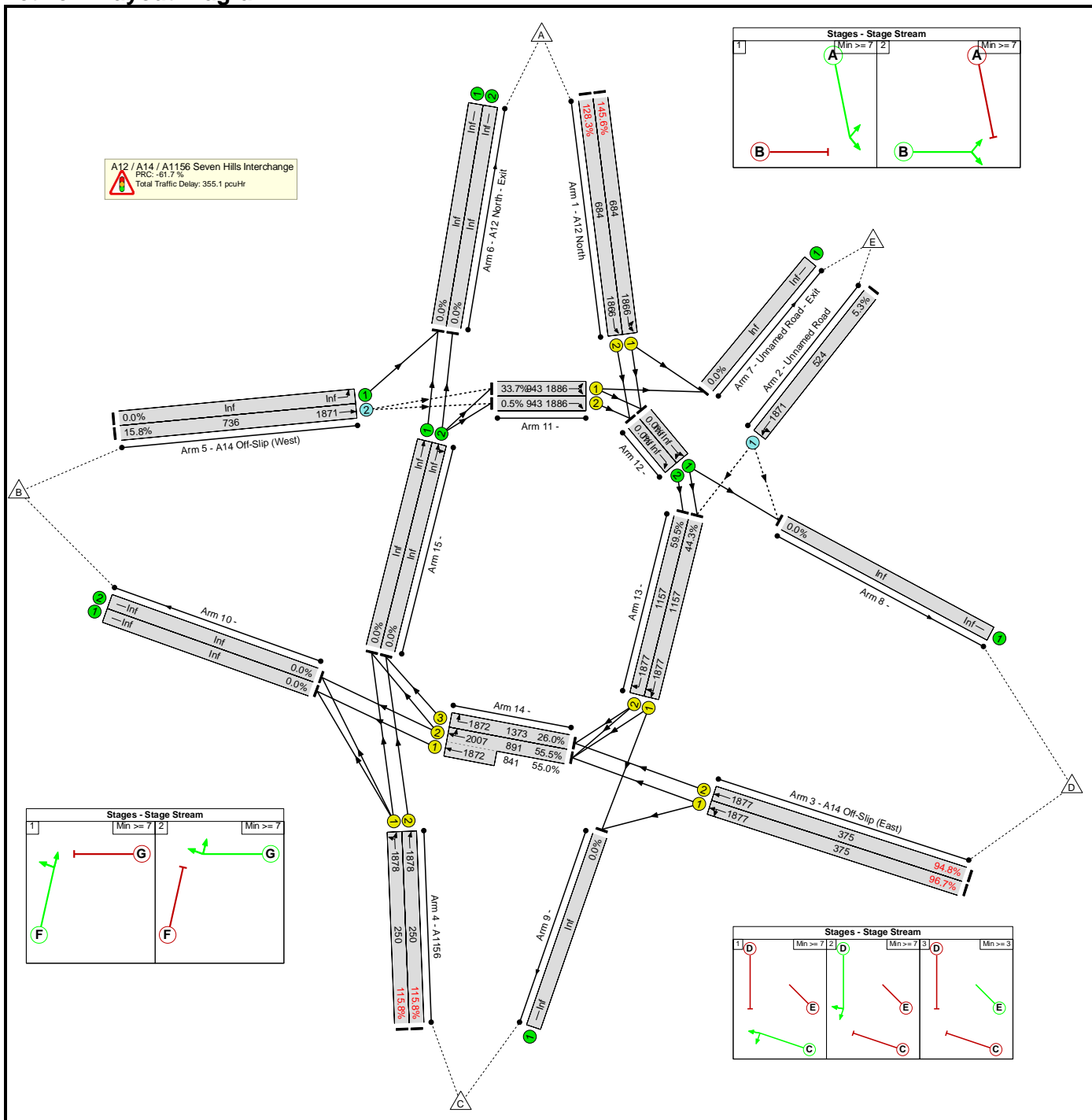
Network Layout Diagram



Basic Results Summary

Scenario 15: '23EY 17:00-18:00' (FG15: '23EY 17:00-18:00', Plan 1: 'Network Control Plan 1')

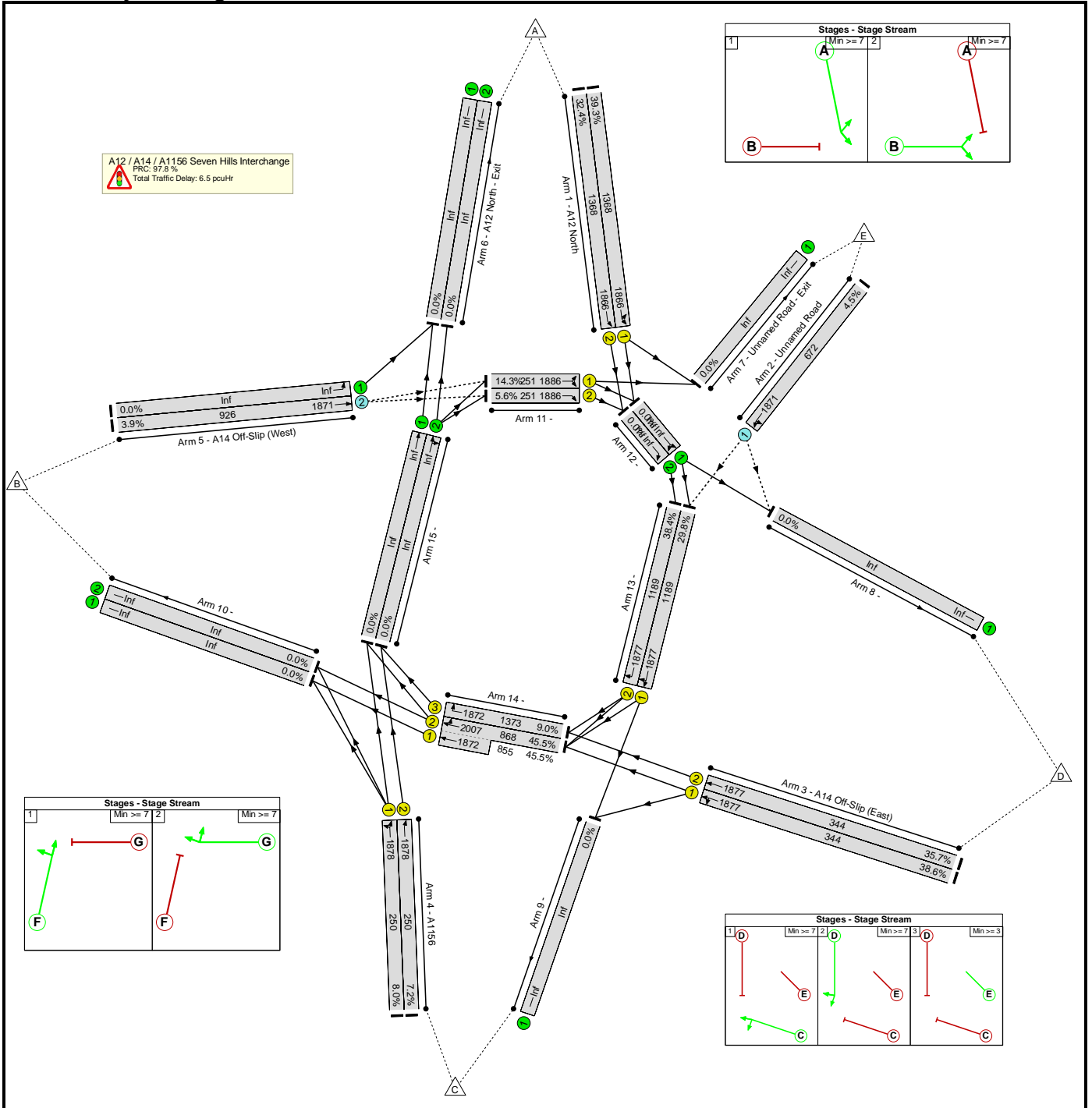
Network Layout Diagram



Basic Results Summary

Scenario 16: '28RC 06:00-07:00' (FG16: '28RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

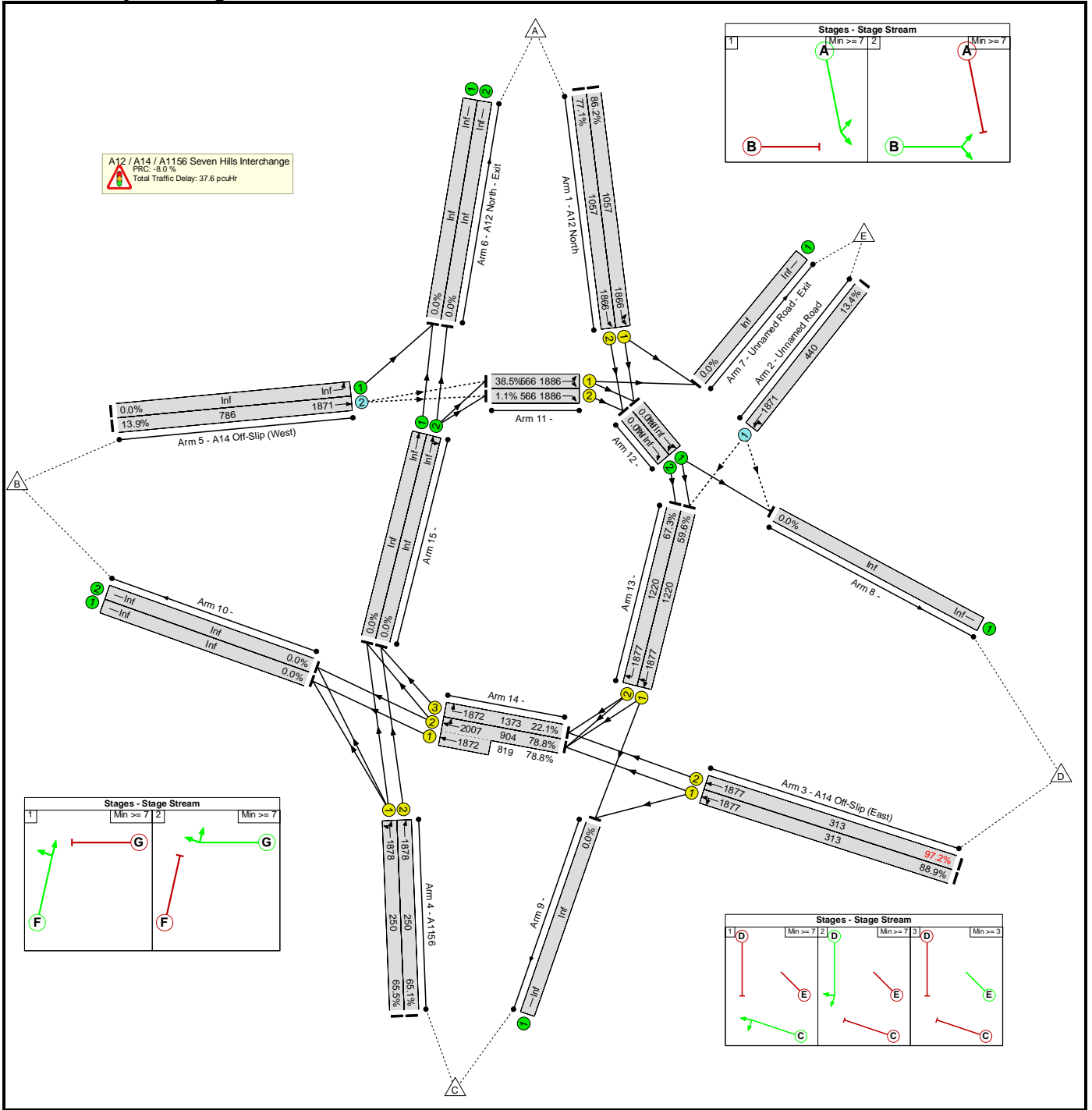
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																																
Network: Junction 21 mitigation measures	-	-	-	45.5%																																
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	45.5%																																
1/1	A12 North Left Ahead	3.6	5.2	39.3%																																
1/2	A12 North Ahead	2.7	4.7	32.4%																																
2/1	Unnamed Road Left Ahead	0.1	2.9	4.5%																																
3/1	A14 Off-Slip (East) Left Ahead	2.2	30.1	38.6%																																
3/2	A14 Off-Slip (East) Ahead	2.1	29.6	35.7%																																
4/1	A1156 Left Ahead	0.3	30.8	8.0%																																
4/2	A1156 Ahead	0.3	30.7	7.2%																																
5/2	A14 Off-Slip (West) Ahead	0.0	2.0	3.9%																																
11/1	Left Right	0.6	25.7	14.3%																																
11/2	Right	0.2	30.5	5.6%																																
13/1	Ahead Right	1.7	5.9	29.8%																																
13/2	Right	2.2	6.2	38.4%																																
14/2+14/1	Ahead Right	8.9	2.7 (3.2:2.3)	45.5 : 45.5%																																
14/3	Right	2.0	8.6	9.0%																																
<table border="0"> <tr> <td>C1</td> <td>Stream: 1</td> <td>PRC for Signalled Lanes (%)</td> <td>128.9</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>1.73</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2</td> <td>PRC for Signalled Lanes (%)</td> <td>132.9</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>3.48</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3</td> <td>PRC for Signalled Lanes (%)</td> <td>97.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>1.22</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td></td> <td>PRC Over All Lanes (%)</td> <td>97.8</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>6.47</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1	PRC for Signalled Lanes (%)	128.9	Total Delay for Signalled Lanes (pcuHr):	1.73	Cycle Time (s):	60	C1	Stream: 2	PRC for Signalled Lanes (%)	132.9	Total Delay for Signalled Lanes (pcuHr):	3.48	Cycle Time (s):	60	C1	Stream: 3	PRC for Signalled Lanes (%)	97.8	Total Delay for Signalled Lanes (pcuHr):	1.22	Cycle Time (s):	60			PRC Over All Lanes (%)	97.8	Total Delay Over All Lanes(pcuHr):	6.47		
C1	Stream: 1	PRC for Signalled Lanes (%)	128.9	Total Delay for Signalled Lanes (pcuHr):	1.73	Cycle Time (s):	60																													
C1	Stream: 2	PRC for Signalled Lanes (%)	132.9	Total Delay for Signalled Lanes (pcuHr):	3.48	Cycle Time (s):	60																													
C1	Stream: 3	PRC for Signalled Lanes (%)	97.8	Total Delay for Signalled Lanes (pcuHr):	1.22	Cycle Time (s):	60																													
		PRC Over All Lanes (%)	97.8	Total Delay Over All Lanes(pcuHr):	6.47																															

Basic Results Summary

Scenario 17: '28RC 07:00-08:00' (FG17: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

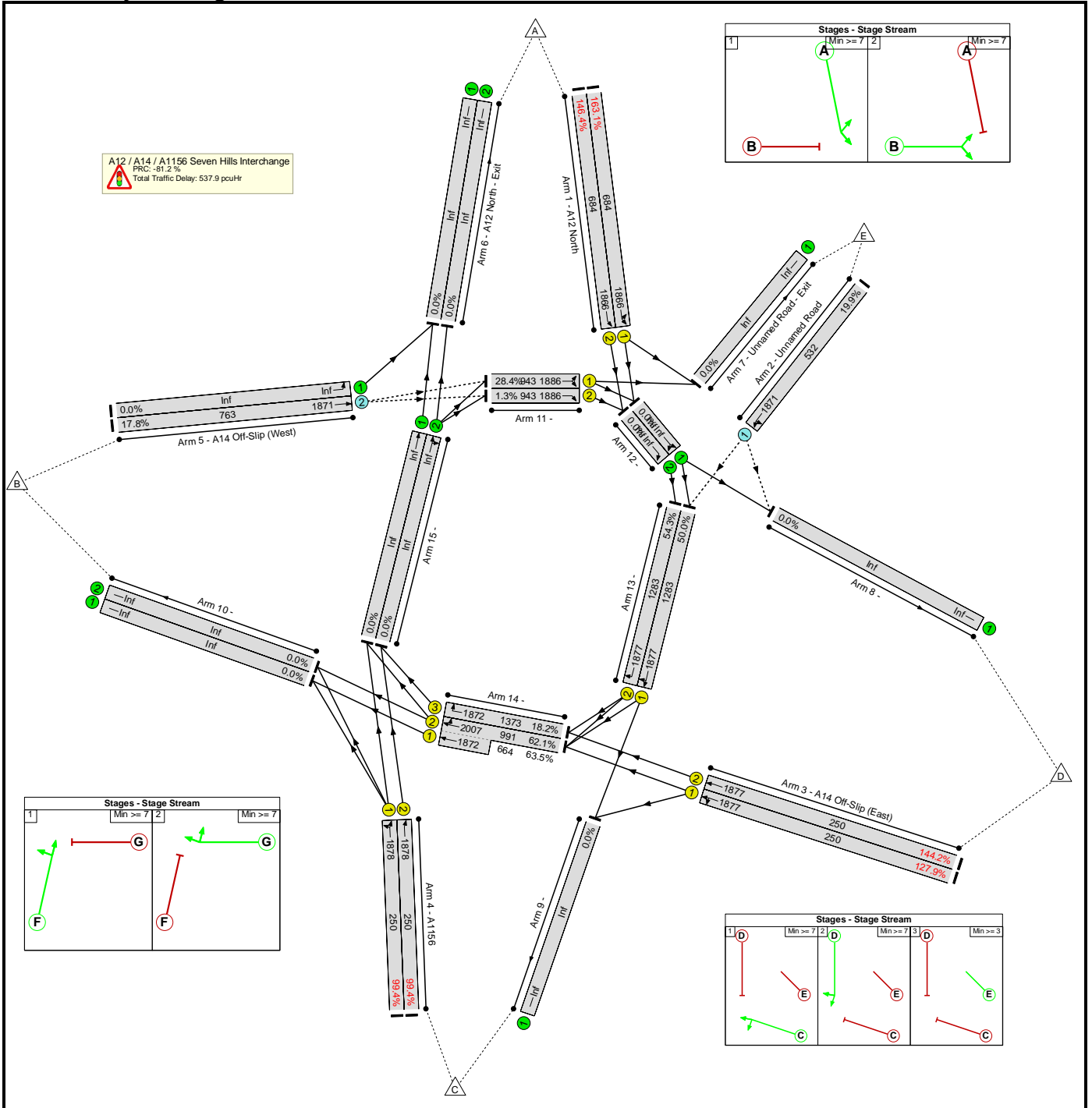
Network Layout Diagram



Basic Results Summary

Scenario 18: '28RC 08:00-09:00' (FG18: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

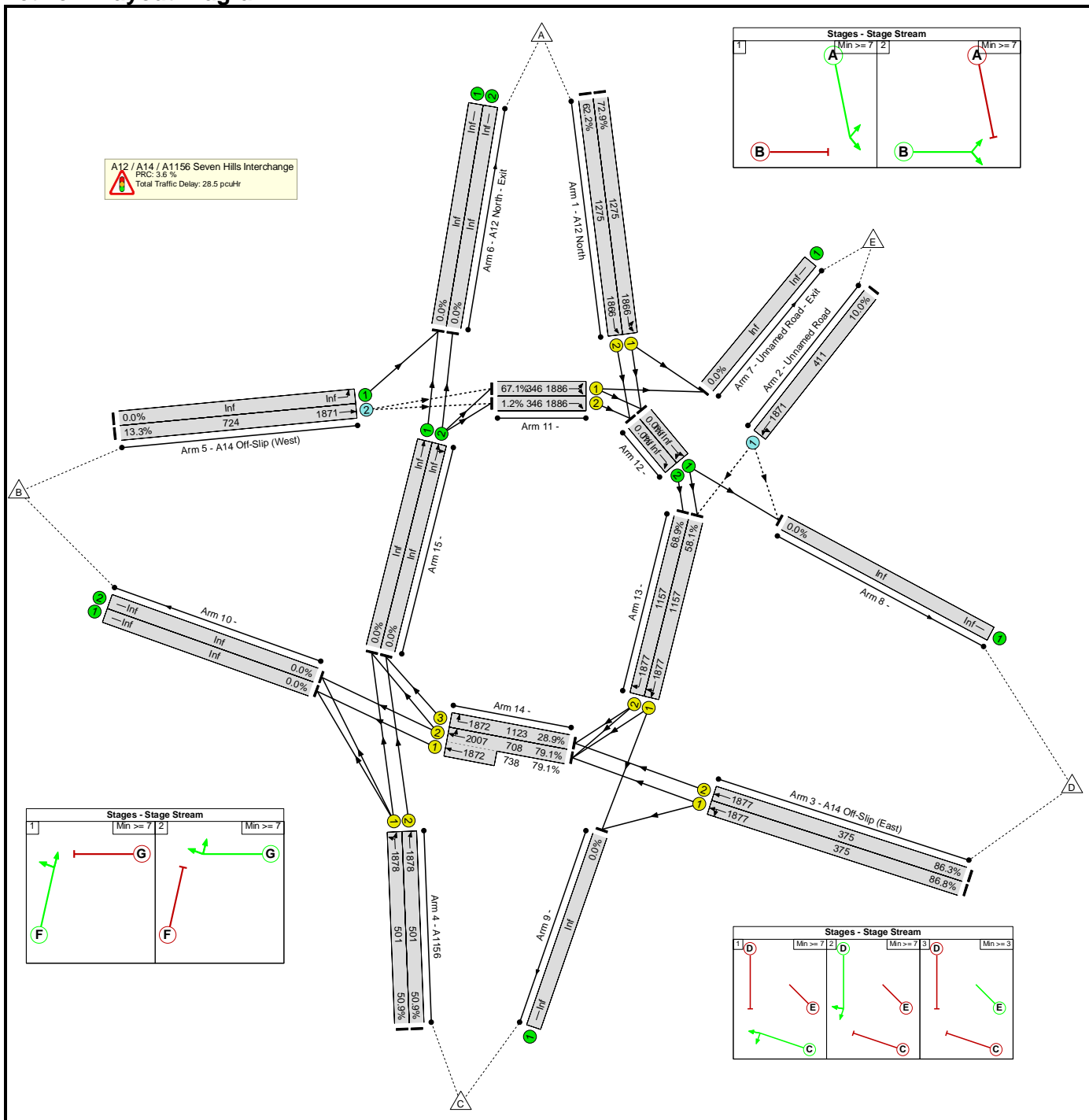
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	163.1%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	163.1%																												
1/1	A12 North Left Ahead	243.0	759.3	163.1%																												
1/2	A12 North Ahead	182.5	628.0	146.4%																												
2/1	Unnamed Road Left Ahead	0.8	8.4	19.9%																												
3/1	A14 Off-Slip (East) Left Ahead	43.7	467.3	127.9%																												
3/2	A14 Off-Slip (East) Ahead	65.6	628.8	144.2%																												
4/1	A1156 Left Ahead	11.6	135.1	99.4%																												
4/2	A1156 Ahead	11.6	135.1	99.4%																												
5/2	A14 Off-Slip (West) Ahead	0.1	2.9	17.8%																												
11/1	Left Right	1.5	7.5	28.4%																												
11/2	Right	0.1	9.7	1.3%																												
13/1	Ahead Right	2.6	5.1	50.0%																												
13/2	Right	1.0	3.6	54.3%																												
14/2+14/1	Ahead Right	17.6	4.5 (4.6:4.4)	62.1 : 63.5%																												
14/3	Right	2.3	9.3	18.2%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>-81.2</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>410.76</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>-60.3</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>106.19</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>-10.5</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>20.64</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>-81.2</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>537.94</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	-81.2	Total Delay for Signalled Lanes (pcuHr):	410.76	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	-60.3	Total Delay for Signalled Lanes (pcuHr):	106.19	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	-10.5	Total Delay for Signalled Lanes (pcuHr):	20.64	Cycle Time (s):	60		PRC Over All Lanes (%)	-81.2	Total Delay Over All Lanes(pcuHr):	537.94		
C1	Stream: 1 PRC for Signalled Lanes (%)	-81.2	Total Delay for Signalled Lanes (pcuHr):	410.76	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	-60.3	Total Delay for Signalled Lanes (pcuHr):	106.19	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	-10.5	Total Delay for Signalled Lanes (pcuHr):	20.64	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	-81.2	Total Delay Over All Lanes(pcuHr):	537.94																												

Basic Results Summary

Scenario 19: '28RC 15:00-16:00' (FG19: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

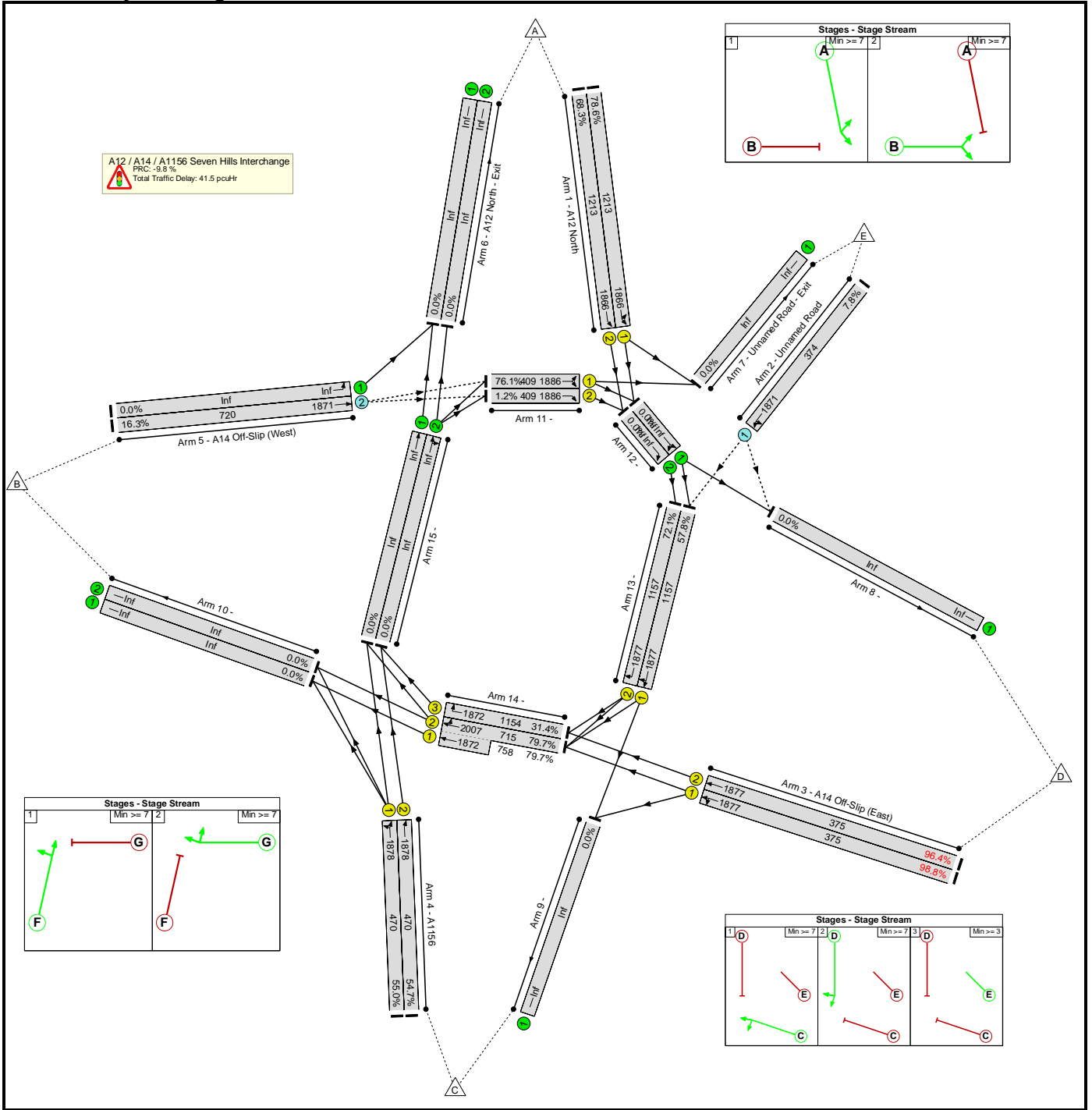
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	86.8%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	86.8%																												
1/1	A12 North Left Ahead	10.9	11.2	72.9%																												
1/2	A12 North Ahead	8.1	9.0	62.2%																												
2/1	Unnamed Road Left Ahead	0.3	7.3	10.0%																												
3/1	A14 Off-Slip (East) Left Ahead	8.2	55.8	86.8%																												
3/2	A14 Off-Slip (East) Ahead	8.1	54.7	86.3%																												
4/1	A1156 Left Ahead	4.1	26.0	50.9%																												
4/2	A1156 Ahead	4.1	26.0	50.9%																												
5/2	A14 Off-Slip (West) Ahead	0.1	2.9	13.3%																												
11/1	Left Right	4.7	34.4	67.1%																												
11/2	Right	0.1	25.7	1.2%																												
13/1	Ahead Right	4.1	8.3	58.1%																												
13/2	Right	4.4	9.4	68.9%																												
14/2+14/1	Ahead Right	12.5	7.4 (8.4:6.5)	79.1 : 79.1%																												
14/3	Right	5.6	17.8	28.9%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>23.5</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>7.09</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>3.6</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>13.62</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>13.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>7.65</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>3.6</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>28.52</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	23.5	Total Delay for Signalled Lanes (pcuHr):	7.09	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	3.6	Total Delay for Signalled Lanes (pcuHr):	13.62	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	13.8	Total Delay for Signalled Lanes (pcuHr):	7.65	Cycle Time (s):	60		PRC Over All Lanes (%)	3.6	Total Delay Over All Lanes(pcuHr):	28.52		
C1	Stream: 1 PRC for Signalled Lanes (%)	23.5	Total Delay for Signalled Lanes (pcuHr):	7.09	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	3.6	Total Delay for Signalled Lanes (pcuHr):	13.62	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	13.8	Total Delay for Signalled Lanes (pcuHr):	7.65	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	3.6	Total Delay Over All Lanes(pcuHr):	28.52																												

Basic Results Summary

Scenario 20: '28RC 17:00-18:00' (FG20: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

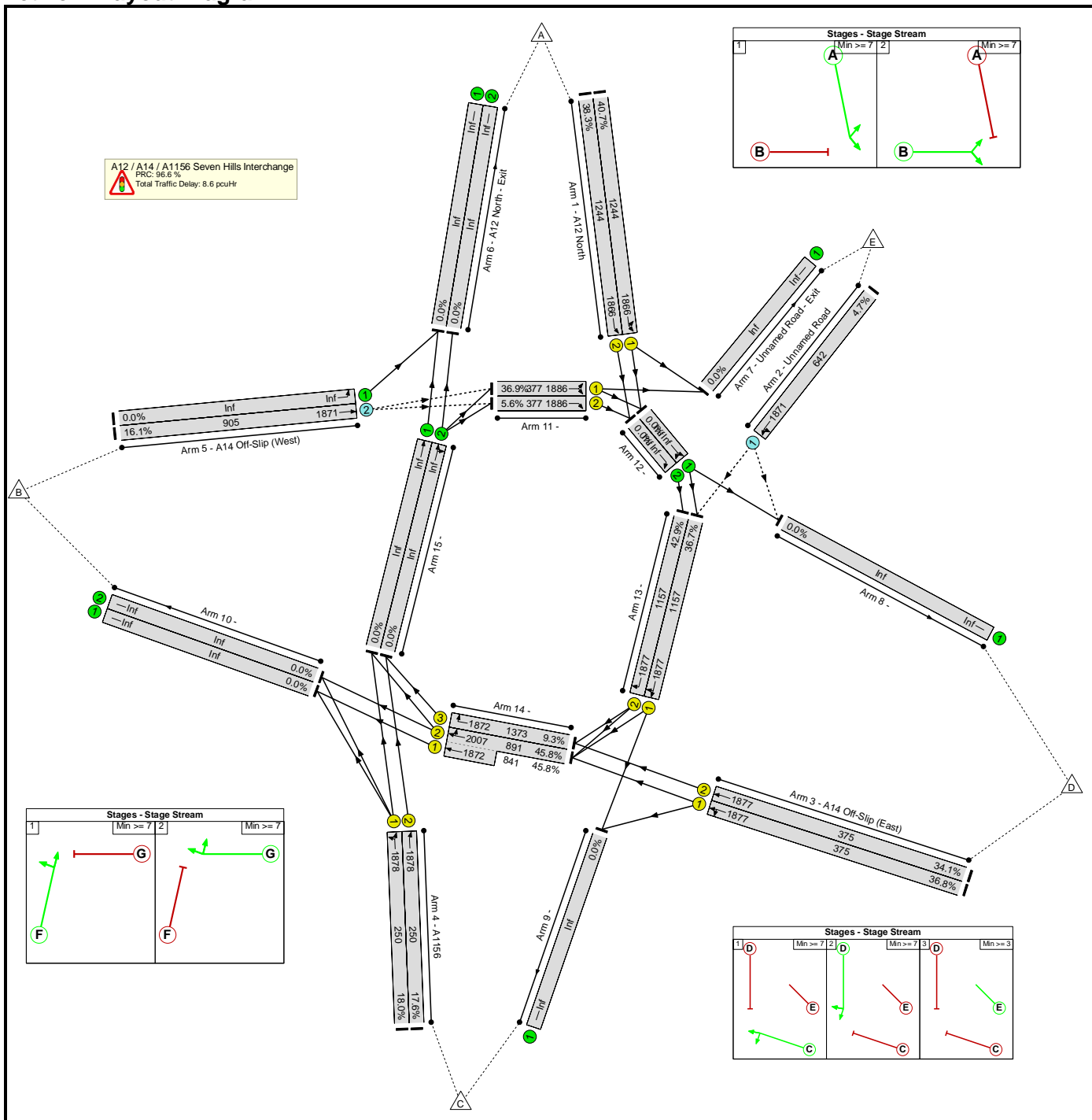
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	98.8%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	98.8%																												
1/1	A12 North Left Ahead	12.9	14.3	78.6%																												
1/2	A12 North Ahead	9.6	11.3	68.3%																												
2/1	Unnamed Road Left Ahead	0.2	8.5	7.8%																												
3/1	A14 Off-Slip (East) Left Ahead	14.7	107.3	98.8%																												
3/2	A14 Off-Slip (East) Ahead	12.7	90.8	96.4%																												
4/1	A1156 Left Ahead	4.3	28.0	55.0%																												
4/2	A1156 Ahead	4.3	28.0	54.7%																												
5/2	A14 Off-Slip (West) Ahead	0.1	3.0	16.3%																												
11/1	Left Right	6.6	34.6	76.1%																												
11/2	Right	0.1	23.3	1.2%																												
13/1	Ahead Right	4.2	8.0	57.8%																												
13/2	Right	4.1	9.3	72.1%																												
14/2+14/1	Ahead Right	16.8	7.1 (7.6:6.6)	79.7 : 79.7%																												
14/3	Right	6.3	17.8	31.4%																												
<table> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>14.5</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>9.42</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>-9.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>23.83</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>13.0</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>8.10</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>-9.8</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>41.51</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	14.5	Total Delay for Signalled Lanes (pcuHr):	9.42	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	-9.8	Total Delay for Signalled Lanes (pcuHr):	23.83	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	13.0	Total Delay for Signalled Lanes (pcuHr):	8.10	Cycle Time (s):	60		PRC Over All Lanes (%)	-9.8	Total Delay Over All Lanes(pcuHr):	41.51		
C1	Stream: 1 PRC for Signalled Lanes (%)	14.5	Total Delay for Signalled Lanes (pcuHr):	9.42	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	-9.8	Total Delay for Signalled Lanes (pcuHr):	23.83	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	13.0	Total Delay for Signalled Lanes (pcuHr):	8.10	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	-9.8	Total Delay Over All Lanes(pcuHr):	41.51																												

Basic Results Summary

Scenario 21: '28PC 06:00-07:00' (FG21: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

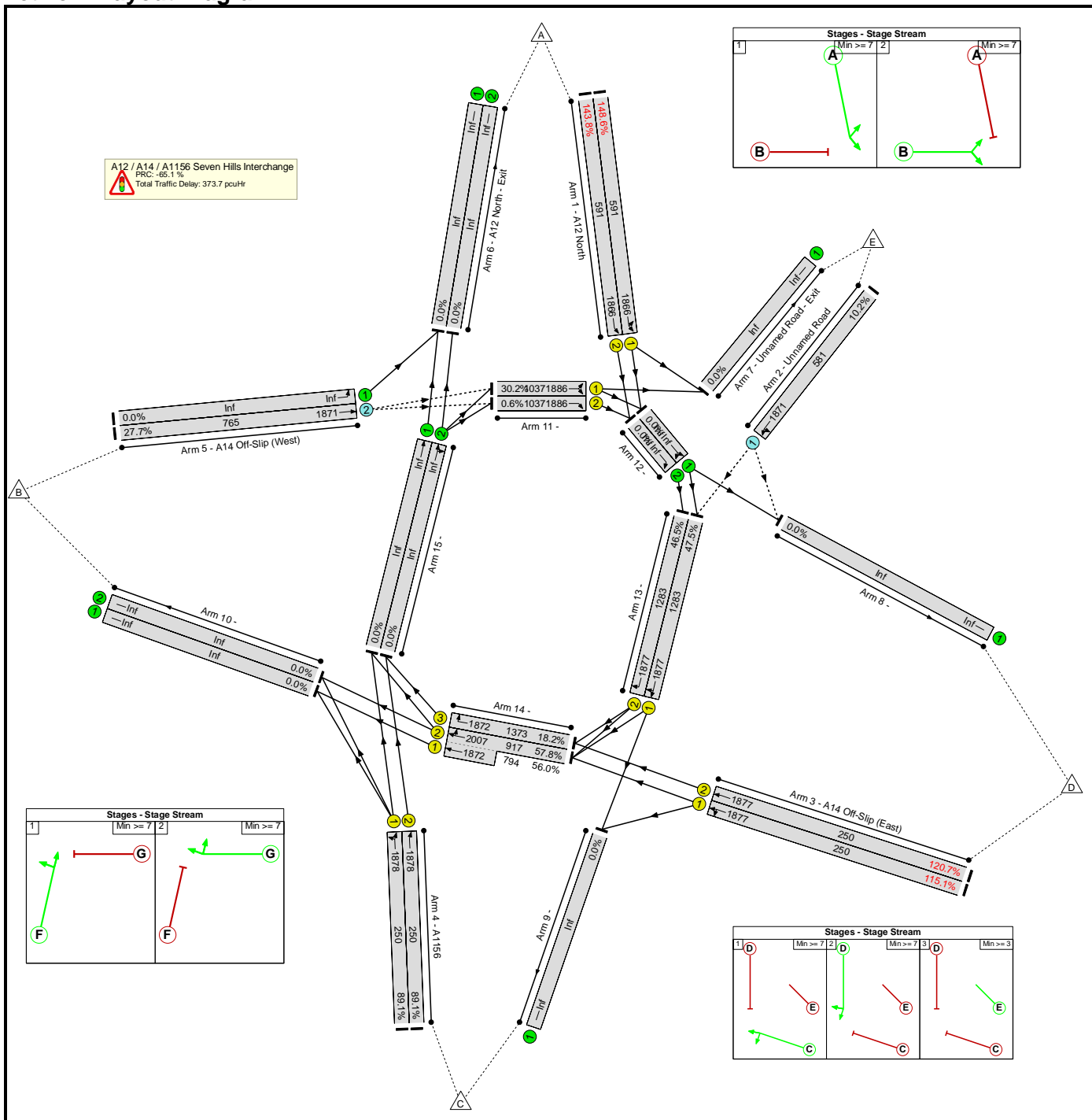
Network Layout Diagram



Basic Results Summary

Scenario 22: '28PC 07:00-08:00' (FG22: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

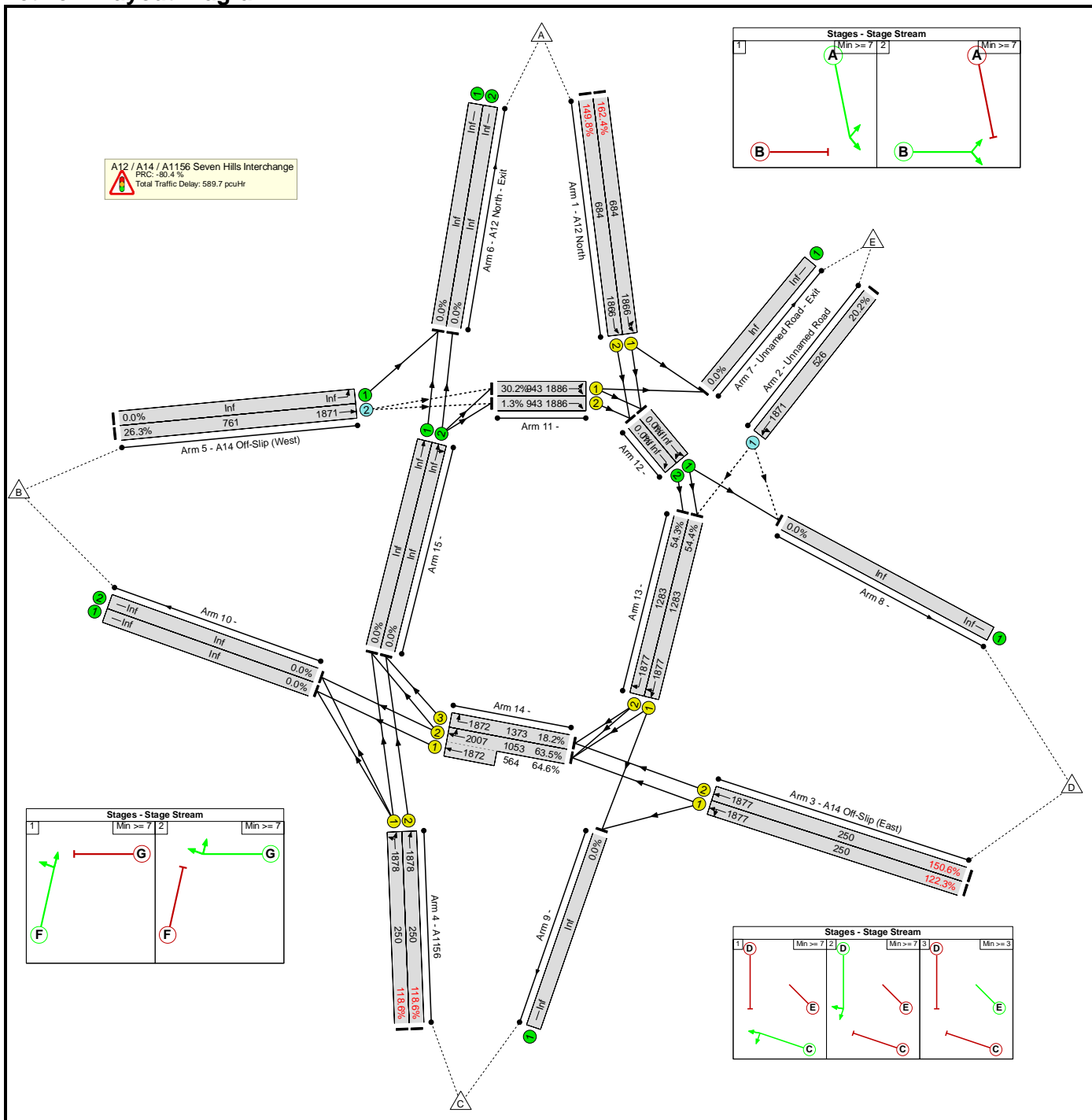
Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	-	148.6%
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	148.6%
1/1	A12 North Left Ahead	164.5	649.3	148.6%
1/2	A12 North Ahead	149.7	607.7	143.8%
2/1	Unnamed Road Left Ahead	0.4	6.2	10.2%
3/1	A14 Off-Slip (East) Left Ahead	27.6	317.3	115.1%
3/2	A14 Off-Slip (East) Ahead	34.4	385.2	120.7%
4/1	A1156 Left Ahead	6.9	78.6	89.1%
4/2	A1156 Ahead	6.9	78.6	89.1%
5/2	A14 Off-Slip (West) Ahead	0.2	3.3	27.7%
11/1	Left Right	2.0	7.4	30.2%
11/2	Right	0.0	8.0	0.6%
13/1	Ahead Right	2.2	4.6	47.5%
13/2	Right	0.6	2.9	46.5%
14/2+14/1	Ahead Right	17.2	4.3 (5.0:3.6)	57.8 : 56.0%
14/3	Right	4.3	15.2	18.2%

C1	Stream: 1 PRC for Signalled Lanes (%)	-65.1	Total Delay for Signalled Lanes (pcuHr):	302.51	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-34.1	Total Delay for Signalled Lanes (pcuHr):	58.95	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%)	1.1	Total Delay for Signalled Lanes (pcuHr):	11.97	Cycle Time (s):	60
	PRC Over All Lanes (%)	-65.1	Total Delay Over All Lanes(pcuHr):	373.72		

Basic Results Summary

Scenario 23: '28PC 08:00-09:00' (FG23: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

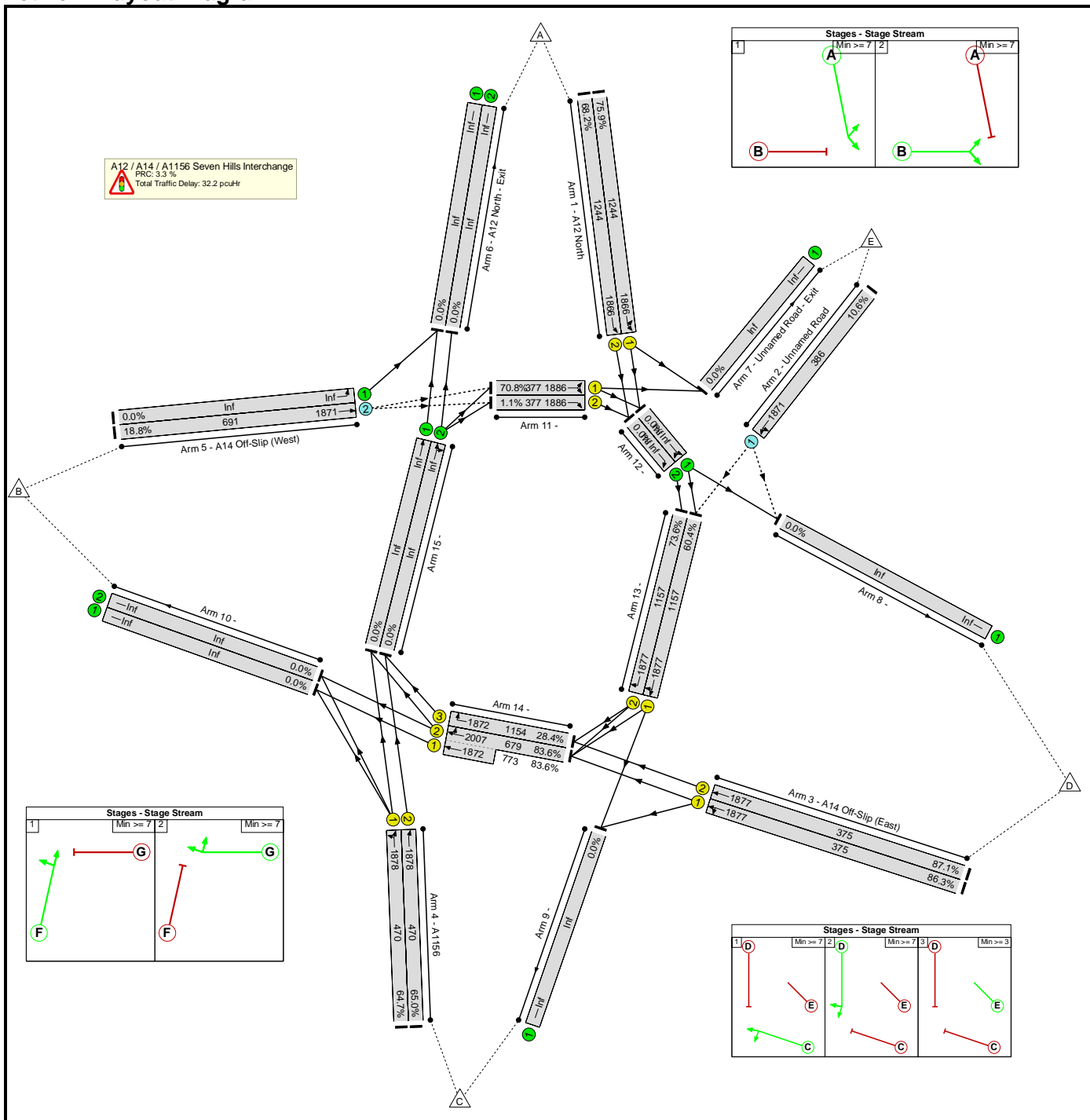
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	162.4%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	162.4%																												
1/1	A12 North Left Ahead	240.3	754.1	162.4%																												
1/2	A12 North Ahead	194.7	656.8	149.8%																												
2/1	Unnamed Road Left Ahead	0.8	8.4	20.2%																												
3/1	A14 Off-Slip (East) Left Ahead	36.4	404.1	122.3%																												
3/2	A14 Off-Slip (East) Ahead	74.2	683.1	150.6%																												
4/1	A1156 Left Ahead	31.9	358.0	118.6%																												
4/2	A1156 Ahead	31.9	358.0	118.6%																												
5/2	A14 Off-Slip (West) Ahead	0.3	3.2	26.3%																												
11/1	Left Right	2.1	9.0	30.2%																												
11/2	Right	0.1	9.7	1.3%																												
13/1	Ahead Right	3.5	6.1	54.4%																												
13/2	Right	1.0	3.6	54.3%																												
14/2+14/1	Ahead Right	17.7	4.6 (4.7:4.5)	63.5 : 64.6%																												
14/3	Right	2.3	9.3	18.2%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>-80.4</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>420.46</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>-67.4</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>107.77</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>-31.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>61.04</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>-80.4</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>589.69</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	-80.4	Total Delay for Signalled Lanes (pcuHr):	420.46	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	-67.4	Total Delay for Signalled Lanes (pcuHr):	107.77	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	-31.8	Total Delay for Signalled Lanes (pcuHr):	61.04	Cycle Time (s):	60		PRC Over All Lanes (%)	-80.4	Total Delay Over All Lanes(pcuHr):	589.69		
C1	Stream: 1 PRC for Signalled Lanes (%)	-80.4	Total Delay for Signalled Lanes (pcuHr):	420.46	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	-67.4	Total Delay for Signalled Lanes (pcuHr):	107.77	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	-31.8	Total Delay for Signalled Lanes (pcuHr):	61.04	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	-80.4	Total Delay Over All Lanes(pcuHr):	589.69																												

Basic Results Summary

Scenario 24: '28PC 15:00-16:00' (FG24: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

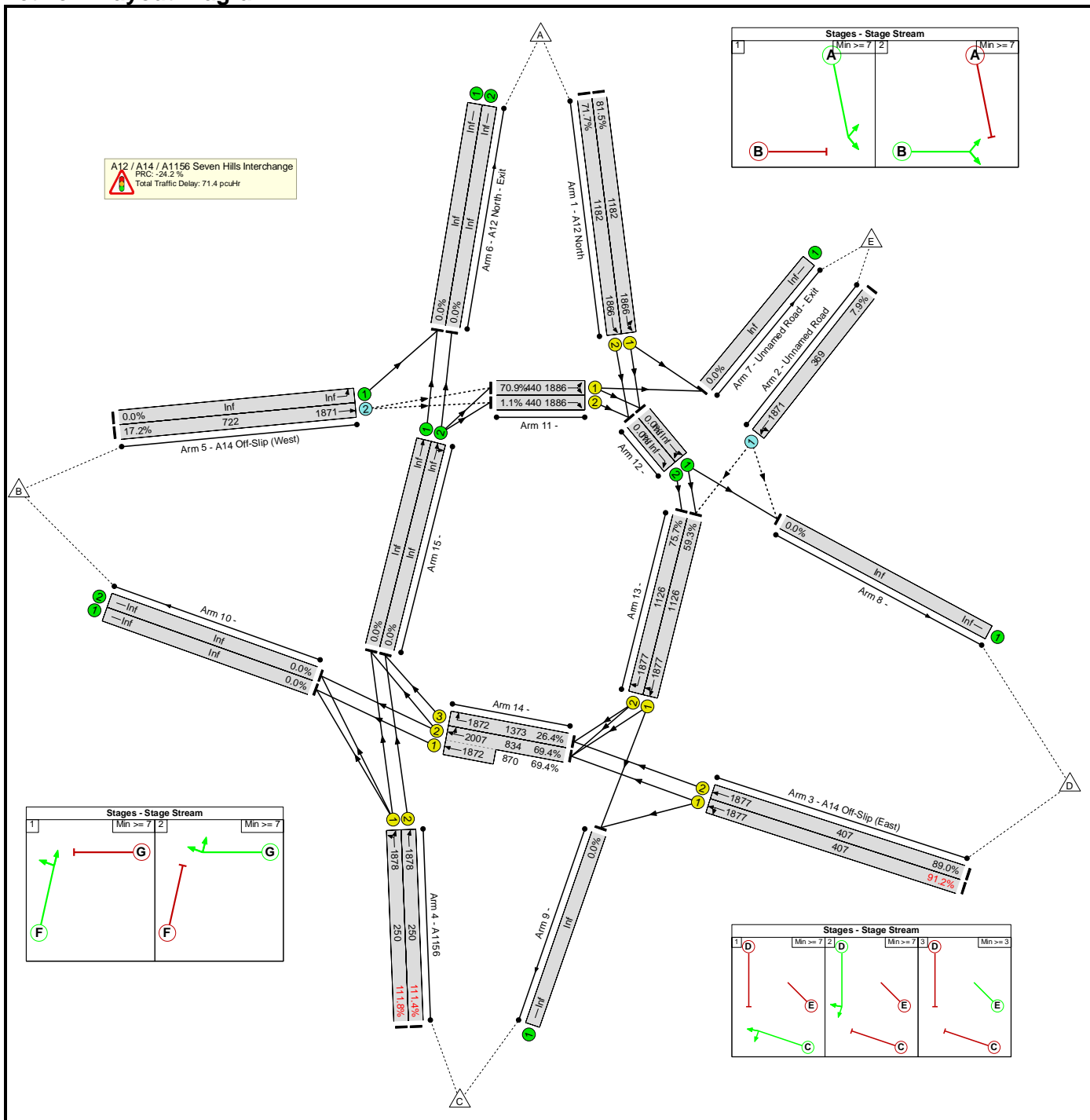
Network Layout Diagram



Basic Results Summary

Scenario 25: '28PC 17:00-18:00' (FG25: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

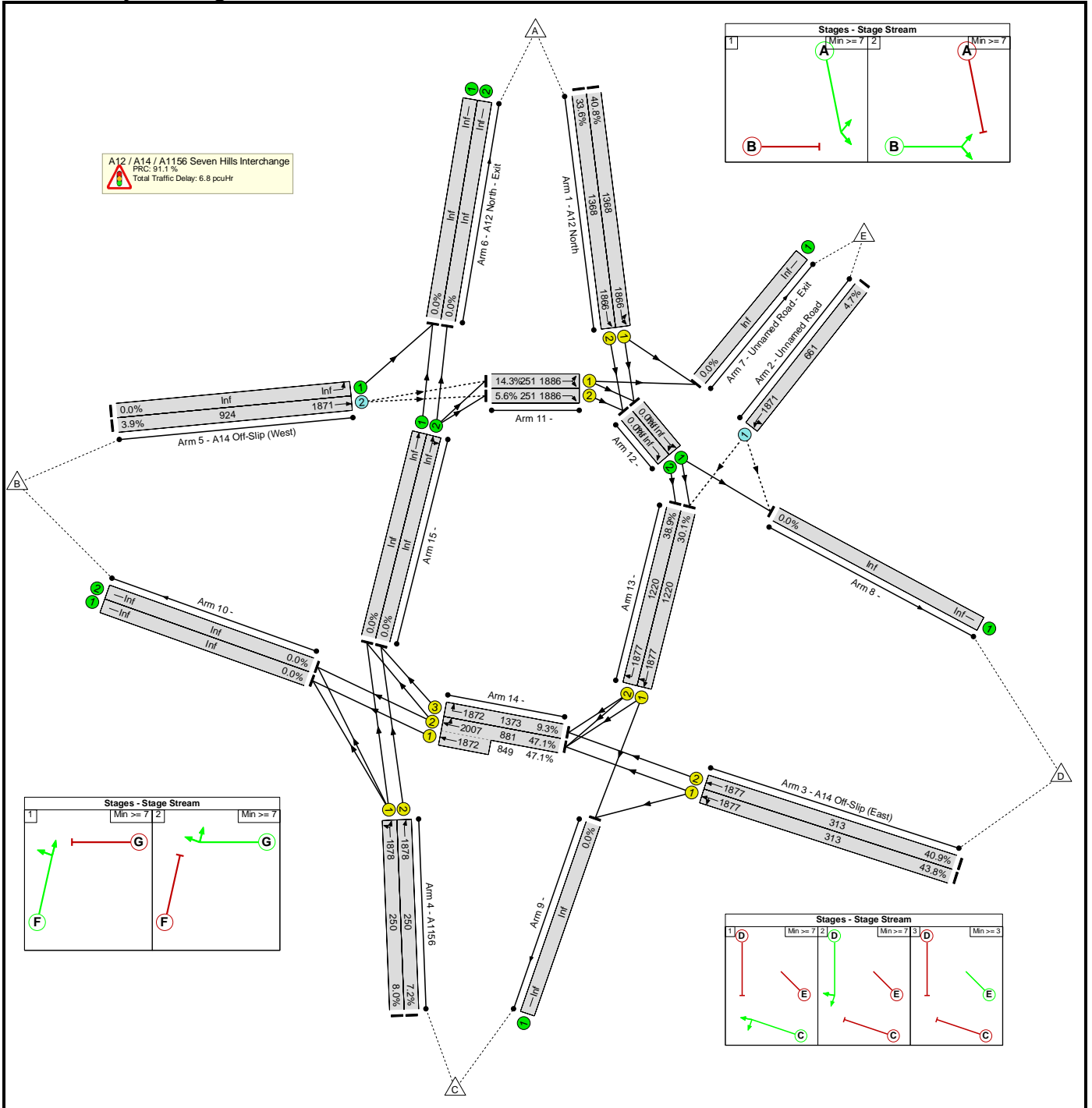
Network Layout Diagram



Basic Results Summary

Scenario 26: '34RC 06:00-07:00' (FG26: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

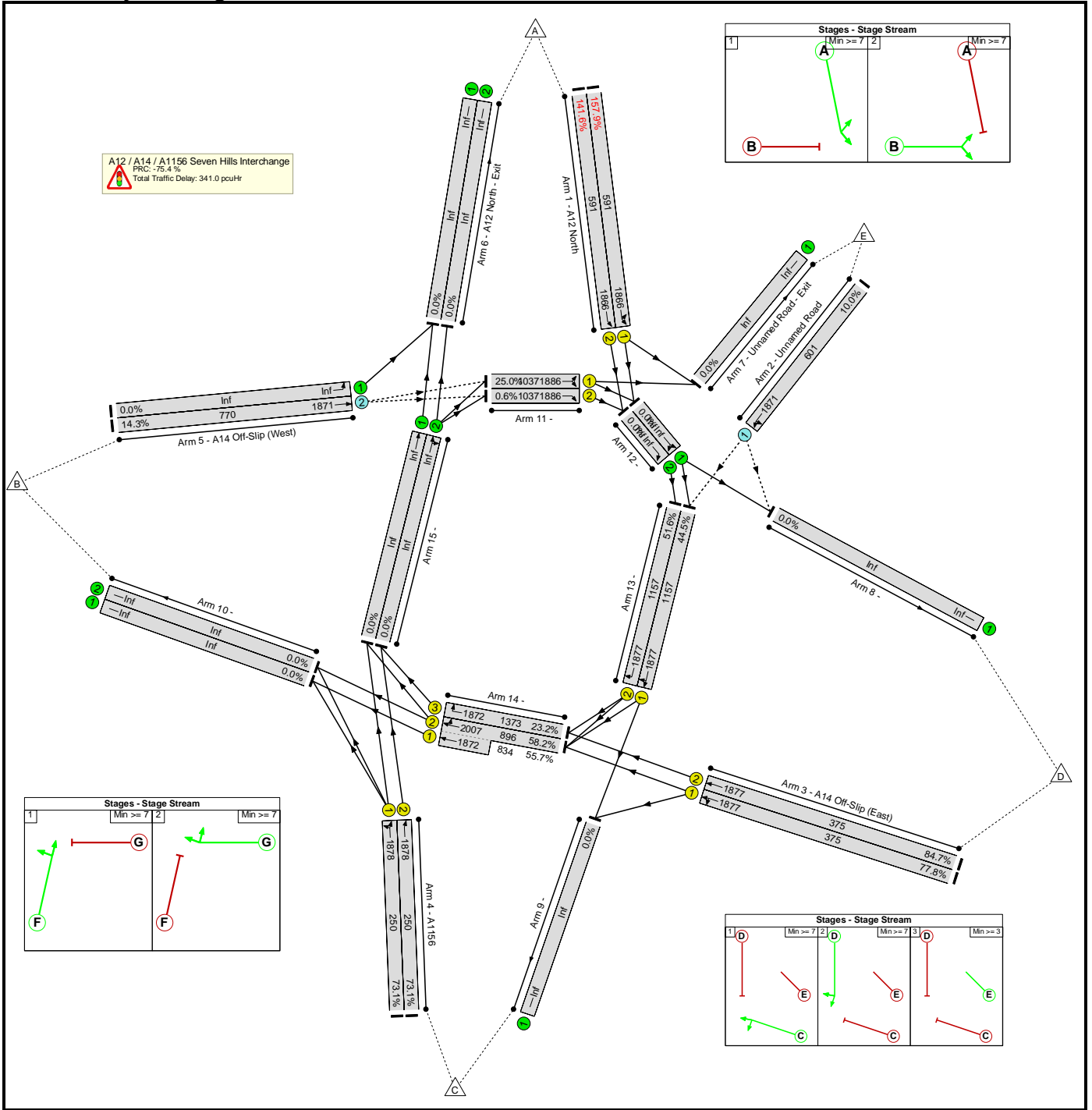
Network Layout Diagram



Basic Results Summary

Scenario 27: '34RC 07:00-08:00' (FG27: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

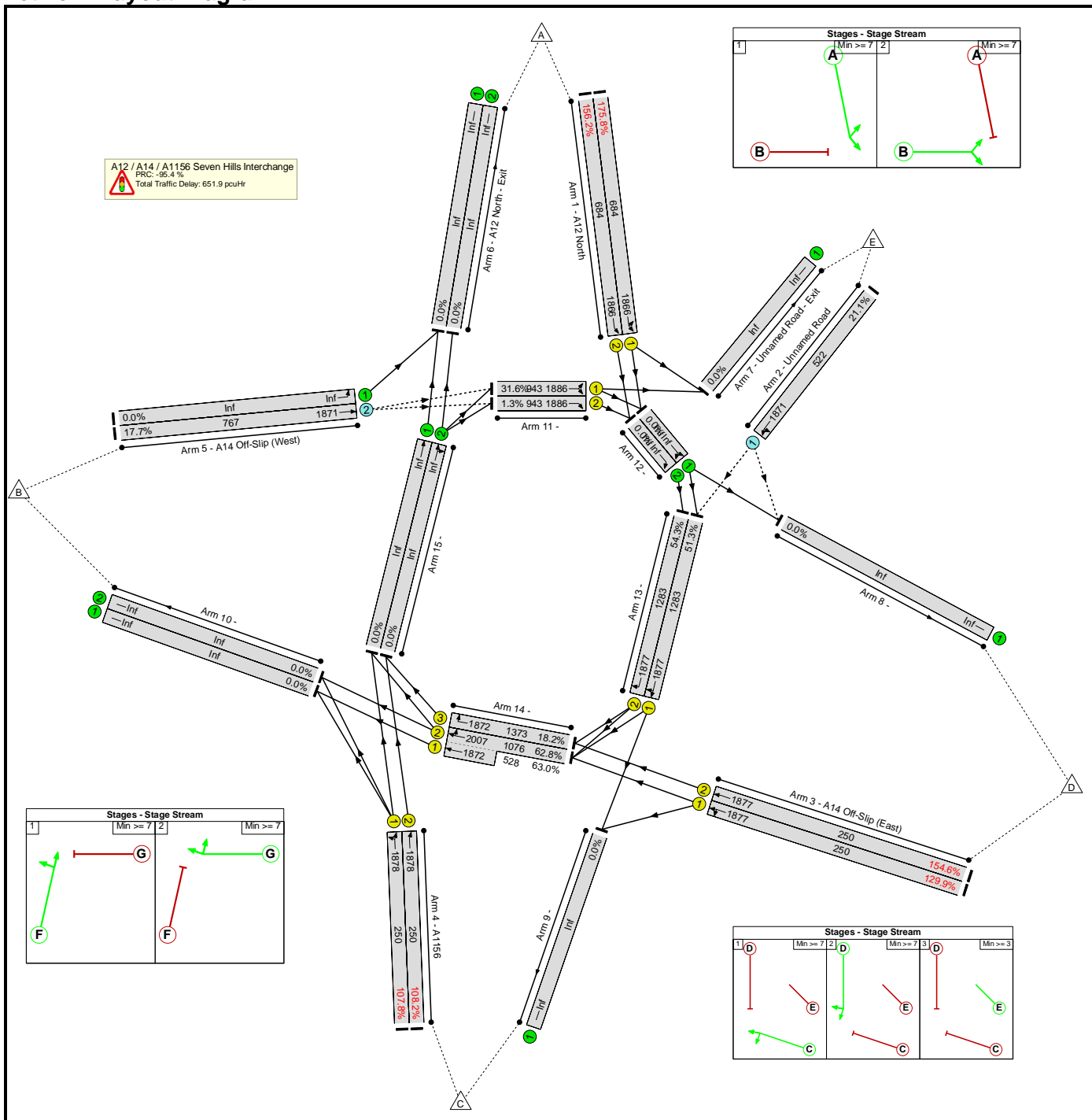
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	157.9%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	157.9%																												
1/1	A12 North Left Ahead	193.7	723.9	157.9%																												
1/2	A12 North Ahead	142.8	587.5	141.6%																												
2/1	Unnamed Road Left Ahead	0.4	6.1	10.0%																												
3/1	A14 Off-Slip (East) Left Ahead	6.2	43.5	77.8%																												
3/2	A14 Off-Slip (East) Ahead	7.6	51.9	84.7%																												
4/1	A1156 Left Ahead	4.2	50.7	73.1%																												
4/2	A1156 Ahead	4.2	50.7	73.1%																												
5/2	A14 Off-Slip (West) Ahead	0.1	2.7	14.3%																												
11/1	Left Right	1.3	6.3	25.0%																												
11/2	Right	0.0	8.0	0.6%																												
13/1	Ahead Right	1.6	4.7	44.5%																												
13/2	Right	0.8	3.6	51.6%																												
14/2+14/1	Ahead Right	17.4	4.2 (4.3:4.1)	58.2 : 55.7%																												
14/3	Right	1.5	5.4	23.2%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>-75.4</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>324.67</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>6.2</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>9.39</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>23.1</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>6.77</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>-75.4</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>341.01</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	-75.4	Total Delay for Signalled Lanes (pcuHr):	324.67	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	6.2	Total Delay for Signalled Lanes (pcuHr):	9.39	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	23.1	Total Delay for Signalled Lanes (pcuHr):	6.77	Cycle Time (s):	60		PRC Over All Lanes (%)	-75.4	Total Delay Over All Lanes(pcuHr):	341.01		
C1	Stream: 1 PRC for Signalled Lanes (%)	-75.4	Total Delay for Signalled Lanes (pcuHr):	324.67	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	6.2	Total Delay for Signalled Lanes (pcuHr):	9.39	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	23.1	Total Delay for Signalled Lanes (pcuHr):	6.77	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	-75.4	Total Delay Over All Lanes(pcuHr):	341.01																												

Basic Results Summary

Scenario 28: '34RC 08:00-09:00' (FG28: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

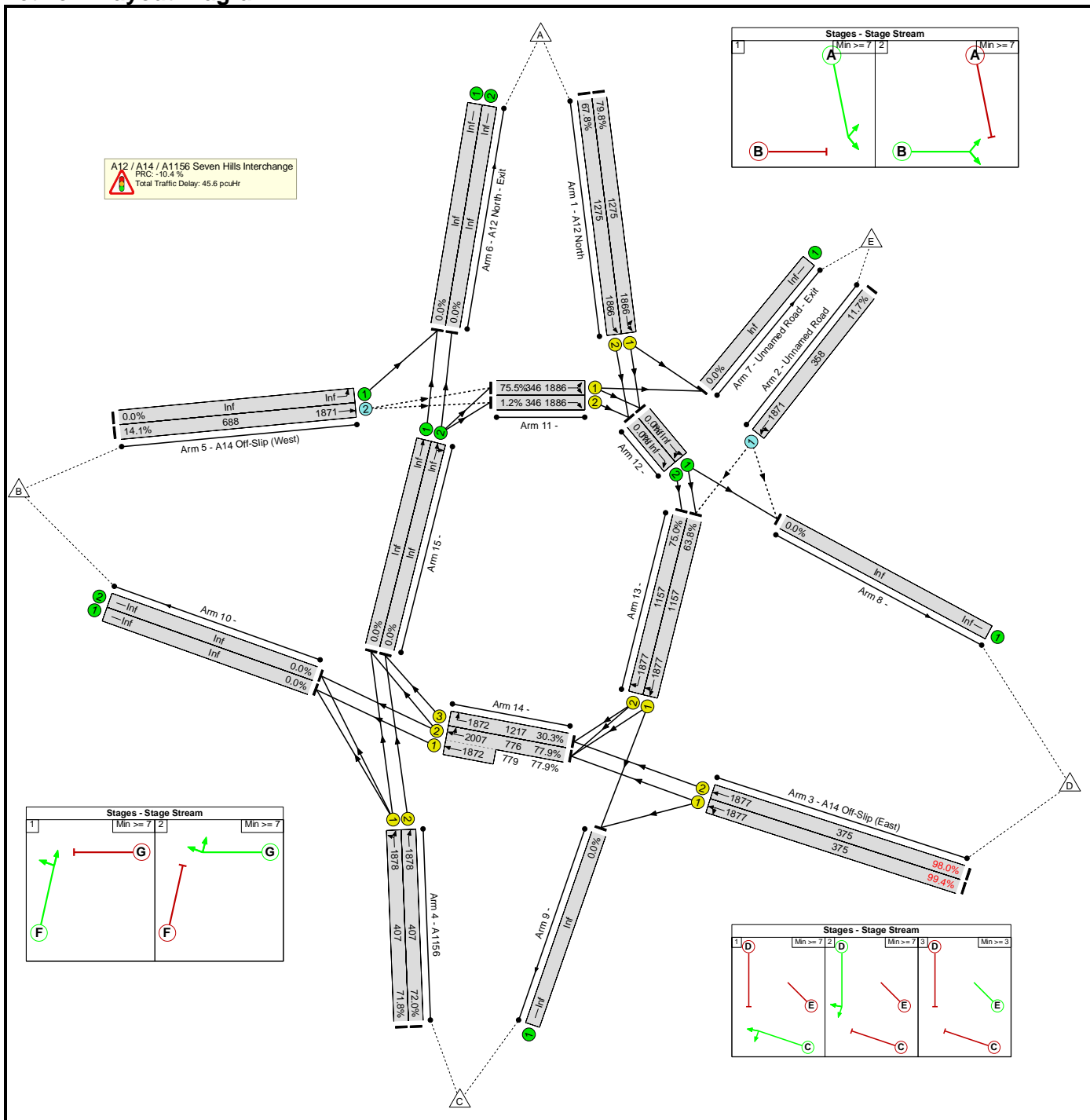
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	175.8%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	175.8%																												
1/1	A12 North Left Ahead	289.3	842.9	175.8%																												
1/2	A12 North Ahead	218.0	708.5	156.2%																												
2/1	Unnamed Road Left Ahead	0.9	8.5	21.1%																												
3/1	A14 Off-Slip (East) Left Ahead	46.4	489.1	129.9%																												
3/2	A14 Off-Slip (East) Ahead	79.7	715.3	154.6%																												
4/1	A1156 Left Ahead	19.3	225.9	107.8%																												
4/2	A1156 Ahead	19.7	230.7	108.2%																												
5/2	A14 Off-Slip (West) Ahead	0.1	2.9	17.7%																												
11/1	Left Right	1.6	7.3	31.6%																												
11/2	Right	0.1	9.7	1.3%																												
13/1	Ahead Right	2.8	5.5	51.3%																												
13/2	Right	1.1	3.7	54.3%																												
14/2+14/1	Ahead Right	17.5	4.5 (4.5:4.5)	62.8 : 63.0%																												
14/3	Right	1.8	7.5	18.2%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>-95.4</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>492.69</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>-71.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>122.76</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>-20.3</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>36.09</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>-95.4</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>651.90</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	-95.4	Total Delay for Signalled Lanes (pcuHr):	492.69	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	-71.8	Total Delay for Signalled Lanes (pcuHr):	122.76	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	-20.3	Total Delay for Signalled Lanes (pcuHr):	36.09	Cycle Time (s):	60		PRC Over All Lanes (%)	-95.4	Total Delay Over All Lanes(pcuHr):	651.90		
C1	Stream: 1 PRC for Signalled Lanes (%)	-95.4	Total Delay for Signalled Lanes (pcuHr):	492.69	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	-71.8	Total Delay for Signalled Lanes (pcuHr):	122.76	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	-20.3	Total Delay for Signalled Lanes (pcuHr):	36.09	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	-95.4	Total Delay Over All Lanes(pcuHr):	651.90																												

Basic Results Summary

Scenario 29: '34RC 15:00-16:00' (FG29: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

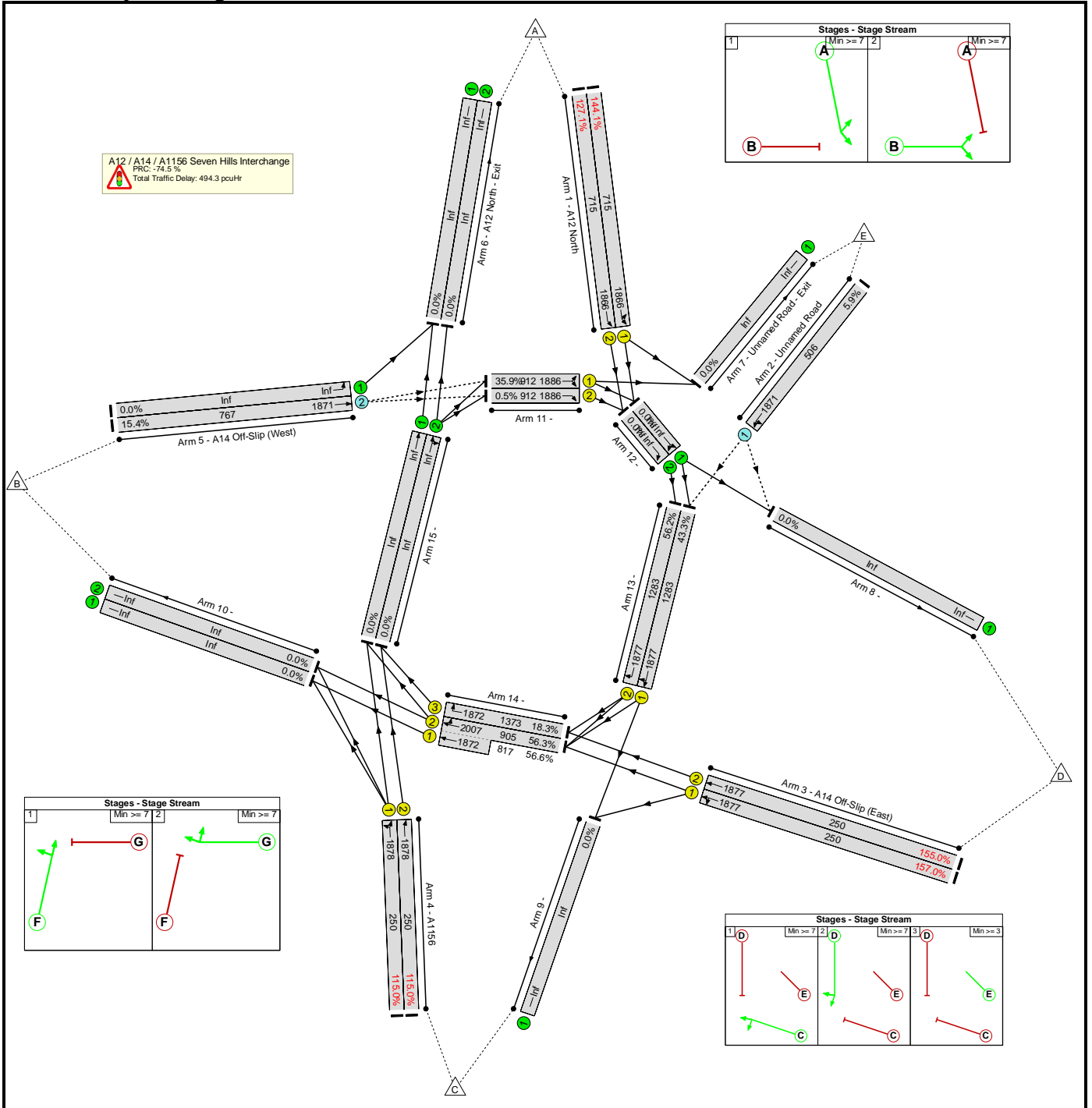
Network Layout Diagram



Basic Results Summary

Scenario 30: '34RC 17:00-18:00' (FG30: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

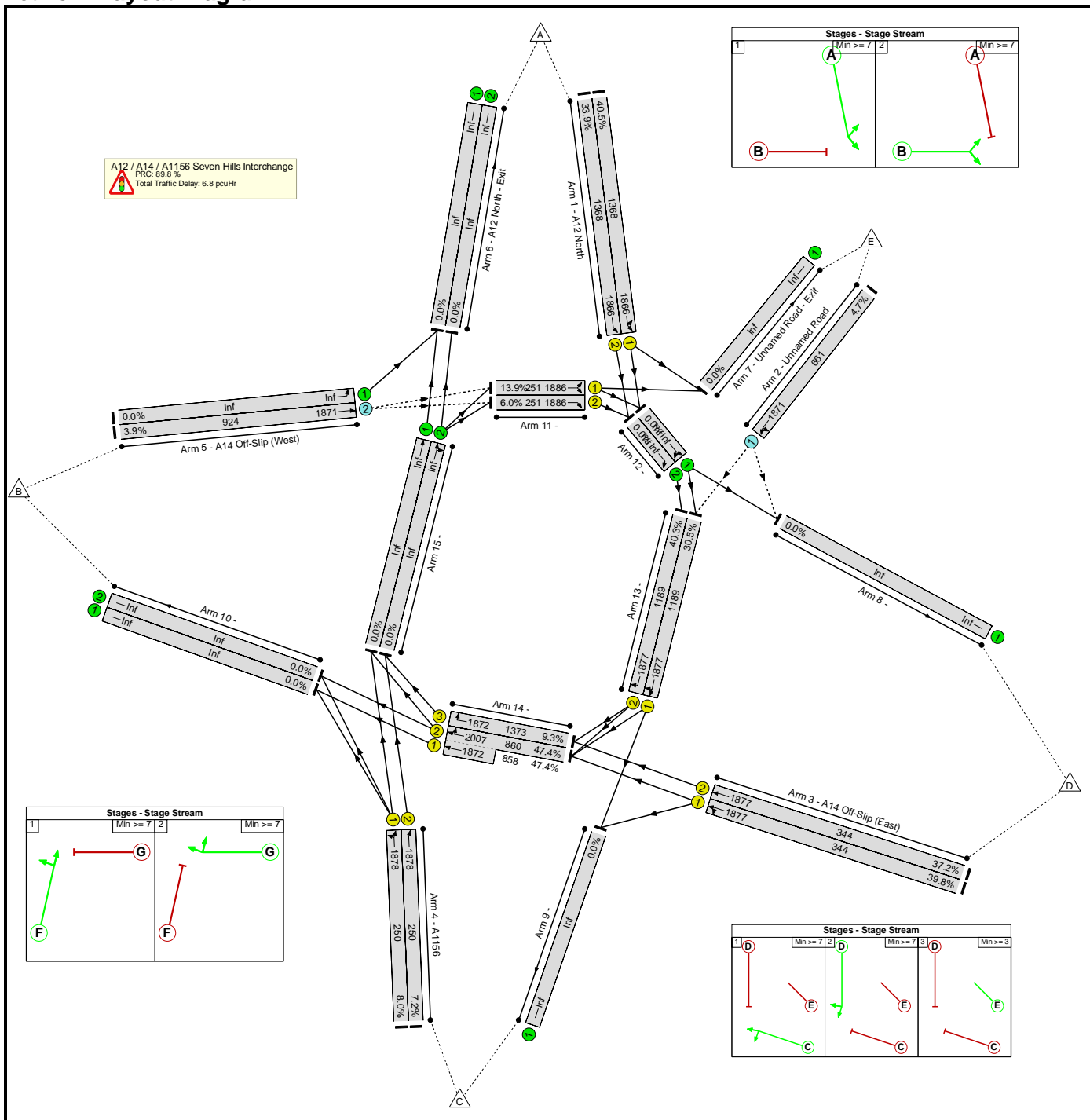
Network Layout Diagram



Basic Results Summary

Scenario 31: '34OP 06:00-07:00' (FG31: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

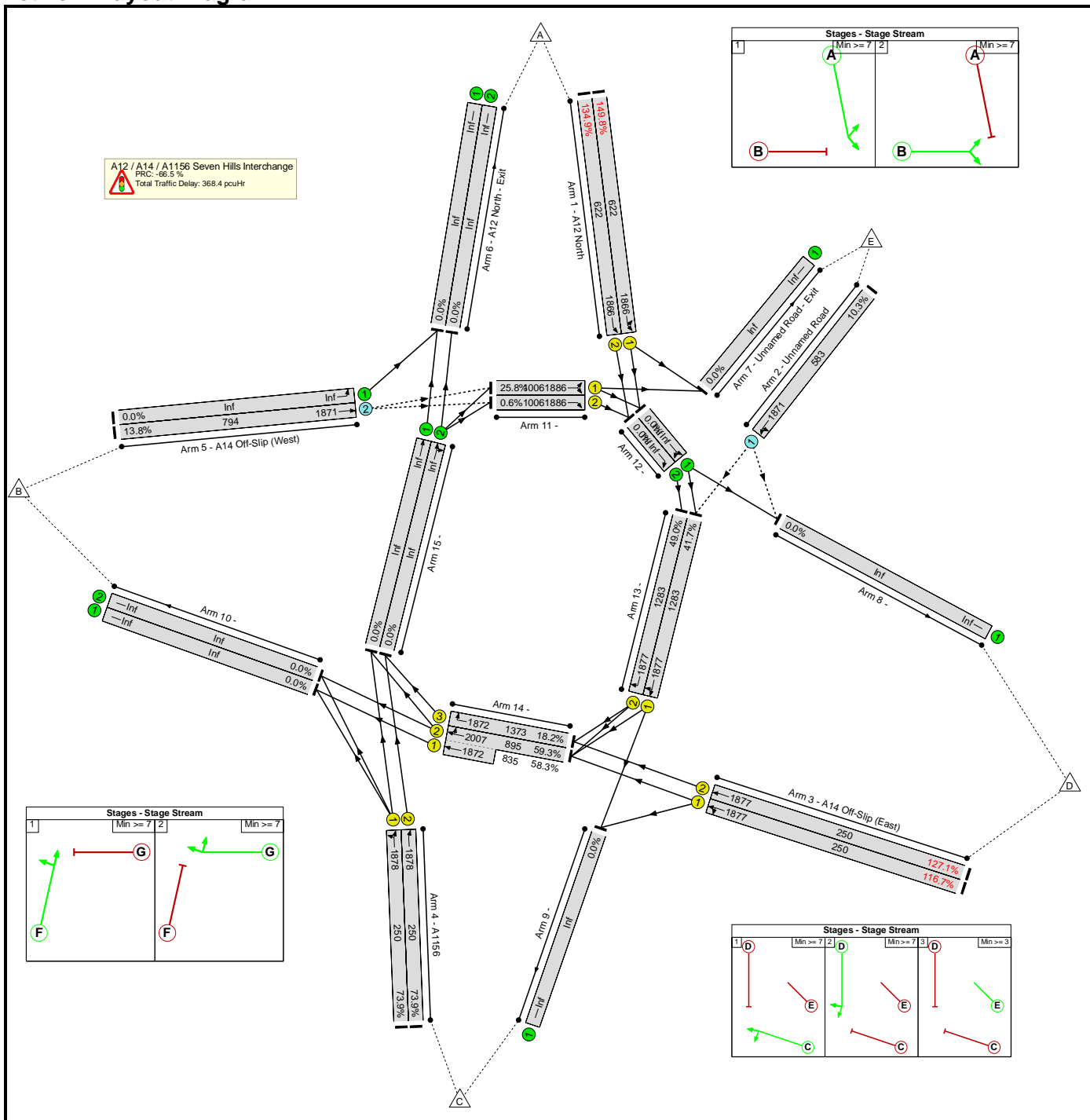
Network Layout Diagram



Basic Results Summary

Scenario 32: '34OP 07:00-08:00' (FG32: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

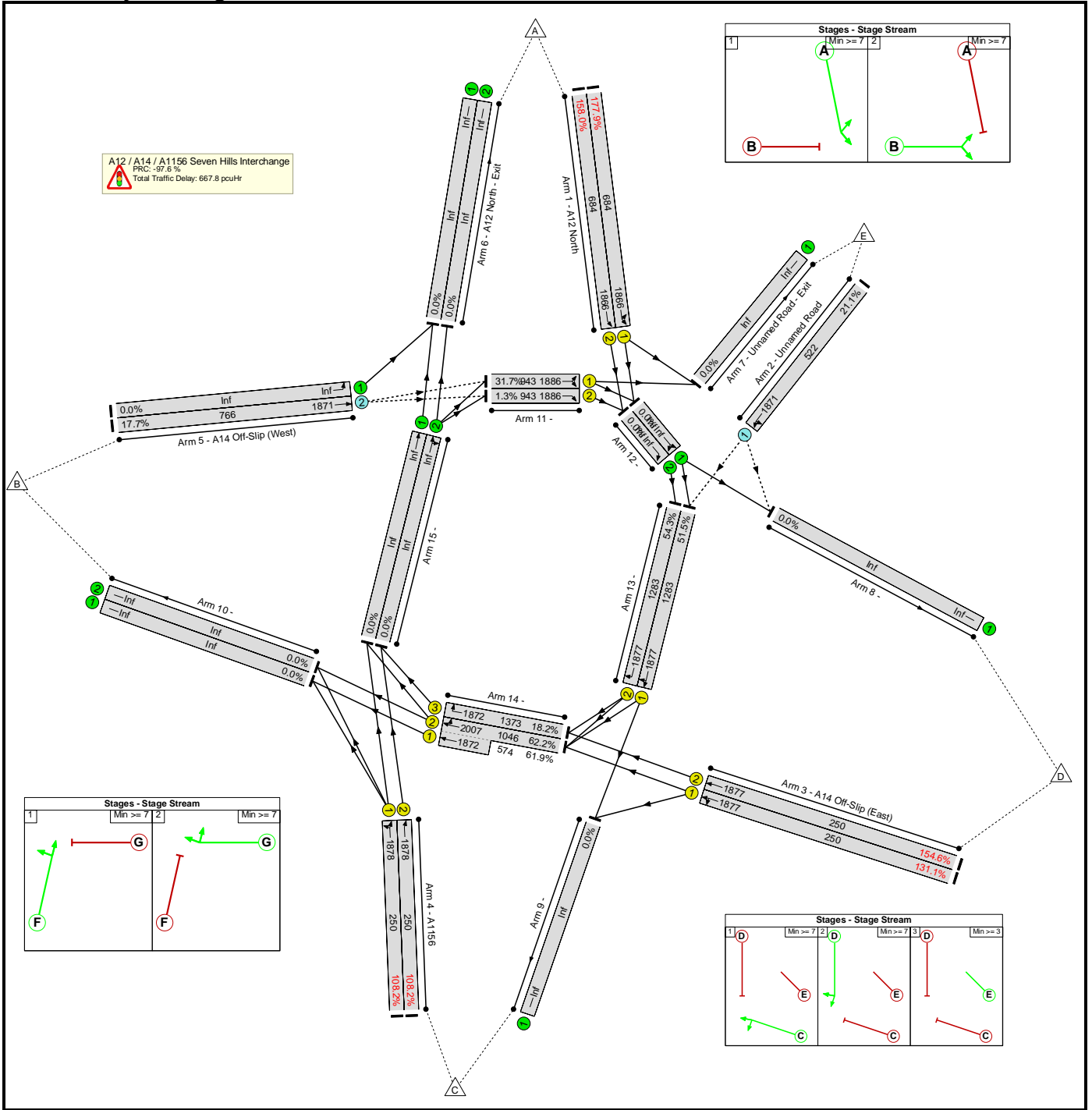
Network Layout Diagram



Basic Results Summary

Scenario 33: '34OP 08:00-09:00' (FG33: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

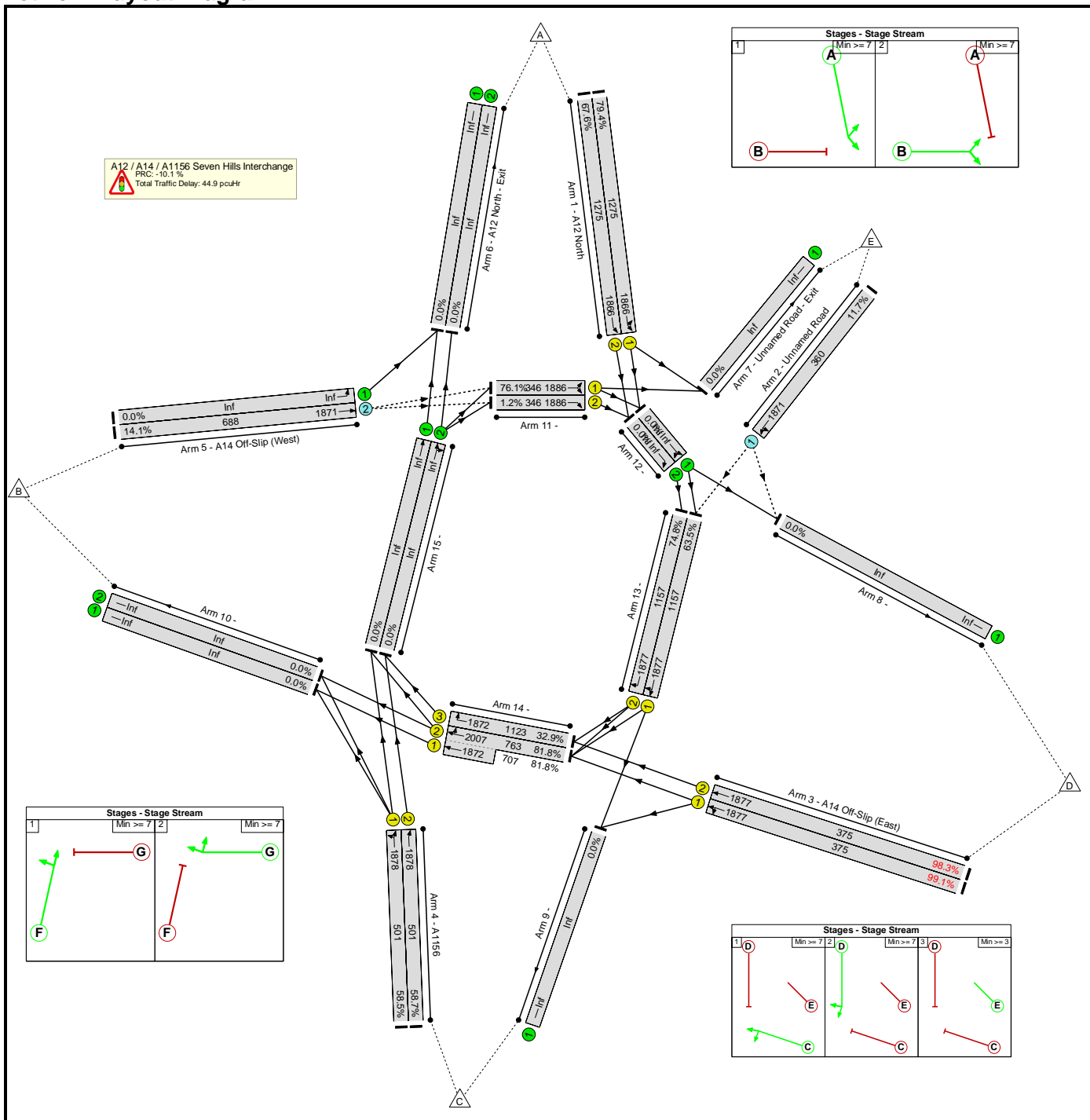
Network Layout Diagram



Basic Results Summary

Scenario 34: '34OP 15:00-16:00' (FG34: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

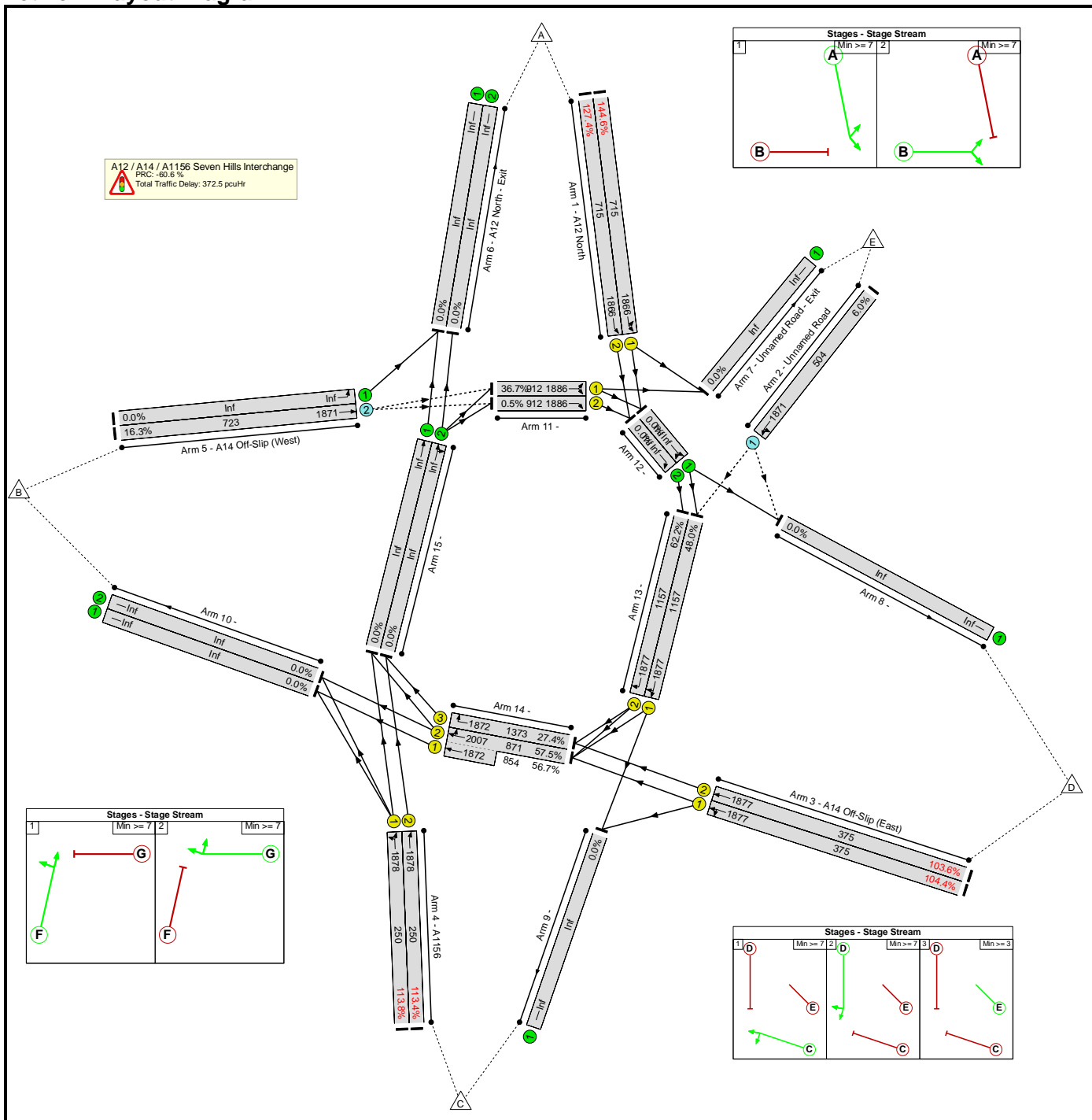
Network Layout Diagram



Basic Results Summary

Scenario 35: '34OP 17:00-18:00' (FG35: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



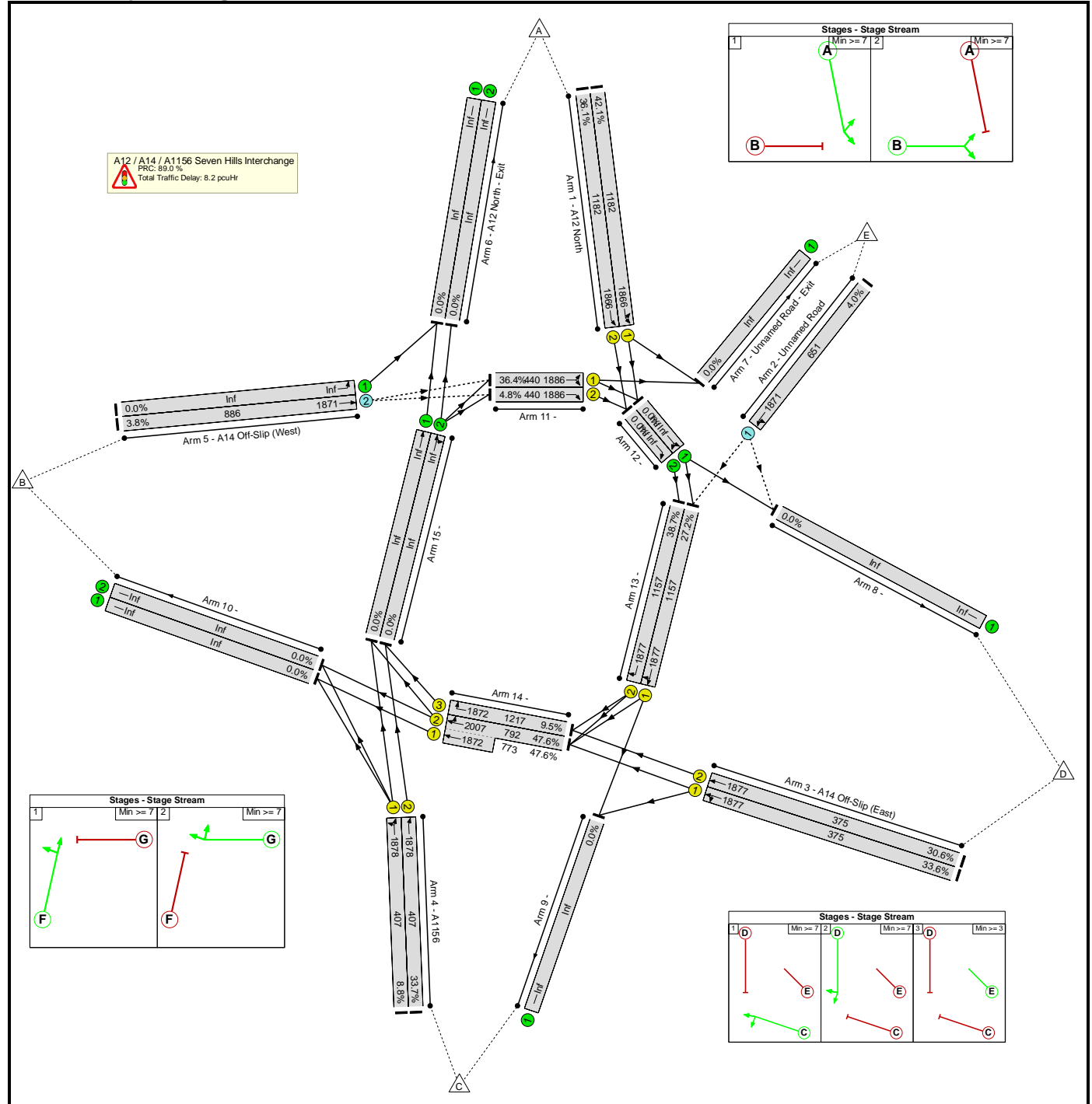
Basic Results Summary
Basic Results Summary

User and Project Details

Project:	Sizewell C
Title:	Junction 21 mitigation measures
Location:	
Site Ref(s):	A12 / A14
Additional detail:	
File name:	2019.10.17 J21_Model_v12.lsg3x
Author:	Chris Rice
Company:	WSP
Address:	Keble House, Southernhay Gardens, Exeter

Basic Results Summary

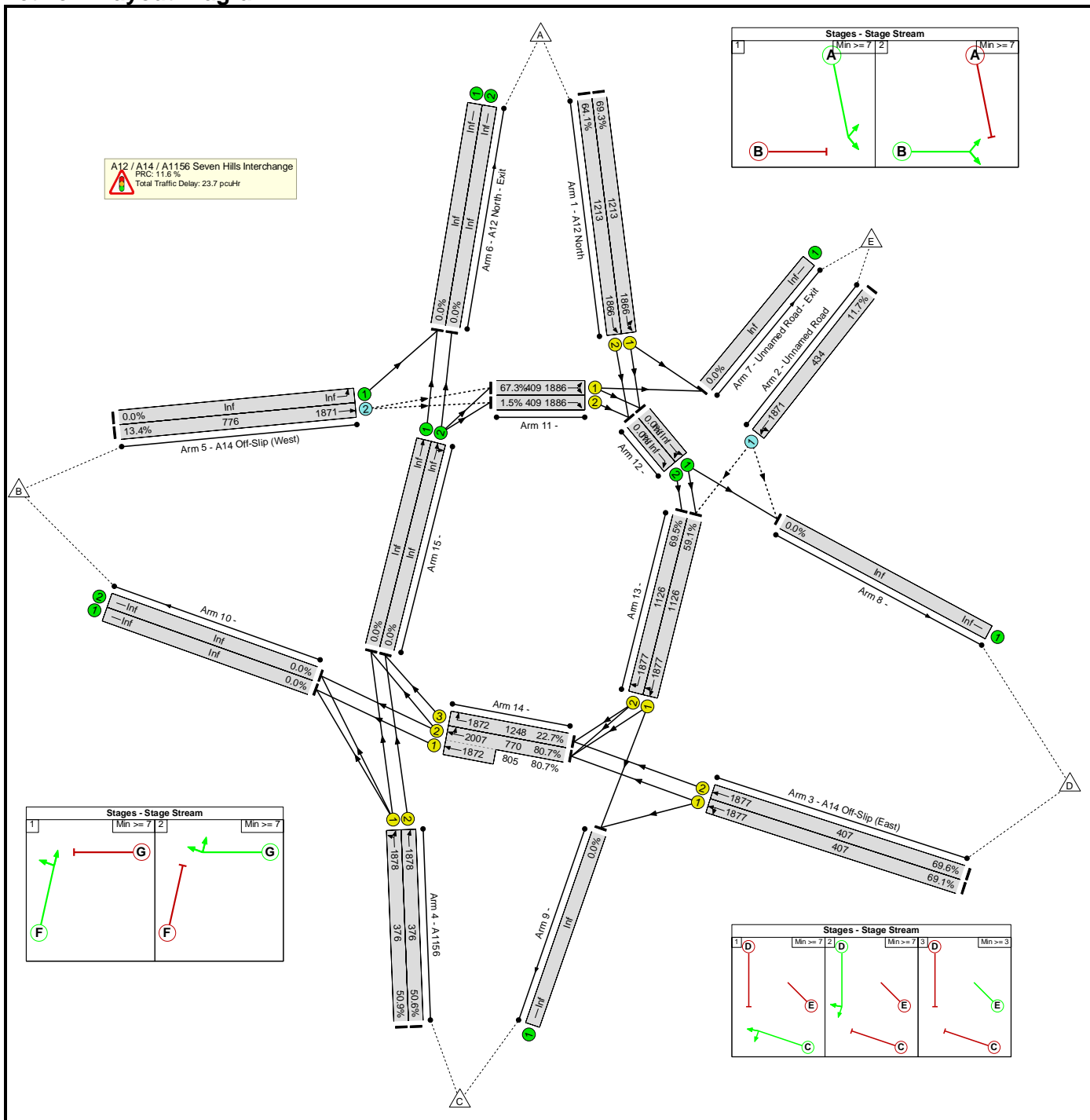
Scenario 1: 'BY 06:00-07:00' (FG1: 'BY 06:00-07:00', Plan 1: 'Network Control Plan 1')



Basic Results Summary

Scenario 2: 'BY 07:00-08:00' (FG2: 'BY 07:00-08:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

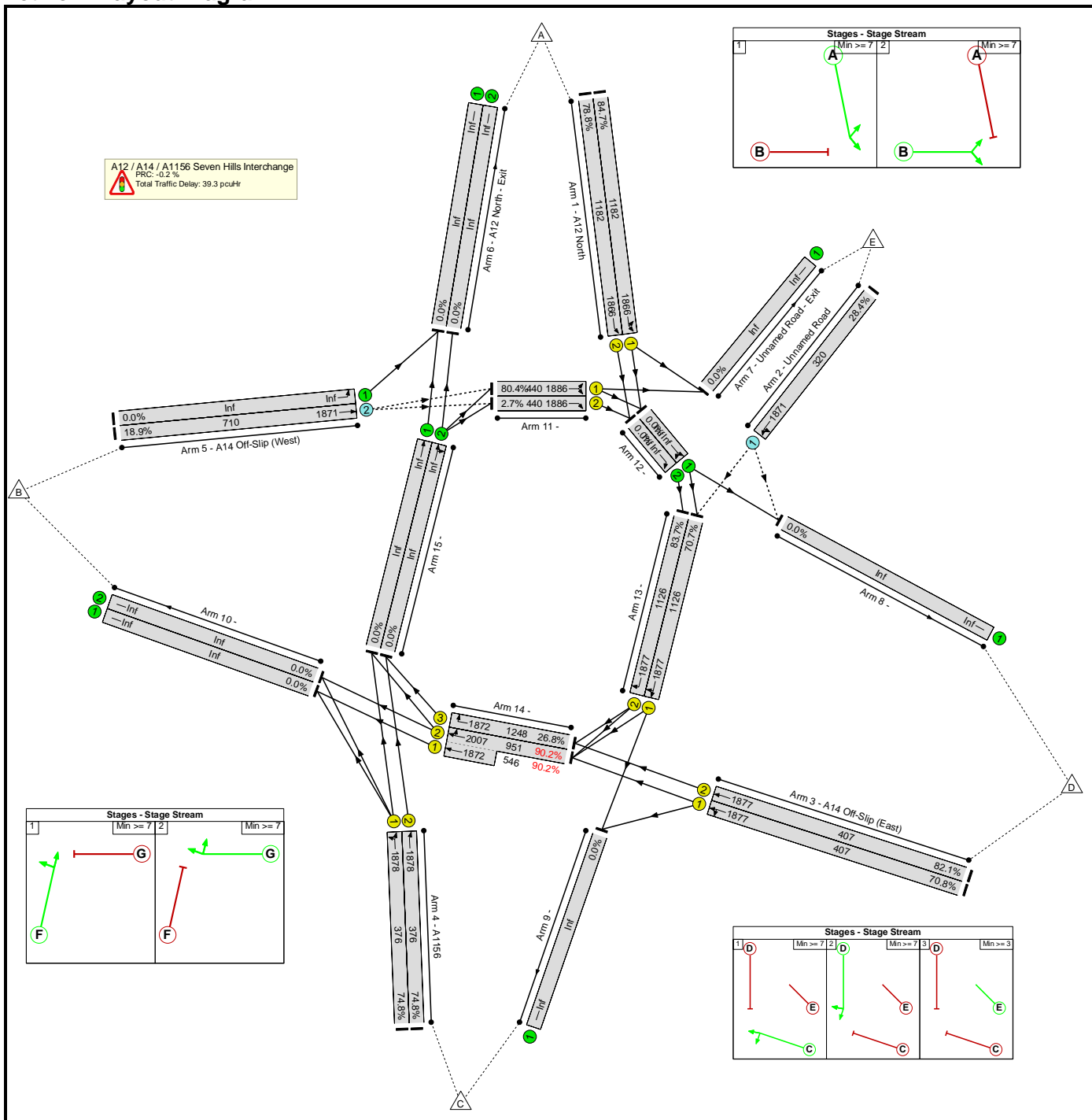
Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	-	80.7%
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	80.7%
1/1	A12 North Left Ahead	10.0	11.5	69.3%
1/2	A12 North Ahead	8.4	10.4	64.1%
2/1	Unnamed Road Left Ahead	0.3	7.0	11.7%
3/1	A14 Off-Slip (East) Left Ahead	5.4	35.7	69.1%
3/2	A14 Off-Slip (East) Ahead	5.4	36.0	69.6%
4/1	A1156 Left Ahead	3.3	31.1	50.9%
4/2	A1156 Ahead	3.3	31.0	50.6%
5/2	A14 Off-Slip (West) Ahead	0.1	2.7	13.4%
11/1	Left Right	5.3	28.4	67.3%
11/2	Right	0.1	23.3	1.5%
13/1	Ahead Right	4.5	8.0	59.1%
13/2	Right	3.9	8.3	69.5%
14/2+14/1	Ahead Right	26.1	8.7 (9.2:8.3)	80.7 : 80.7%
14/3	Right	4.9	14.3	22.7%

C1	Stream: 1	PRC for Signalled Lanes (%)	30.0	Total Delay for Signalled Lanes (pcuHr):	7.14	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%)	29.3	Total Delay for Signalled Lanes (pcuHr):	8.89	Cycle Time (s):	60
C1	Stream: 3	PRC for Signalled Lanes (%)	11.6	Total Delay for Signalled Lanes (pcuHr):	7.49	Cycle Time (s):	60
		PRC Over All Lanes (%)	11.6	Total Delay Over All Lanes(pcuHr):	23.69		

Basic Results Summary

Scenario 3: 'BY 08:00-09:00' (FG3: 'BY 08:00-09:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

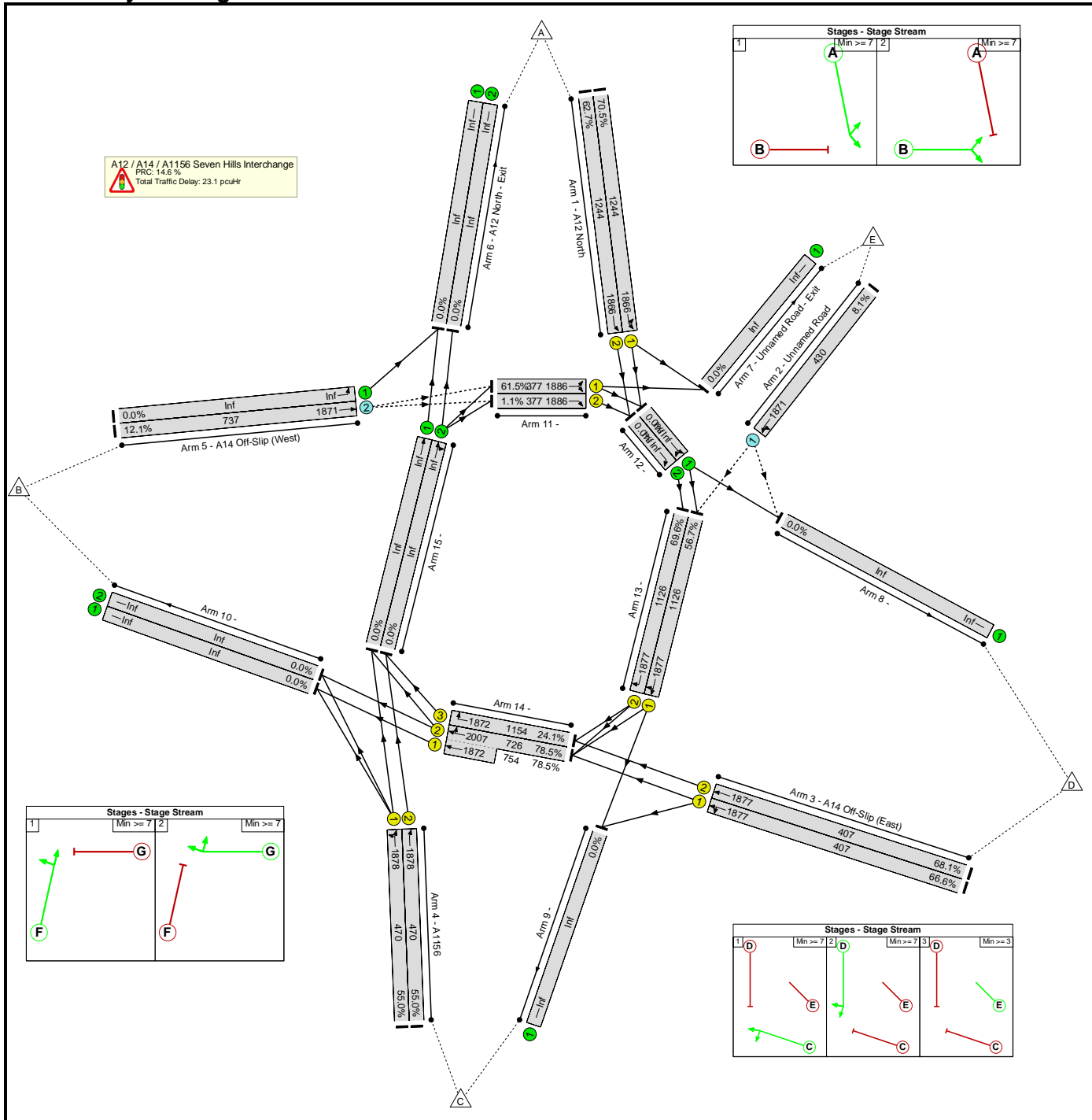
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	90.2%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	90.2%																												
1/1	A12 North Left Ahead	15.8	18.4	84.7%																												
1/2	A12 North Ahead	12.9	15.1	78.8%																												
2/1	Unnamed Road Left Ahead	1.0	14.5	28.4%																												
3/1	A14 Off-Slip (East) Left Ahead	5.6	36.6	70.8%																												
3/2	A14 Off-Slip (East) Ahead	7.5	45.8	82.1%																												
4/1	A1156 Left Ahead	5.8	41.1	74.8%																												
4/2	A1156 Ahead	5.8	41.1	74.8%																												
5/2	A14 Off-Slip (West) Ahead	0.1	3.1	18.9%																												
11/1	Left Right	7.5	33.5	80.4%																												
11/2	Right	0.2	22.2	2.7%																												
13/1	Ahead Right	8.1	11.1	70.7%																												
13/2	Right	6.7	12.2	83.7%																												
14/2+14/1	Ahead Right	28.8	14.9 (15.1:14.5)	90.2 : 90.2%																												
14/3	Right	5.7	17.5	26.8%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>6.3</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>12.38</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>7.5</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>12.83</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>-0.2</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>13.60</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>-0.2</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>39.30</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	6.3	Total Delay for Signalled Lanes (pcuHr):	12.38	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	7.5	Total Delay for Signalled Lanes (pcuHr):	12.83	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	-0.2	Total Delay for Signalled Lanes (pcuHr):	13.60	Cycle Time (s):	60		PRC Over All Lanes (%)	-0.2	Total Delay Over All Lanes(pcuHr):	39.30		
C1	Stream: 1 PRC for Signalled Lanes (%)	6.3	Total Delay for Signalled Lanes (pcuHr):	12.38	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	7.5	Total Delay for Signalled Lanes (pcuHr):	12.83	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	-0.2	Total Delay for Signalled Lanes (pcuHr):	13.60	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	-0.2	Total Delay Over All Lanes(pcuHr):	39.30																												

Basic Results Summary

Scenario 4: 'BY 15:00-16:00' (FG4: 'BY 15:00-16:00', Plan 1: 'Network Control Plan 1')

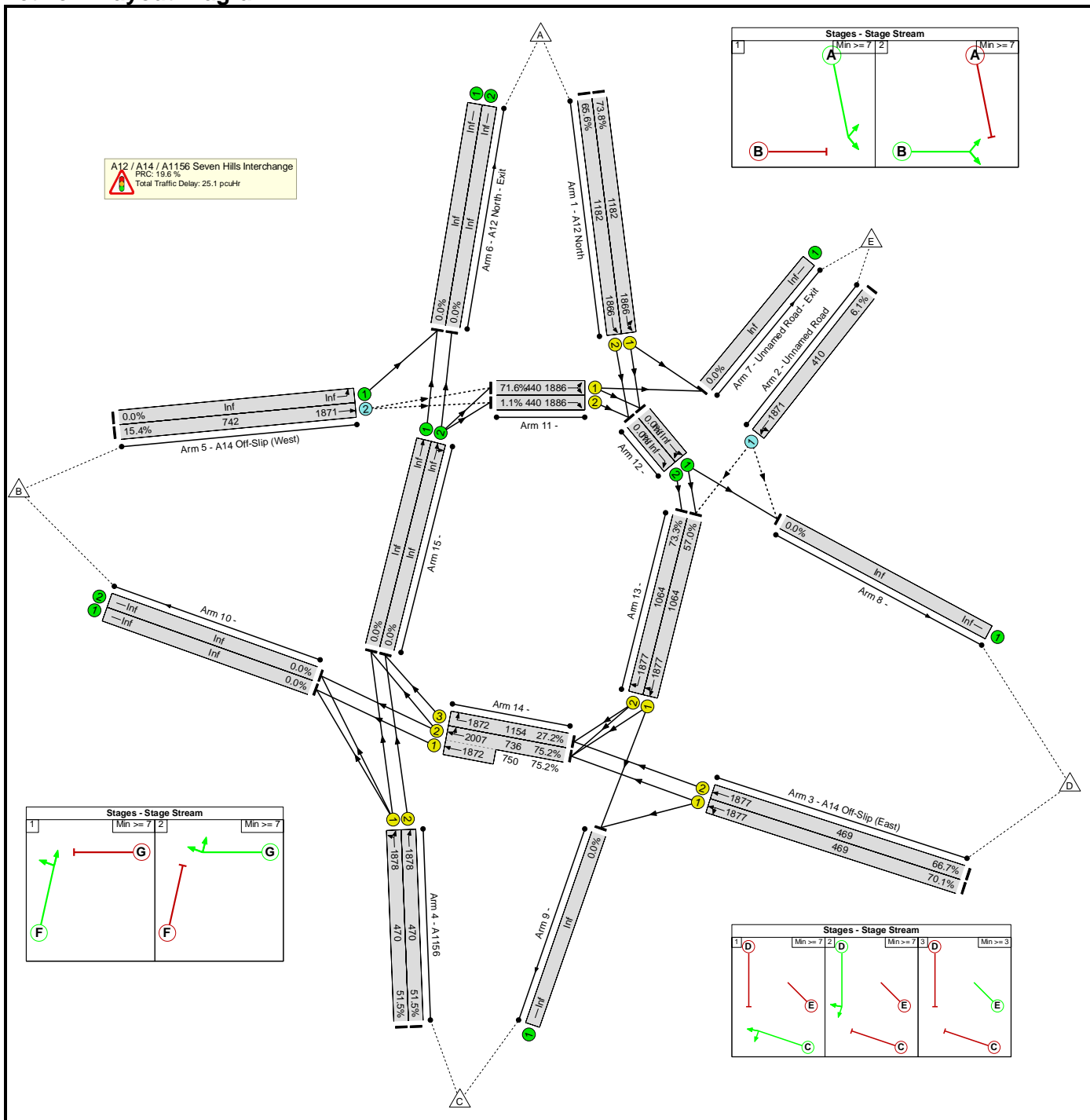
Network Layout Diagram



Basic Results Summary

Scenario 5: 'BY 17:00-18:00' (FG5: 'BY 17:00-18:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

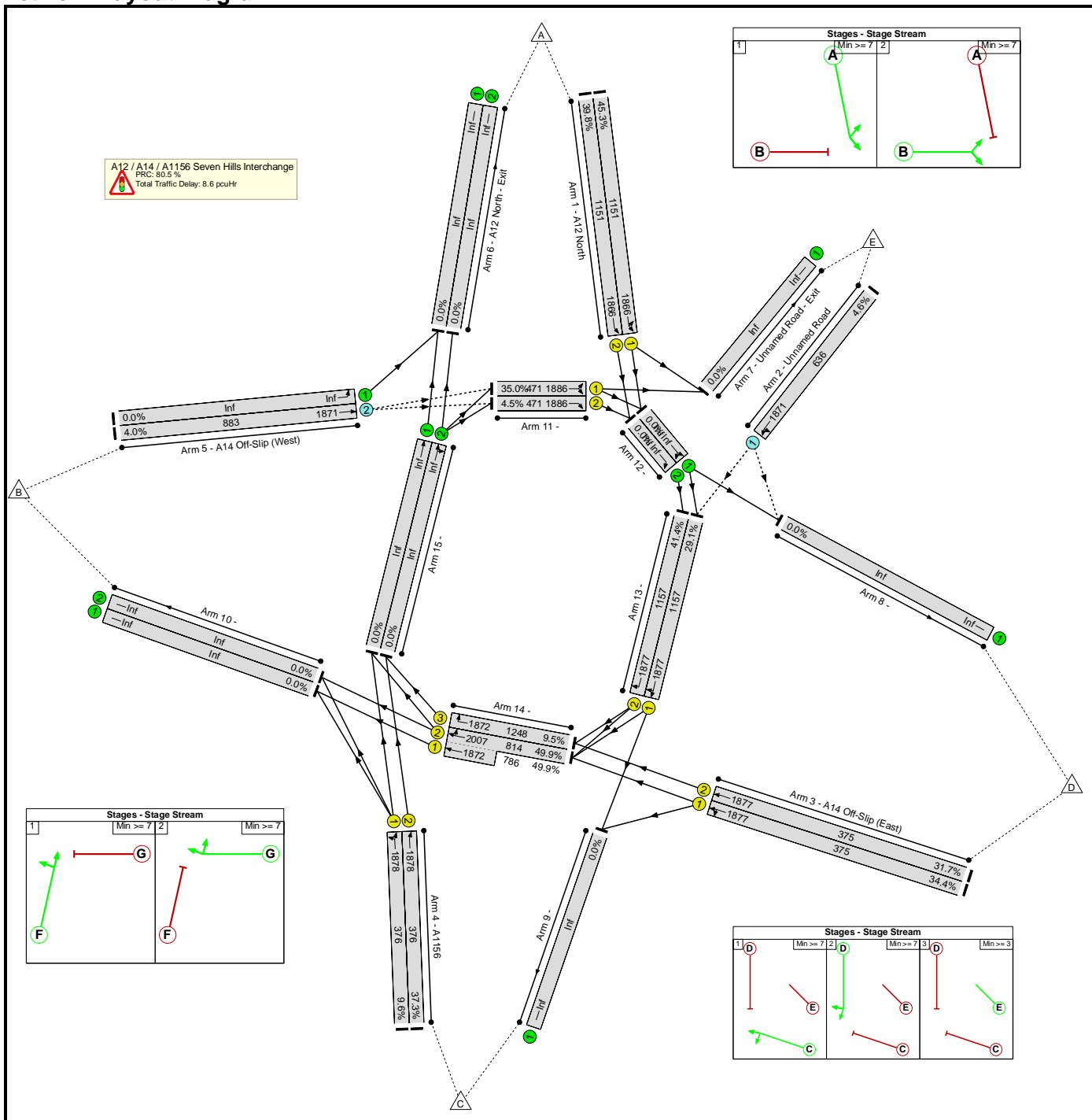
Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	-	75.2%
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	75.2%
1/1	A12 North Left Ahead	11.3	13.3	73.8%
1/2	A12 North Ahead	8.9	11.3	65.6%
2/1	Unnamed Road Left Ahead	0.2	7.2	6.1%
3/1	A14 Off-Slip (East) Left Ahead	6.1	33.1	70.1%
3/2	A14 Off-Slip (East) Ahead	5.7	31.6	66.7%
4/1	A1156 Left Ahead	4.0	27.3	51.5%
4/2	A1156 Ahead	4.0	27.3	51.5%
5/2	A14 Off-Slip (West) Ahead	0.1	2.9	15.4%
11/1	Left Right	6.3	29.4	71.6%
11/2	Right	0.1	22.2	1.1%
13/1	Ahead Right	4.5	8.9	57.0%
13/2	Right	4.6	10.0	73.3%
14/2+14/1	Ahead Right	21.3	6.7 (7.3:6.1)	75.2 : 75.2%
14/3	Right	5.4	17.4	27.2%

C1	Stream: 1	PRC for Signalled Lanes (%)	22.0	Total Delay for Signalled Lanes (pcuHr):	8.26	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%)	22.7	Total Delay for Signalled Lanes (pcuHr):	9.45	Cycle Time (s):	60
C1	Stream: 3	PRC for Signalled Lanes (%)	19.6	Total Delay for Signalled Lanes (pcuHr):	7.27	Cycle Time (s):	60
		PRC Over All Lanes (%)	19.6	Total Delay Over All Lanes(pcuHr):	25.13		

Basic Results Summary

Scenario 6: '23RC 06:00-07:00' (FG6: '23RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

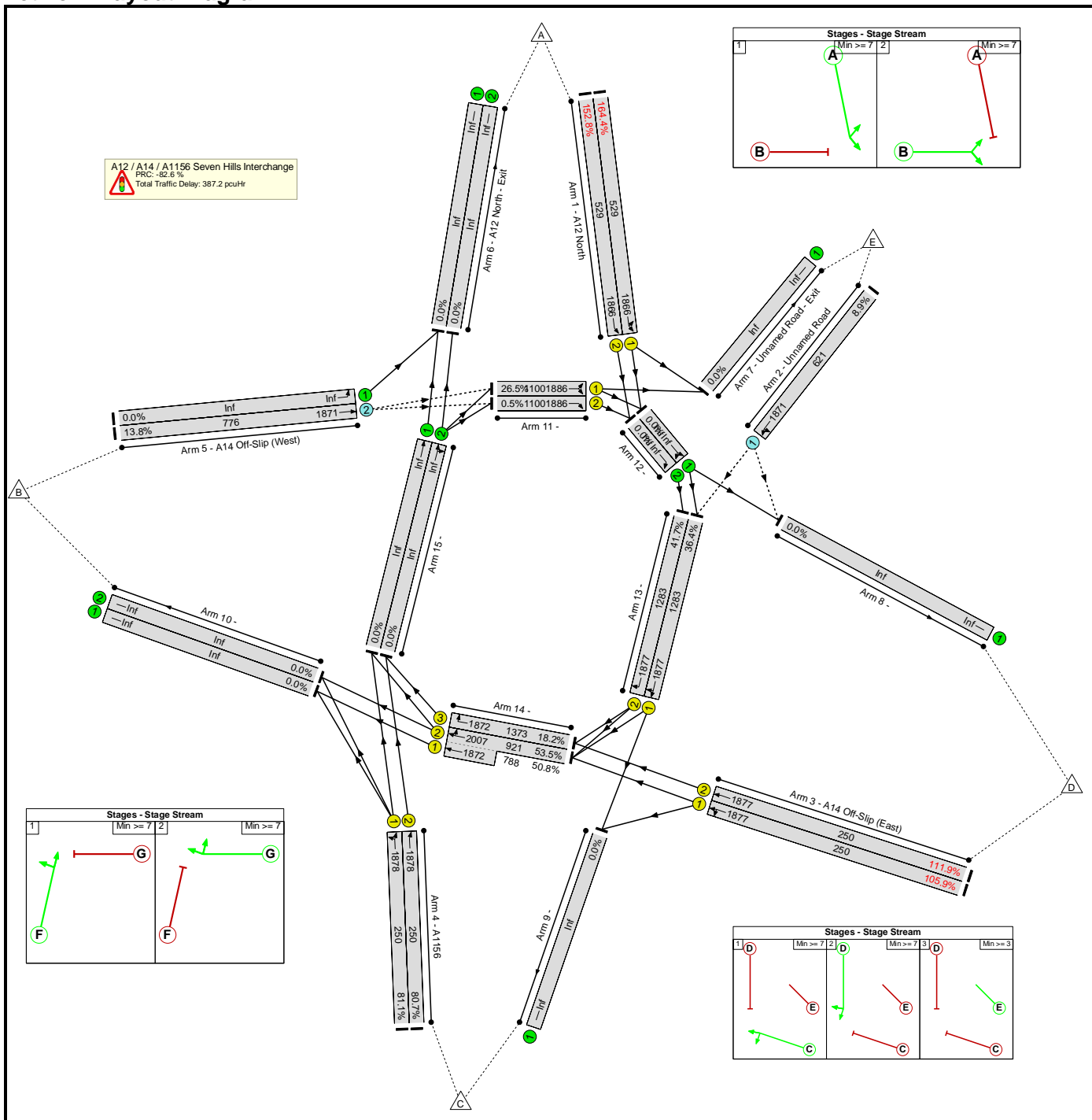
Network Layout Diagram



Basic Results Summary

Scenario 7: '23RC 07:00-08:00' (FG7: '23RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

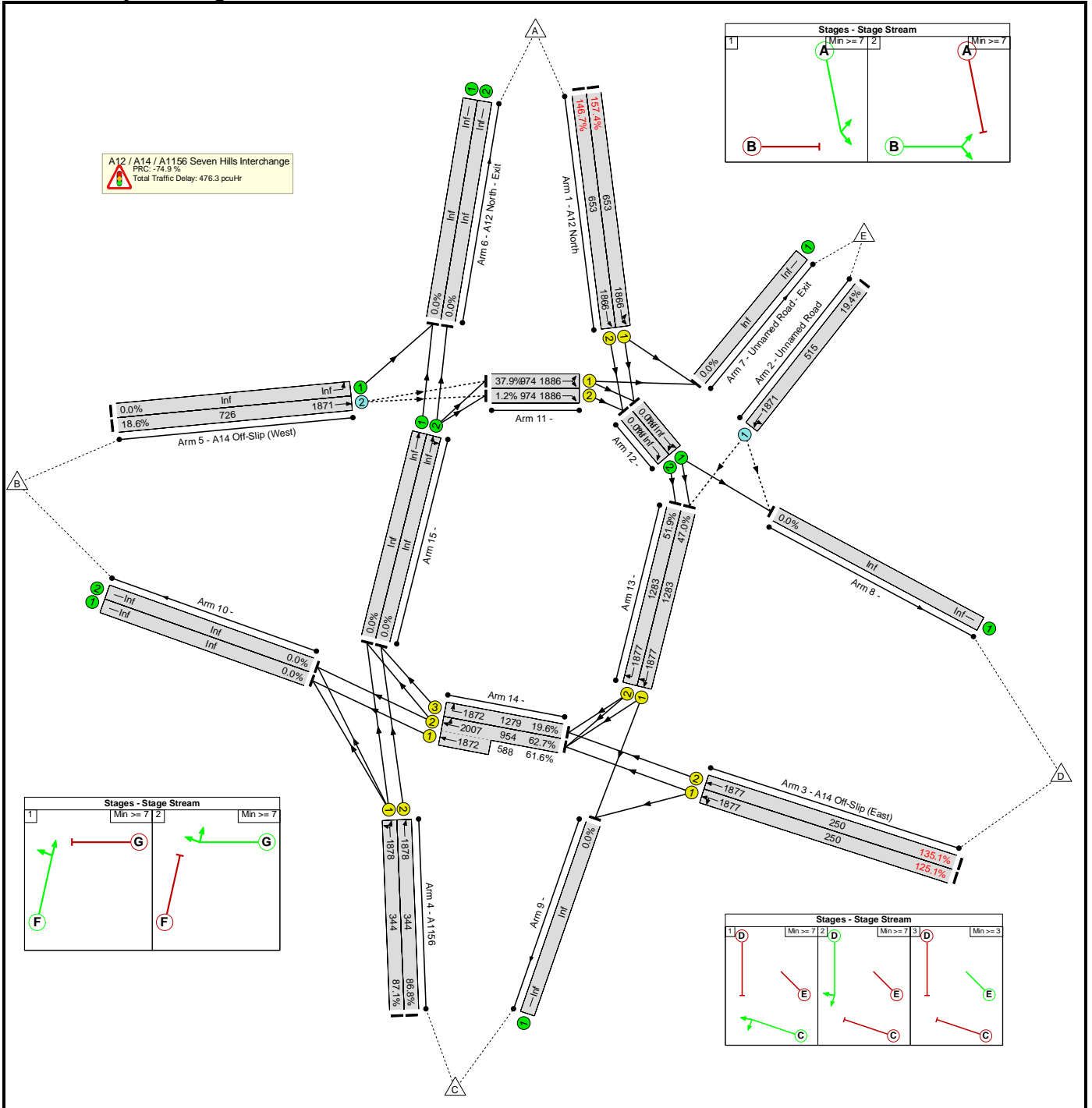
Network Layout Diagram



Basic Results Summary

Scenario 8: '23RC 08:00-09:00' (FG8: '23RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

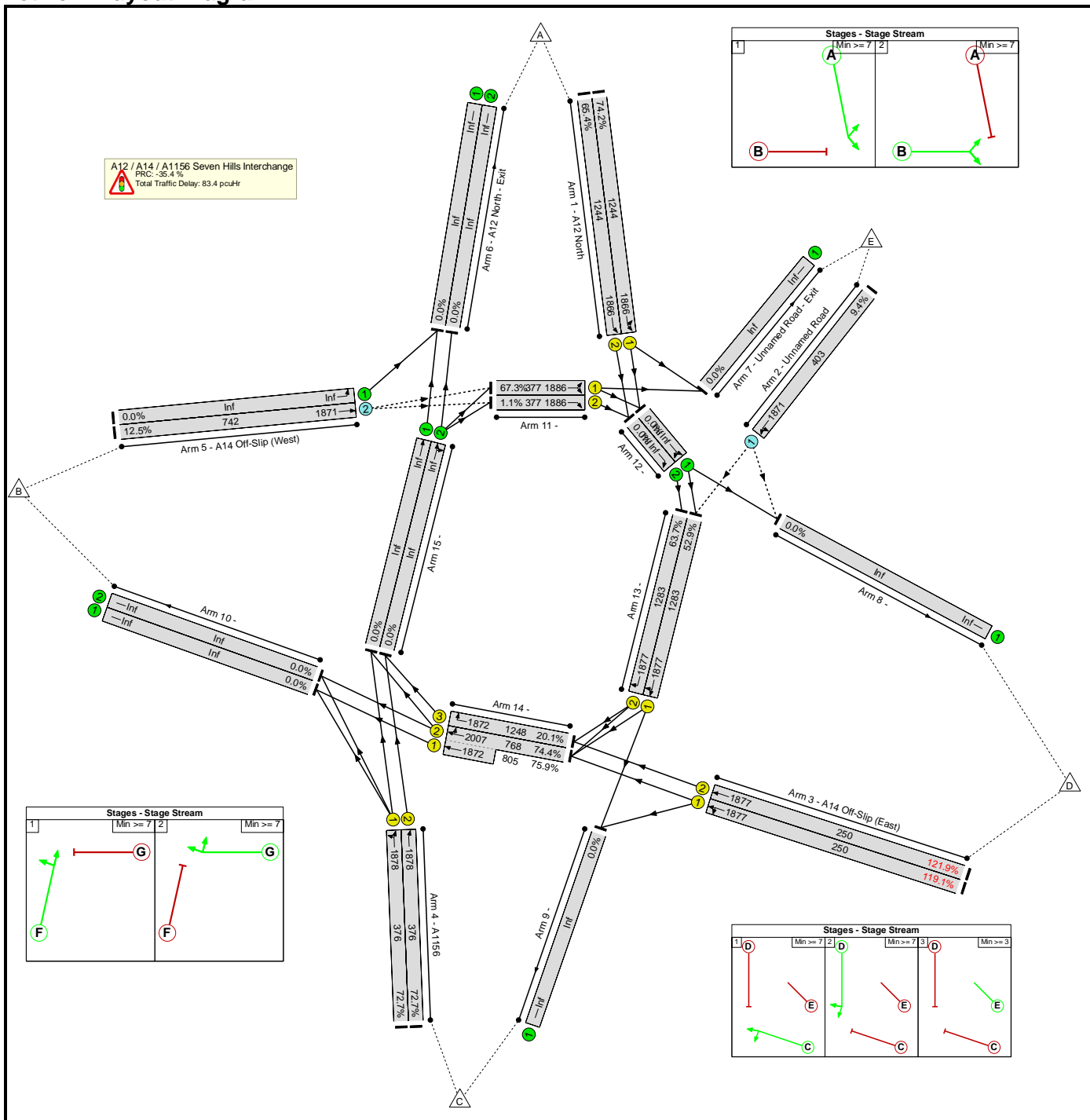
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	157.4%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	157.4%																												
1/1	A12 North Left Ahead	212.2	718.3	157.4%																												
1/2	A12 North Ahead	175.1	631.0	146.7%																												
2/1	Unnamed Road Left Ahead	0.7	8.1	19.4%																												
3/1	A14 Off-Slip (East) Left Ahead	40.0	435.6	125.1%																												
3/2	A14 Off-Slip (East) Ahead	53.0	541.6	135.1%																												
4/1	A1156 Left Ahead	7.8	59.6	87.1%																												
4/2	A1156 Ahead	7.7	59.0	86.8%																												
5/2	A14 Off-Slip (West) Ahead	0.2	3.0	18.6%																												
11/1	Left Right	1.6	6.5	37.9%																												
11/2	Right	0.1	9.1	1.2%																												
13/1	Ahead Right	2.0	4.4	47.0%																												
13/2	Right	0.7	3.2	51.9%																												
14/2+14/1	Ahead Right	15.3	4.3 (4.8:3.7)	62.7 : 61.6%																												
14/3	Right	4.3	17.3	19.6%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>-74.9</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>373.72</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>-50.1</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>90.04</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>3.3</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>12.23</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>-74.9</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>476.33</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	-74.9	Total Delay for Signalled Lanes (pcuHr):	373.72	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	-50.1	Total Delay for Signalled Lanes (pcuHr):	90.04	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	3.3	Total Delay for Signalled Lanes (pcuHr):	12.23	Cycle Time (s):	60		PRC Over All Lanes (%)	-74.9	Total Delay Over All Lanes(pcuHr):	476.33		
C1	Stream: 1 PRC for Signalled Lanes (%)	-74.9	Total Delay for Signalled Lanes (pcuHr):	373.72	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	-50.1	Total Delay for Signalled Lanes (pcuHr):	90.04	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	3.3	Total Delay for Signalled Lanes (pcuHr):	12.23	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	-74.9	Total Delay Over All Lanes(pcuHr):	476.33																												

Basic Results Summary

Scenario 9: '23RC 15:00-16:00' (FG9: '23RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

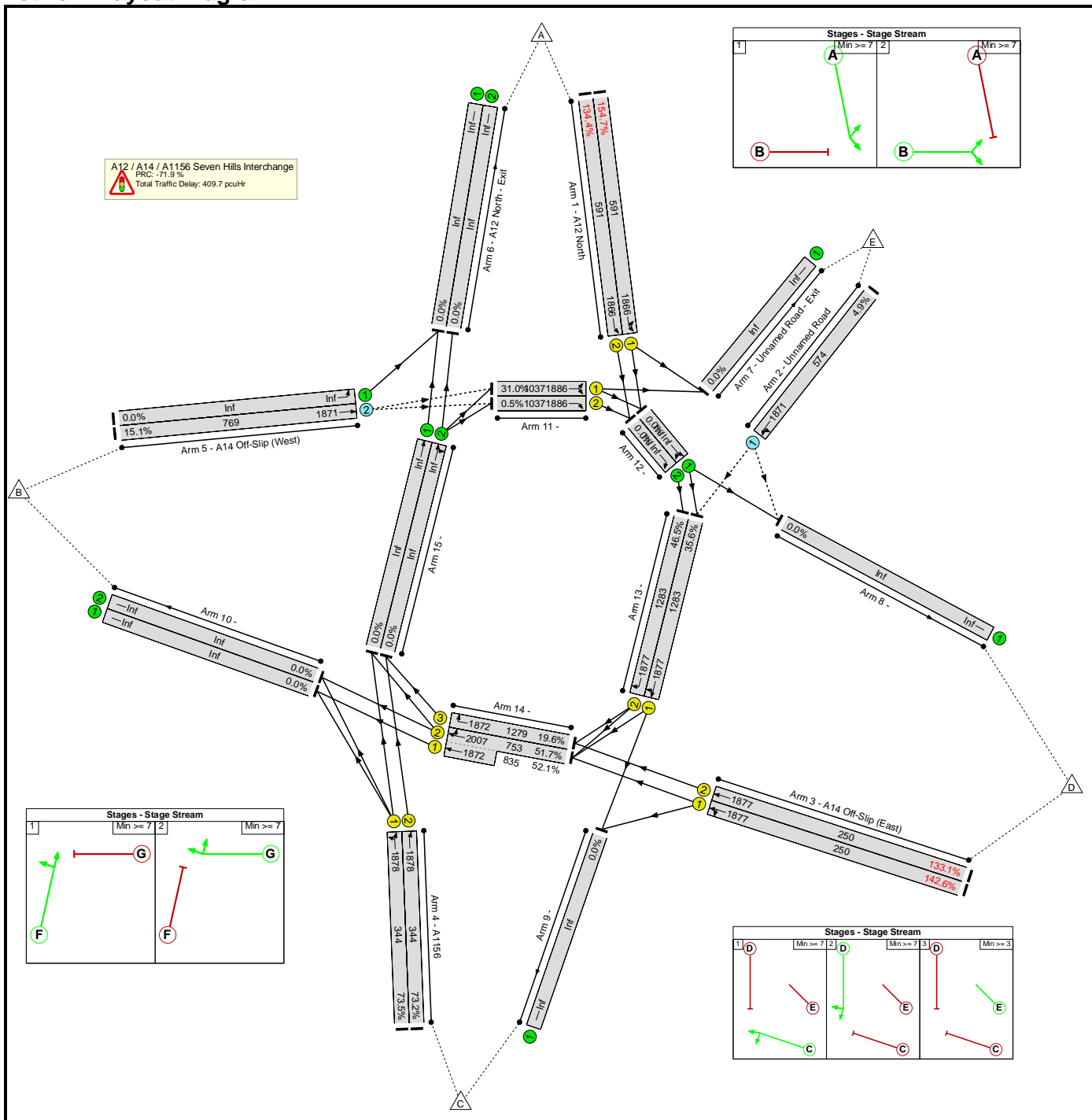
Network Layout Diagram



Basic Results Summary

Scenario 10: '23RC 17:00-18:00' (FG10: '23RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

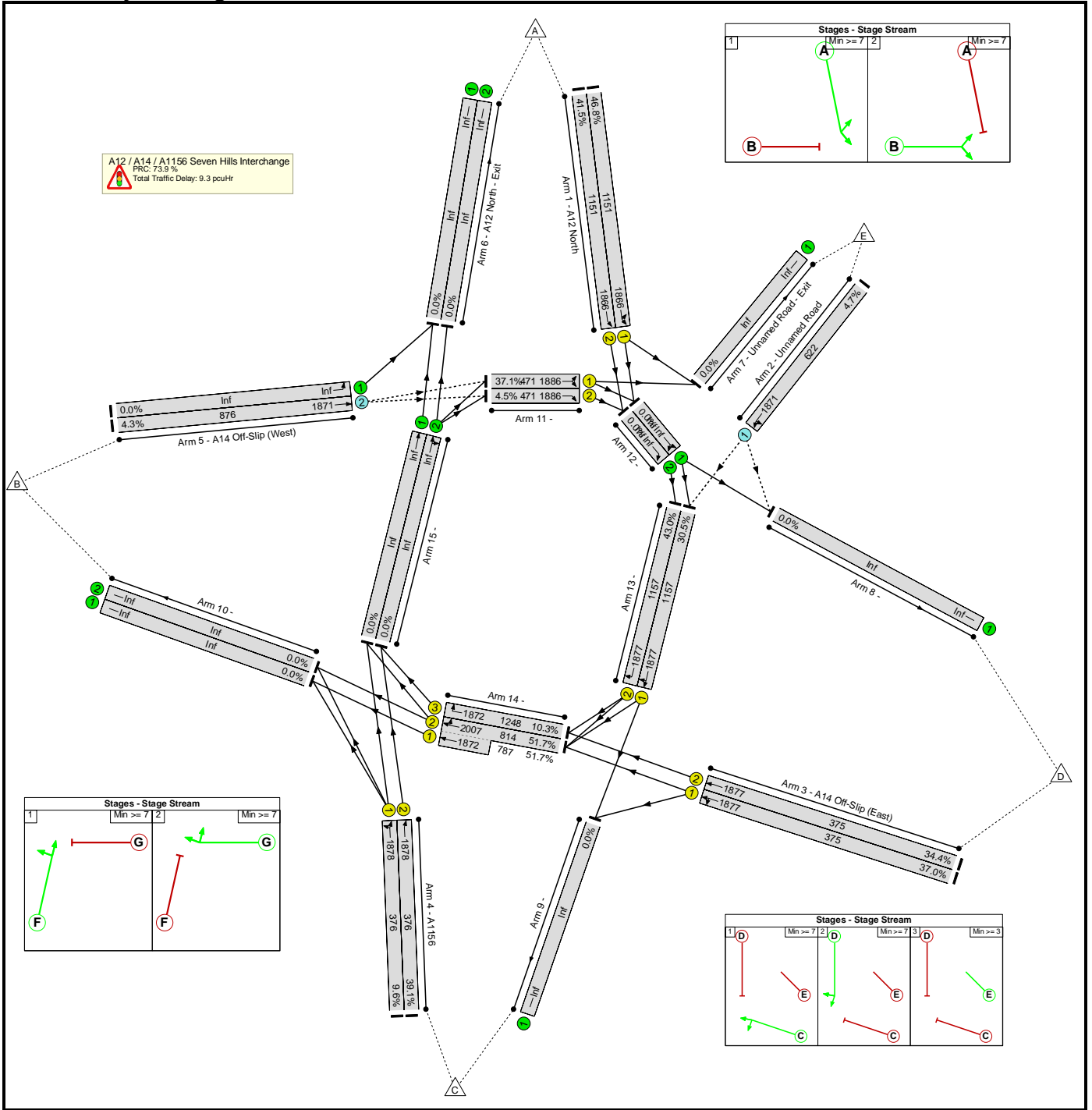
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	154.7%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	154.7%																												
1/1	A12 North Left Ahead	183.6	699.1	154.7%																												
1/2	A12 North Ahead	120.1	516.2	134.4%																												
2/1	Unnamed Road Left Ahead	0.2	5.9	4.9%																												
3/1	A14 Off-Slip (East) Left Ahead	63.5	614.8	142.6%																												
3/2	A14 Off-Slip (East) Ahead	50.7	522.4	133.1%																												
4/1	A1156 Left Ahead	5.3	42.3	73.5%																												
4/2	A1156 Ahead	5.2	42.1	73.2%																												
5/2	A14 Off-Slip (West) Ahead	0.1	2.8	15.1%																												
11/1	Left Right	1.3	4.9	31.0%																												
11/2	Right	0.0	8.0	0.5%																												
13/1	Ahead Right	1.2	3.6	35.6%																												
13/2	Right	0.7	3.0	46.5%																												
14/2+14/1	Ahead Right	15.0	3.2 (3.4:3.0)	51.7 : 52.1%																												
14/3	Right	4.3	13.3	19.6%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>-71.9</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>291.80</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>-58.5</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>110.24</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>22.5</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>7.58</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>-71.9</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>409.75</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	-71.9	Total Delay for Signalled Lanes (pcuHr):	291.80	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	-58.5	Total Delay for Signalled Lanes (pcuHr):	110.24	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	22.5	Total Delay for Signalled Lanes (pcuHr):	7.58	Cycle Time (s):	60		PRC Over All Lanes (%)	-71.9	Total Delay Over All Lanes(pcuHr):	409.75		
C1	Stream: 1 PRC for Signalled Lanes (%)	-71.9	Total Delay for Signalled Lanes (pcuHr):	291.80	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	-58.5	Total Delay for Signalled Lanes (pcuHr):	110.24	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	22.5	Total Delay for Signalled Lanes (pcuHr):	7.58	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	-71.9	Total Delay Over All Lanes(pcuHr):	409.75																												

Basic Results Summary

Scenario 11: '23EY 06:00-07:00' (FG11: '23EY 06:00-07:00', Plan 1: 'Network Control Plan 1')

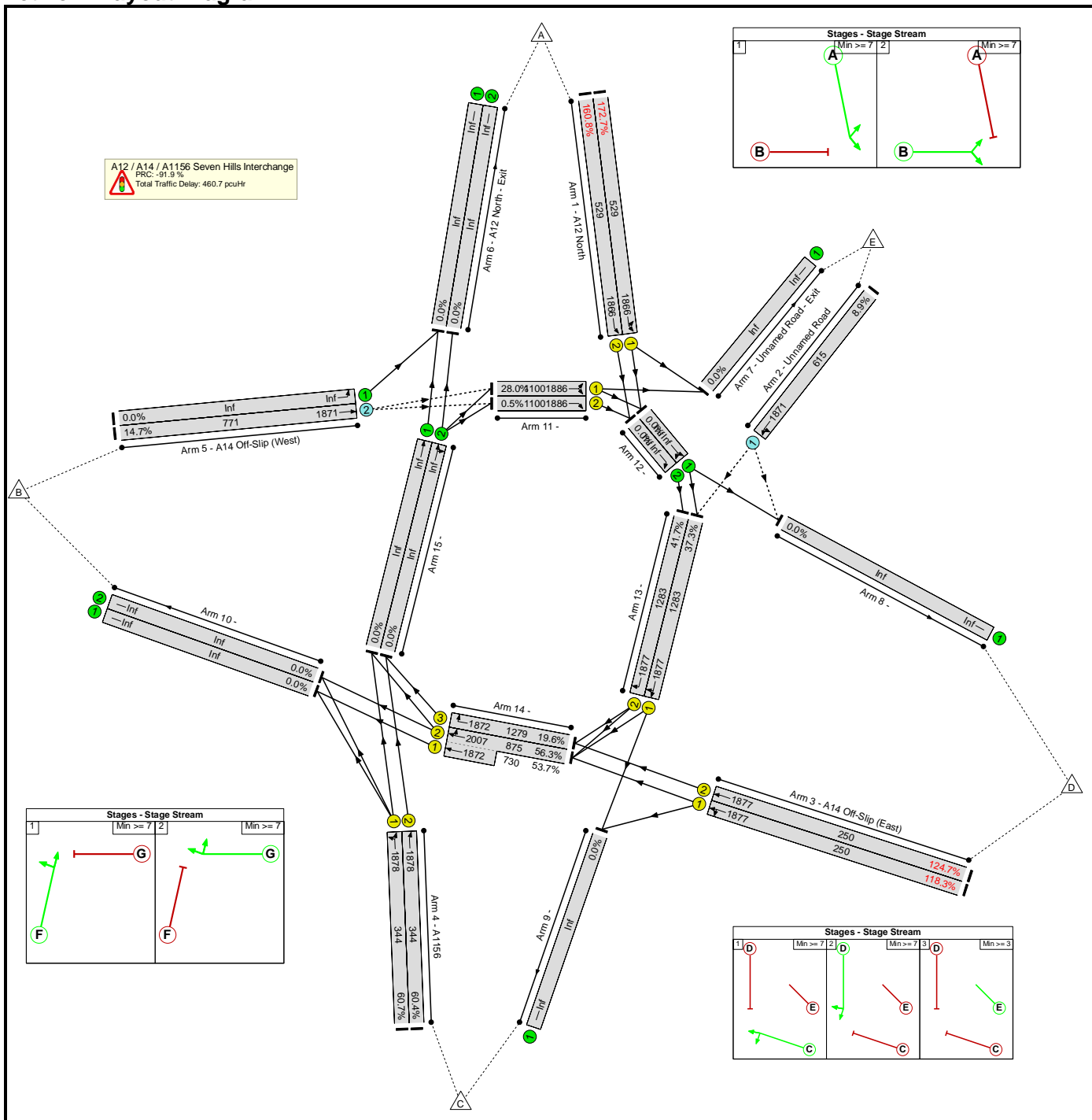
Network Layout Diagram



Basic Results Summary

Scenario 12: '23EY 07:00-08:00' (FG12: '23EY 07:00-08:00', Plan 1: 'Network Control Plan 1')

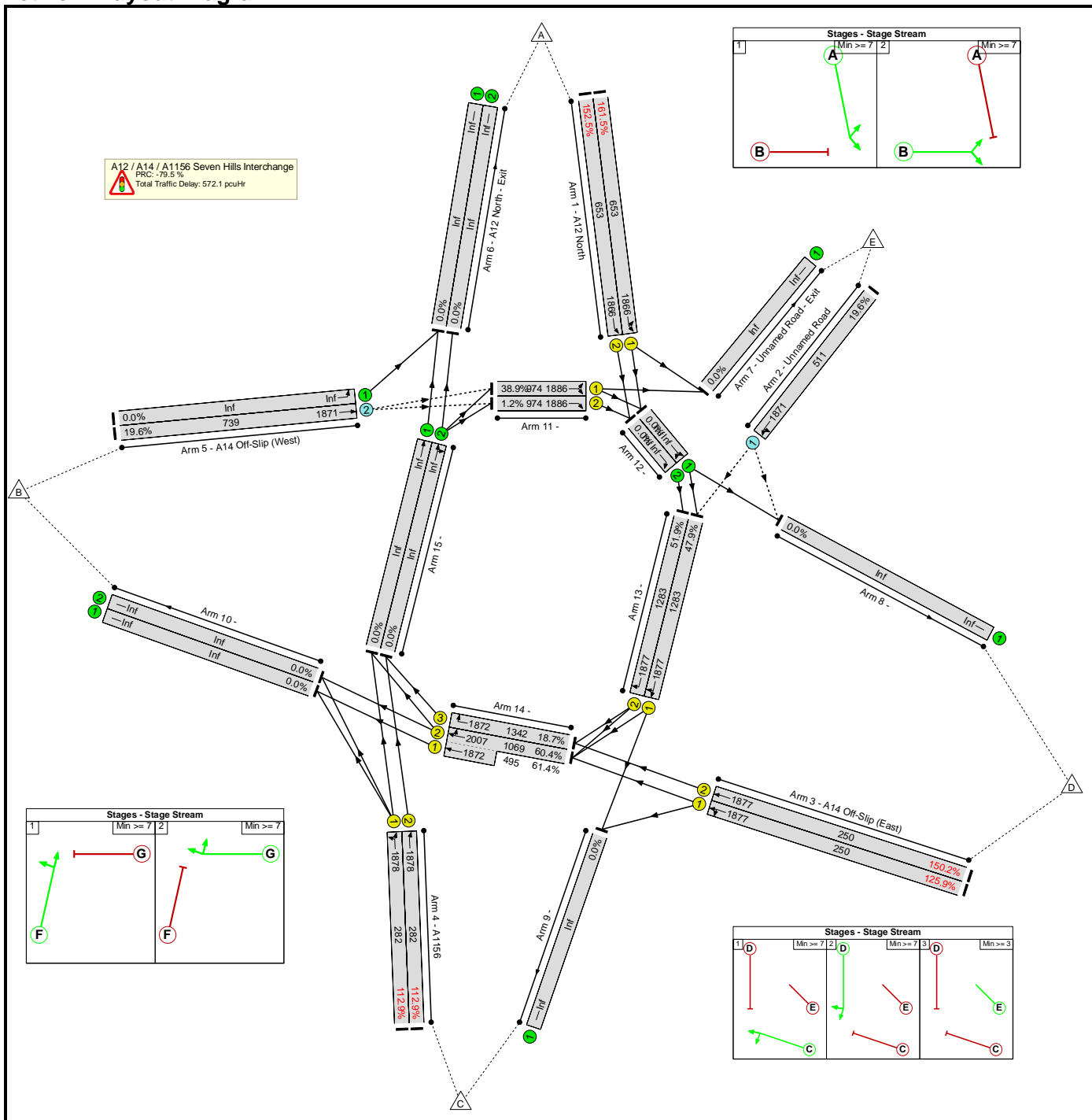
Network Layout Diagram



Basic Results Summary

Scenario 13: '23EY 08:00-09:00' (FG13: '23EY 08:00-09:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

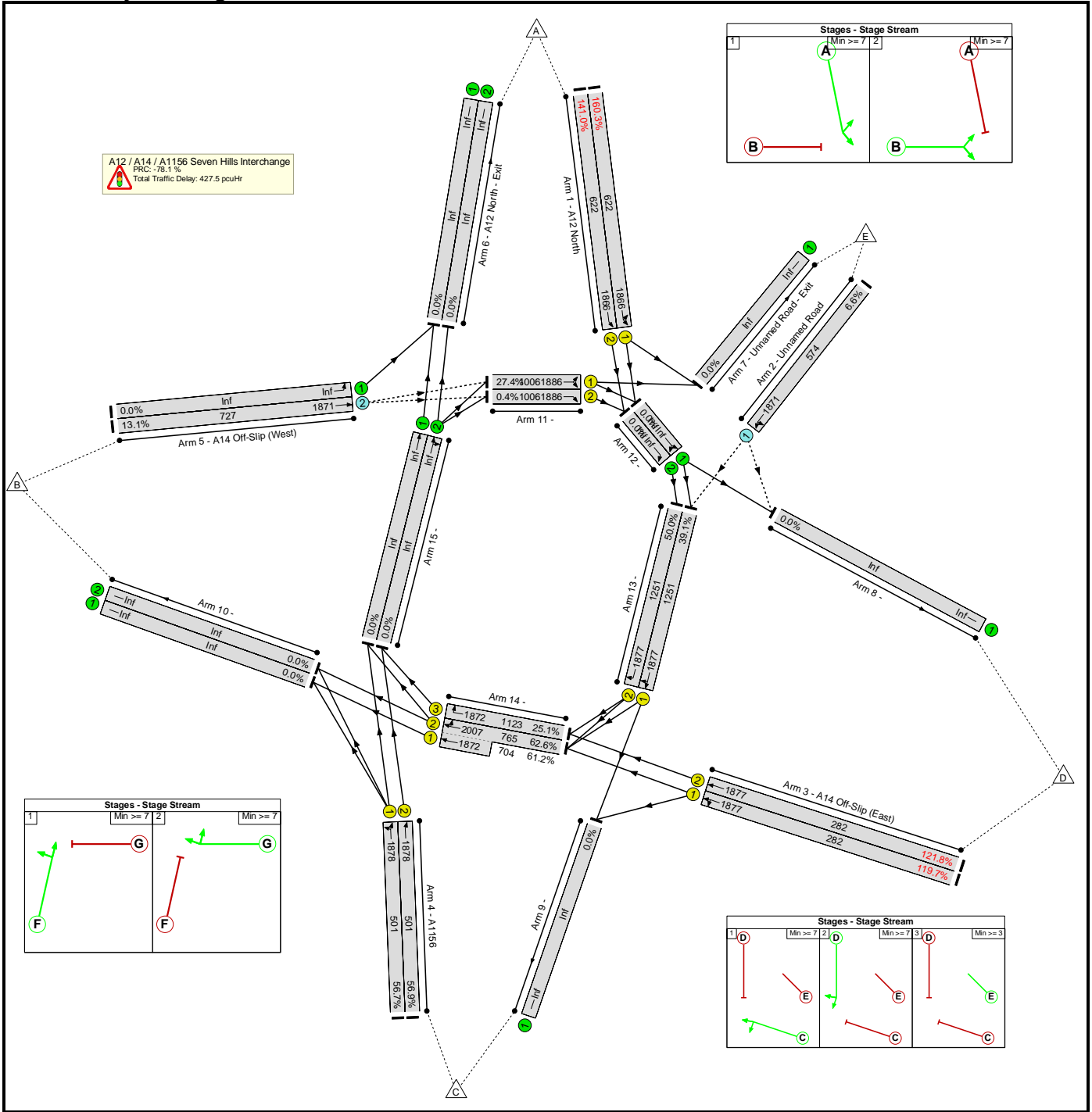
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	161.5%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	161.5%																												
1/1	A12 North Left Ahead	226.5	748.9	161.5%																												
1/2	A12 North Ahead	195.2	679.9	152.5%																												
2/1	Unnamed Road Left Ahead	0.7	8.1	19.6%																												
3/1	A14 Off-Slip (East) Left Ahead	41.0	444.6	125.9%																												
3/2	A14 Off-Slip (East) Ahead	73.3	678.9	150.2%																												
4/1	A1156 Left Ahead	27.7	283.6	112.9%																												
4/2	A1156 Ahead	27.7	283.6	112.9%																												
5/2	A14 Off-Slip (West) Ahead	0.2	3.0	19.6%																												
11/1	Left Right	1.7	6.6	38.9%																												
11/2	Right	0.1	9.1	1.2%																												
13/1	Ahead Right	2.1	4.5	47.9%																												
13/2	Right	0.7	3.2	51.9%																												
14/2+14/1	Ahead Right	15.3	3.9 (4.2:3.4)	60.4 : 61.4%																												
14/3	Right	4.3	16.2	18.7%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>-79.5</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>408.29</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>-66.9</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>111.15</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>-25.4</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>52.26</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>-79.5</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>572.05</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	-79.5	Total Delay for Signalled Lanes (pcuHr):	408.29	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	-66.9	Total Delay for Signalled Lanes (pcuHr):	111.15	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	-25.4	Total Delay for Signalled Lanes (pcuHr):	52.26	Cycle Time (s):	60		PRC Over All Lanes (%)	-79.5	Total Delay Over All Lanes(pcuHr):	572.05		
C1	Stream: 1 PRC for Signalled Lanes (%)	-79.5	Total Delay for Signalled Lanes (pcuHr):	408.29	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	-66.9	Total Delay for Signalled Lanes (pcuHr):	111.15	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	-25.4	Total Delay for Signalled Lanes (pcuHr):	52.26	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	-79.5	Total Delay Over All Lanes(pcuHr):	572.05																												

Basic Results Summary

Scenario 14: '23EY 15:00-16:00' (FG14: '23EY 15:00-16:00', Plan 1: 'Network Control Plan 1')

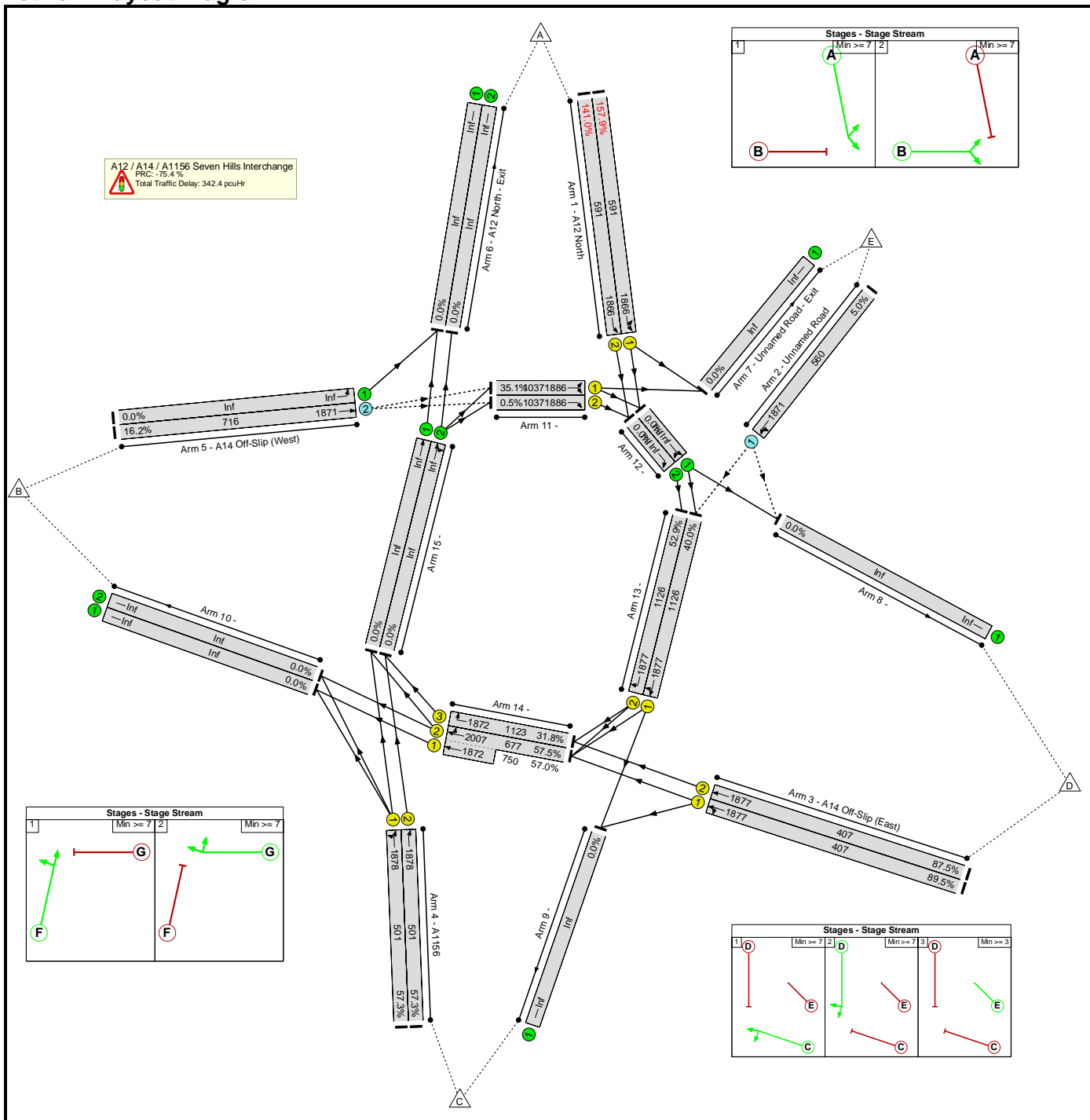
Network Layout Diagram



Basic Results Summary

Scenario 15: '23EY 17:00-18:00' (FG15: '23EY 17:00-18:00', Plan 1: 'Network Control Plan 1')

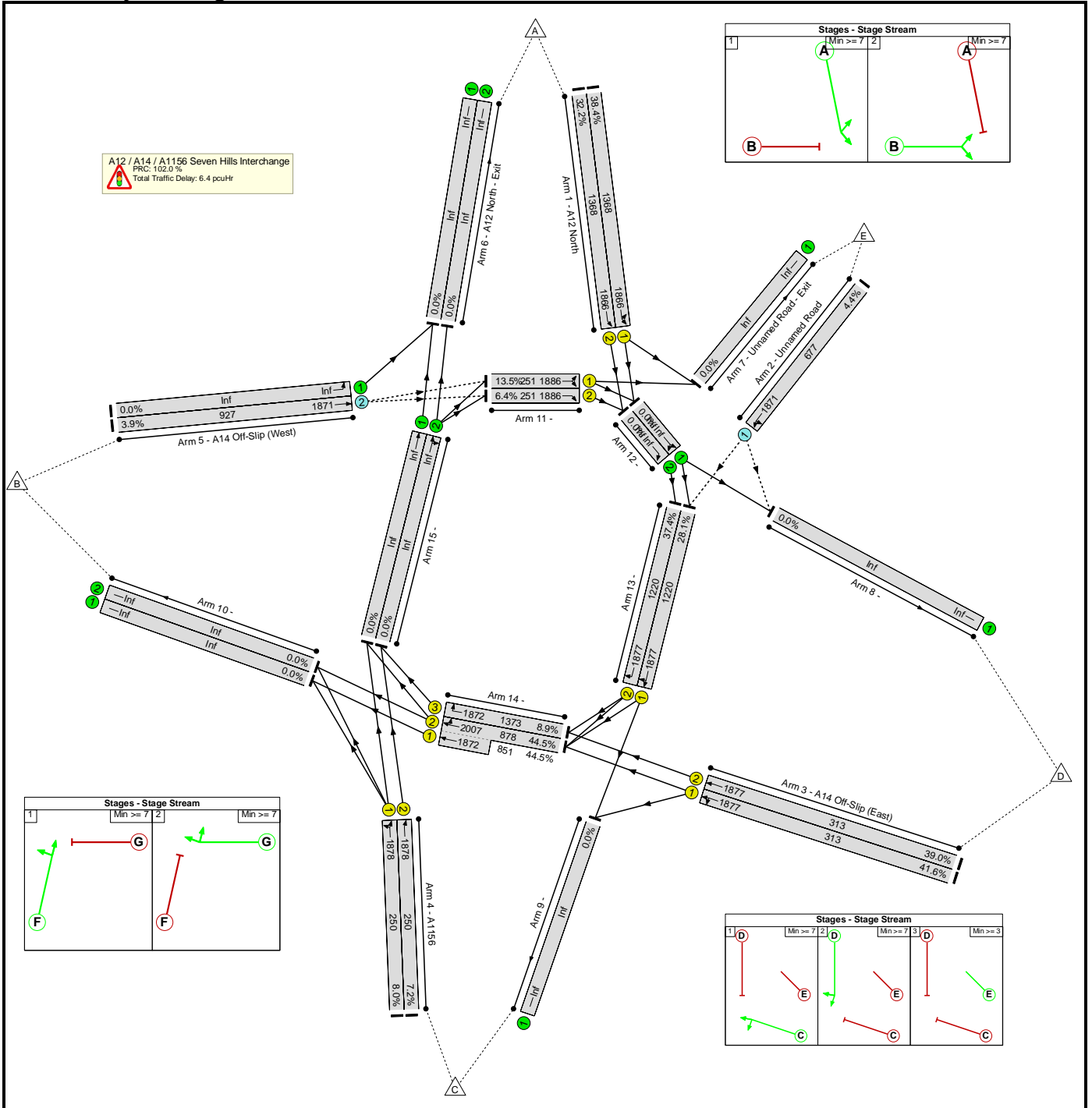
Network Layout Diagram



Basic Results Summary

Scenario 16: '28RC 06:00-07:00' (FG16: '28RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

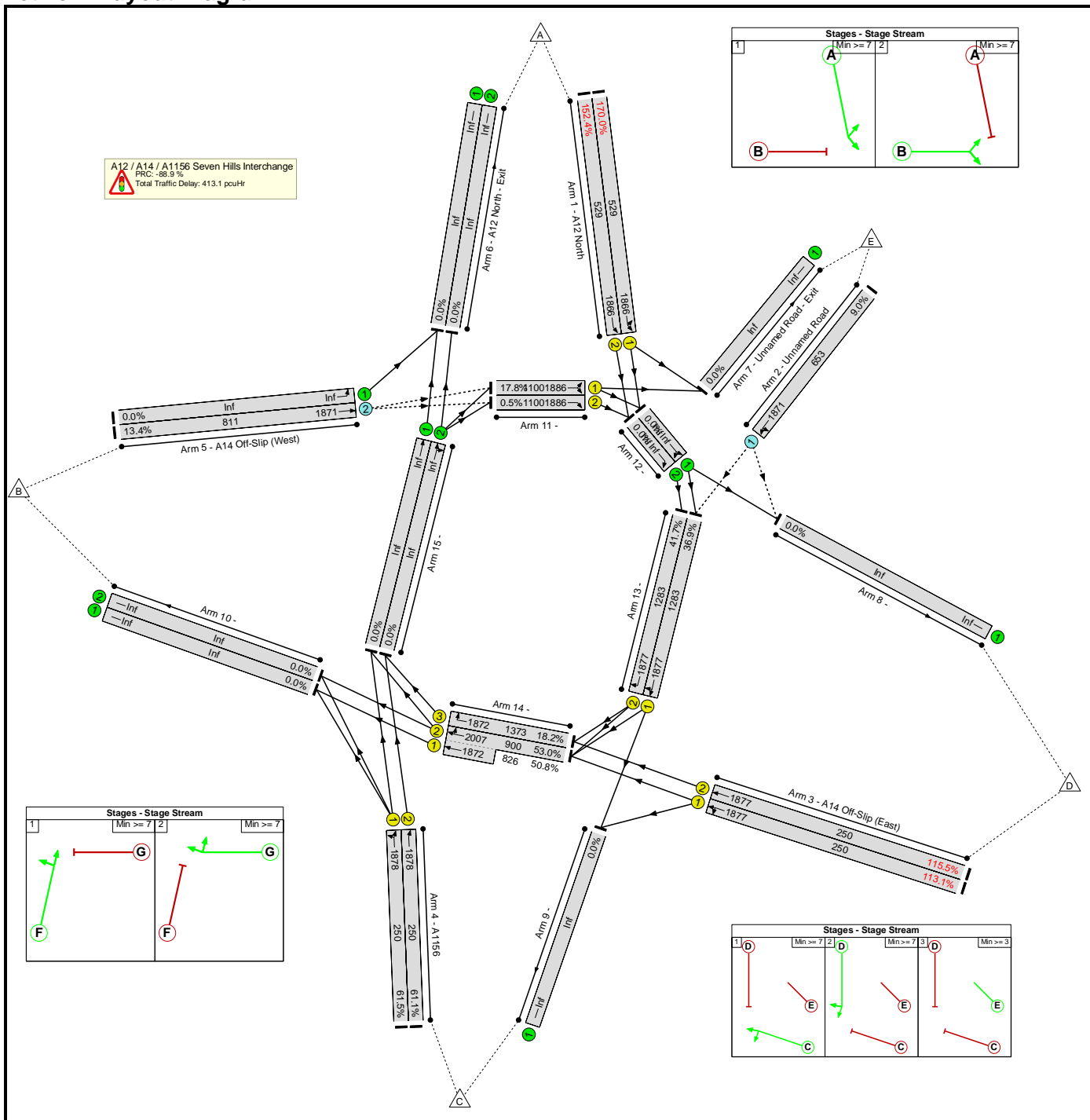
Network Layout Diagram



Basic Results Summary

Scenario 17: '28RC 07:00-08:00' (FG17: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

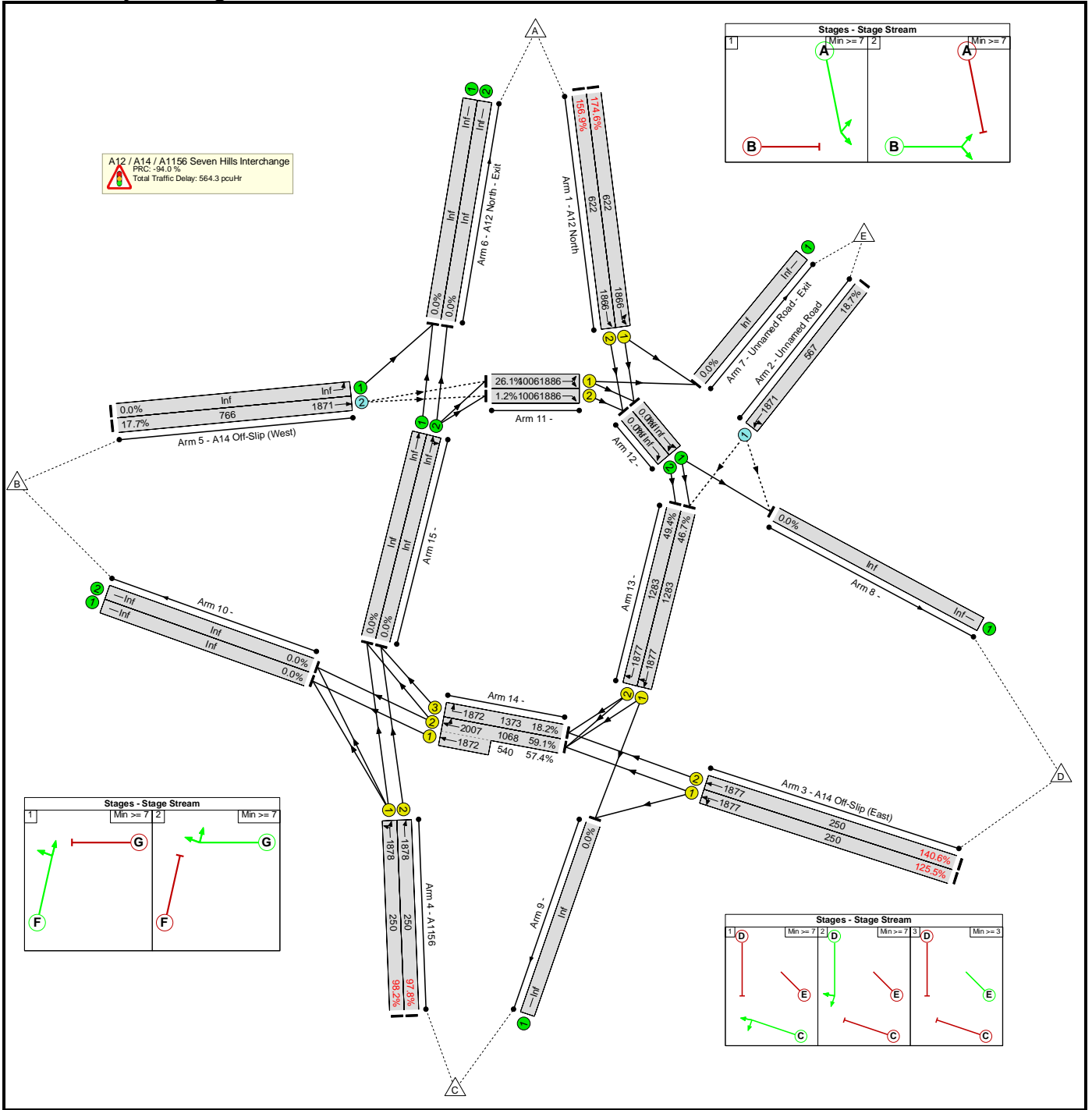
Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network: Junction 21 mitigation measures	-	-	-	170.0%
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	170.0%
1/1	A12 North Left Ahead	212.7	818.5	170.0%
1/2	A12 North Ahead	161.9	689.0	152.4%
2/1	Unnamed Road Left Ahead	0.3	5.2	9.0%
3/1	A14 Off-Slip (East) Left Ahead	25.2	289.0	113.1%
3/2	A14 Off-Slip (East) Ahead	28.0	318.3	115.5%
4/1	A1156 Left Ahead	3.2	42.9	61.5%
4/2	A1156 Ahead	3.2	42.7	61.1%
5/2	A14 Off-Slip (West) Ahead	0.1	2.6	13.4%
11/1	Left Right	0.9	5.5	17.8%
11/2	Right	0.0	7.1	0.5%
13/1	Ahead Right	1.2	3.5	36.9%
13/2	Right	0.6	2.7	41.7%
14/2+14/1	Ahead Right	15.5	3.7 (3.8:3.5)	53.0 : 50.8%
14/3	Right	1.0	4.4	18.2%

C1	Stream: 1	PRC for Signalled Lanes (%)	-88.9	Total Delay for Signalled Lanes (pcuHr):	358.97	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%)	-28.3	Total Delay for Signalled Lanes (pcuHr):	49.14	Cycle Time (s):	60
C1	Stream: 3	PRC for Signalled Lanes (%)	46.3	Total Delay for Signalled Lanes (pcuHr):	4.87	Cycle Time (s):	60
		PRC Over All Lanes (%)	-88.9	Total Delay Over All Lanes(pcuHr):	413.15		

Basic Results Summary

Scenario 18: '28RC 08:00-09:00' (FG18: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

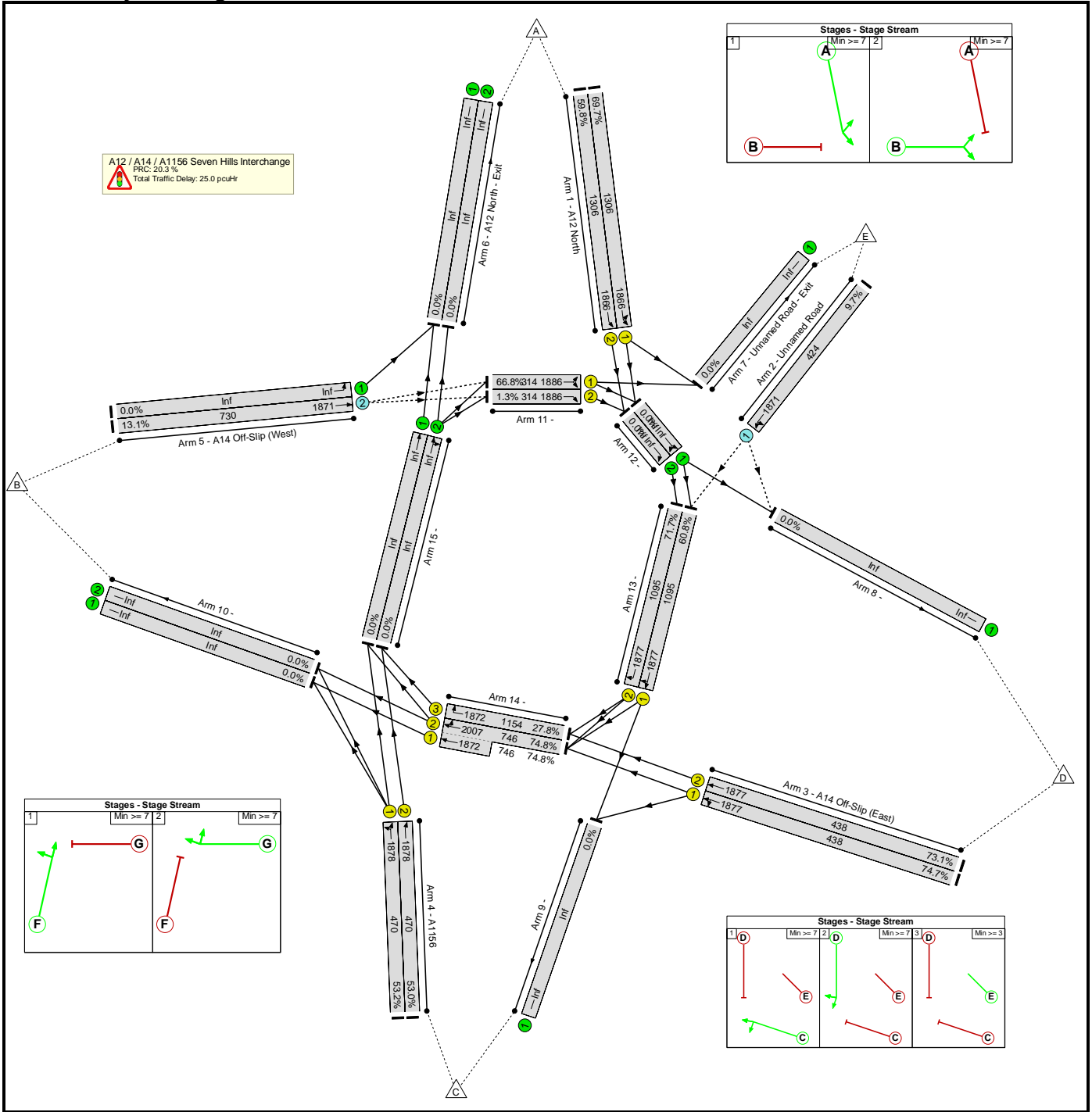
Network Layout Diagram



Basic Results Summary

Scenario 19: '28RC 15:00-16:00' (FG19: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

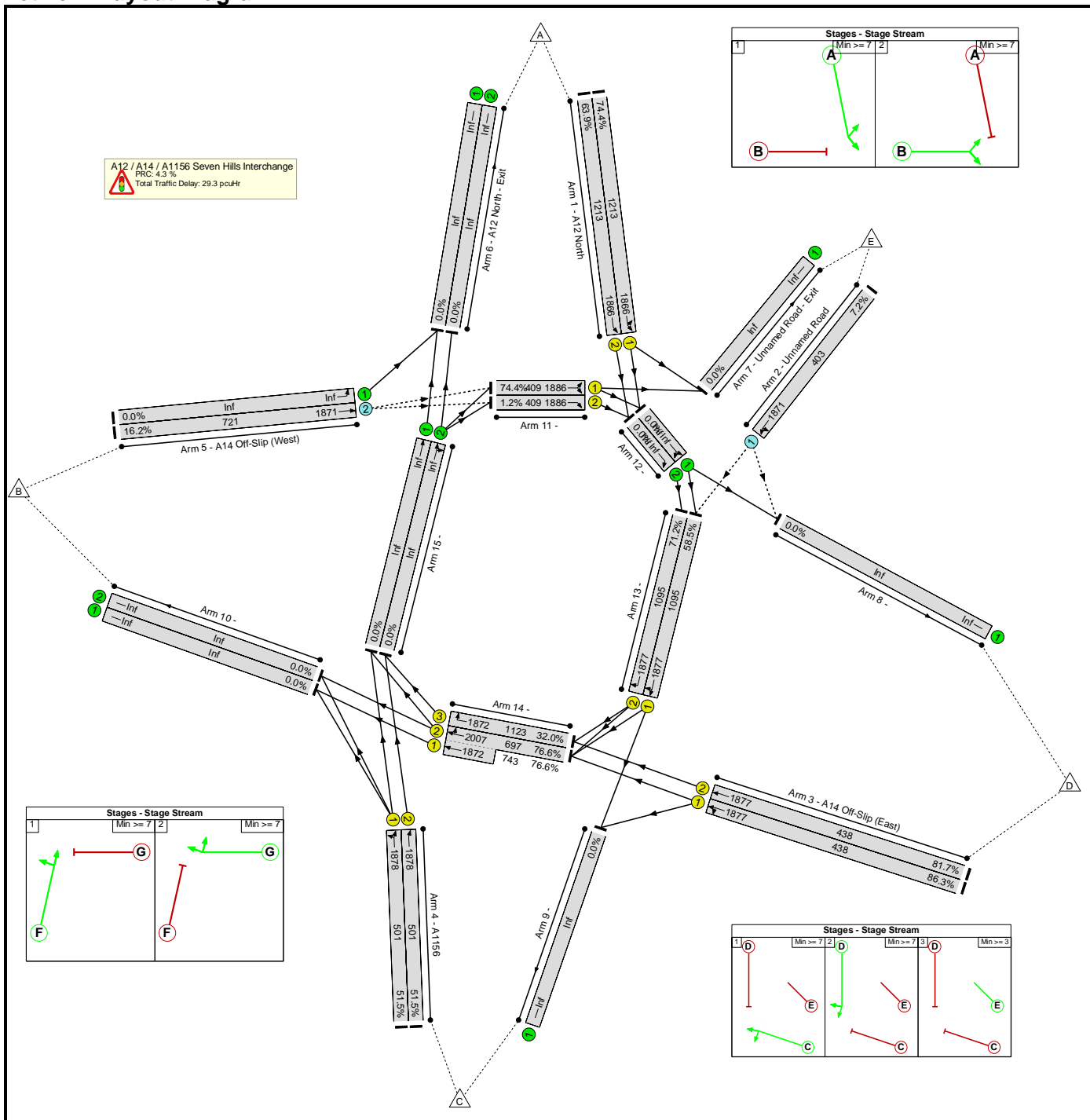
Network Layout Diagram



Basic Results Summary

Scenario 20: '28RC 17:00-18:00' (FG20: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

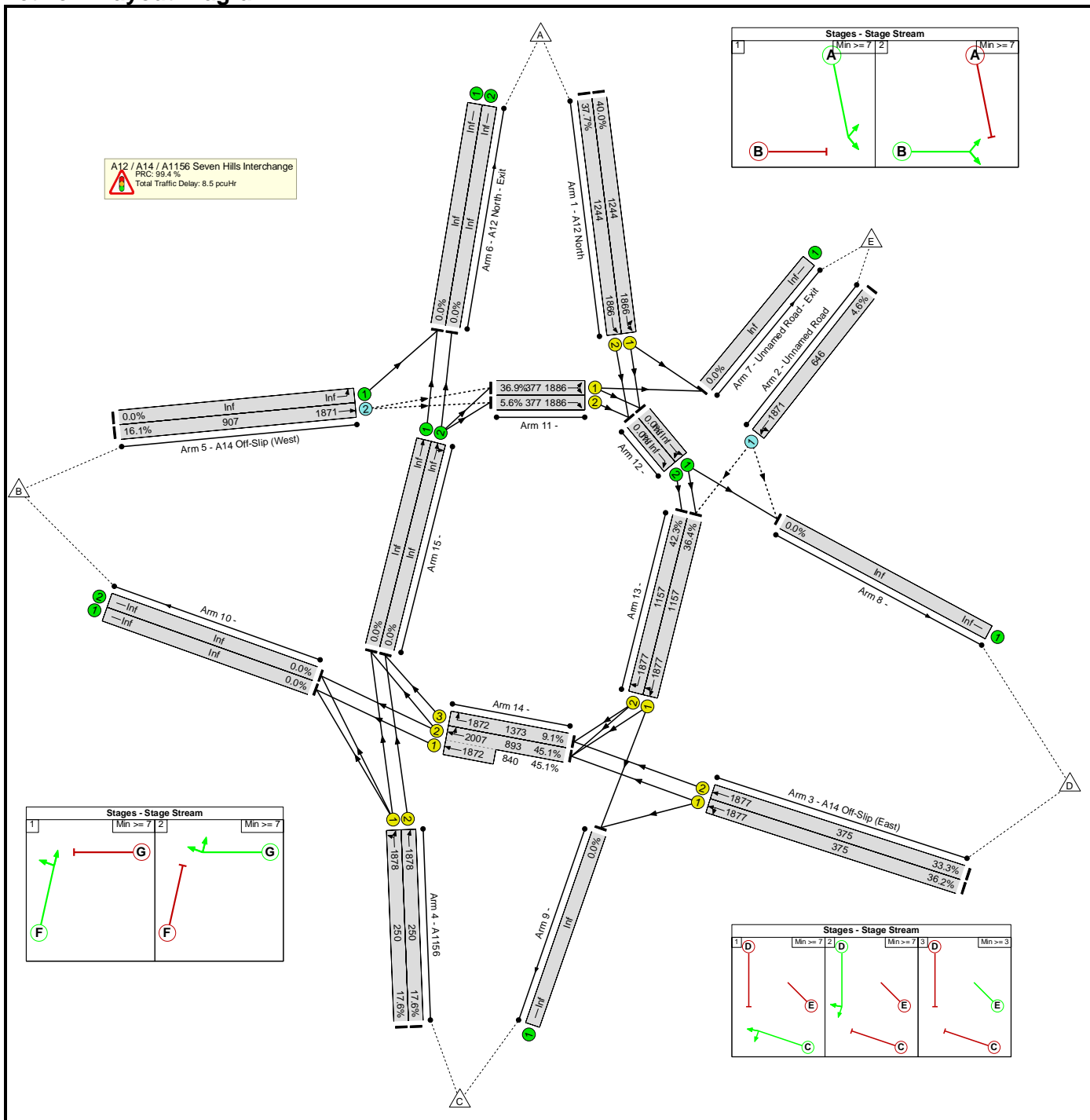
Network Layout Diagram



Basic Results Summary

Scenario 21: '28PC 06:00-07:00' (FG21: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

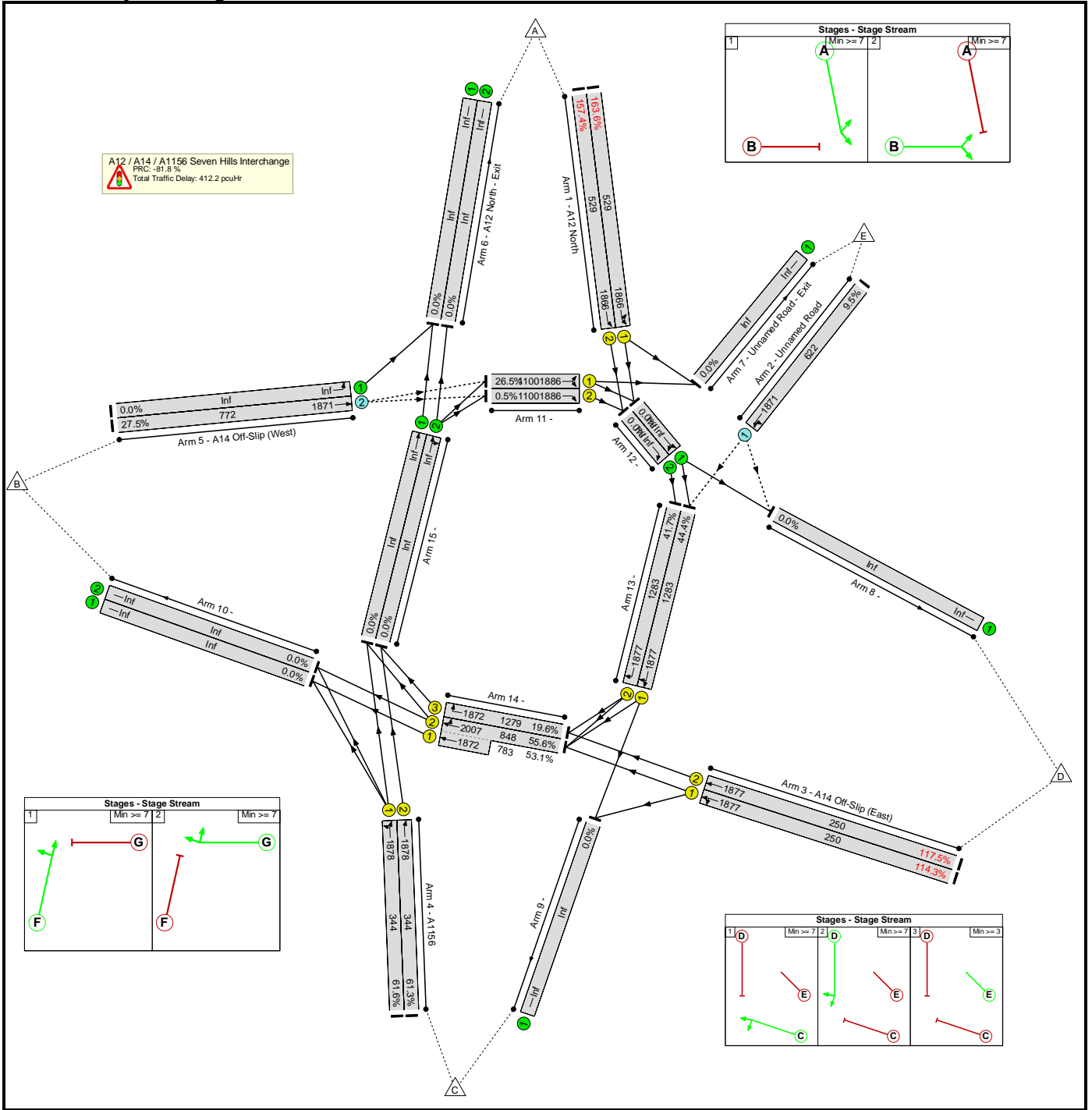
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	45.1%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	45.1%																												
1/1	A12 North Left Ahead	4.1	7.0	40.0%																												
1/2	A12 North Ahead	3.7	6.8	37.7%																												
2/1	Unnamed Road Left Ahead	0.1	3.2	4.6%																												
3/1	A14 Off-Slip (East) Left Ahead	2.2	28.2	36.2%																												
3/2	A14 Off-Slip (East) Ahead	2.0	27.8	33.3%																												
4/1	A1156 Left Ahead	0.8	31.9	17.6%																												
4/2	A1156 Ahead	0.8	31.9	17.6%																												
5/2	A14 Off-Slip (West) Ahead	0.1	2.4	16.1%																												
11/1	Left Right	2.2	26.8	36.9%																												
11/2	Right	0.3	24.7	5.6%																												
13/1	Ahead Right	3.5	7.3	36.4%																												
13/2	Right	2.1	5.9	42.3%																												
14/2+14/1	Ahead Right	1.6	2.7 (3.2:2.1)	45.1 : 45.1%																												
14/3	Right	2.0	8.5	9.1%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>124.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>3.03</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>112.6</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>3.68</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>99.4</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>1.66</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>99.4</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>8.49</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	124.8	Total Delay for Signalled Lanes (pcuHr):	3.03	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	112.6	Total Delay for Signalled Lanes (pcuHr):	3.68	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	99.4	Total Delay for Signalled Lanes (pcuHr):	1.66	Cycle Time (s):	60		PRC Over All Lanes (%)	99.4	Total Delay Over All Lanes(pcuHr):	8.49		
C1	Stream: 1 PRC for Signalled Lanes (%)	124.8	Total Delay for Signalled Lanes (pcuHr):	3.03	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	112.6	Total Delay for Signalled Lanes (pcuHr):	3.68	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	99.4	Total Delay for Signalled Lanes (pcuHr):	1.66	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	99.4	Total Delay Over All Lanes(pcuHr):	8.49																												

Basic Results Summary

Scenario 22: '28PC 07:00-08:00' (FG22: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

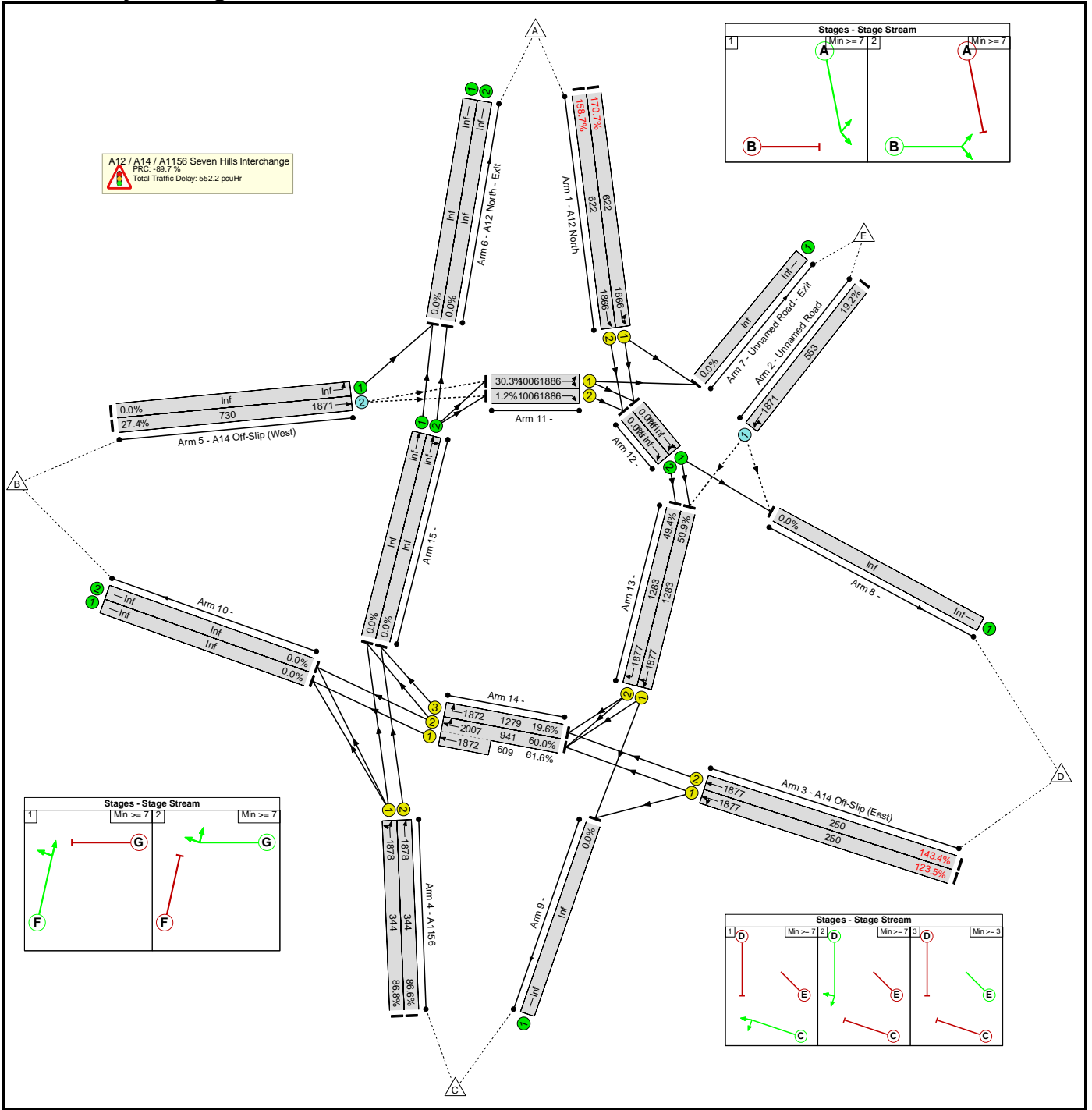
Network Layout Diagram



Basic Results Summary

Scenario 23: '28PC 08:00-09:00' (FG23: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

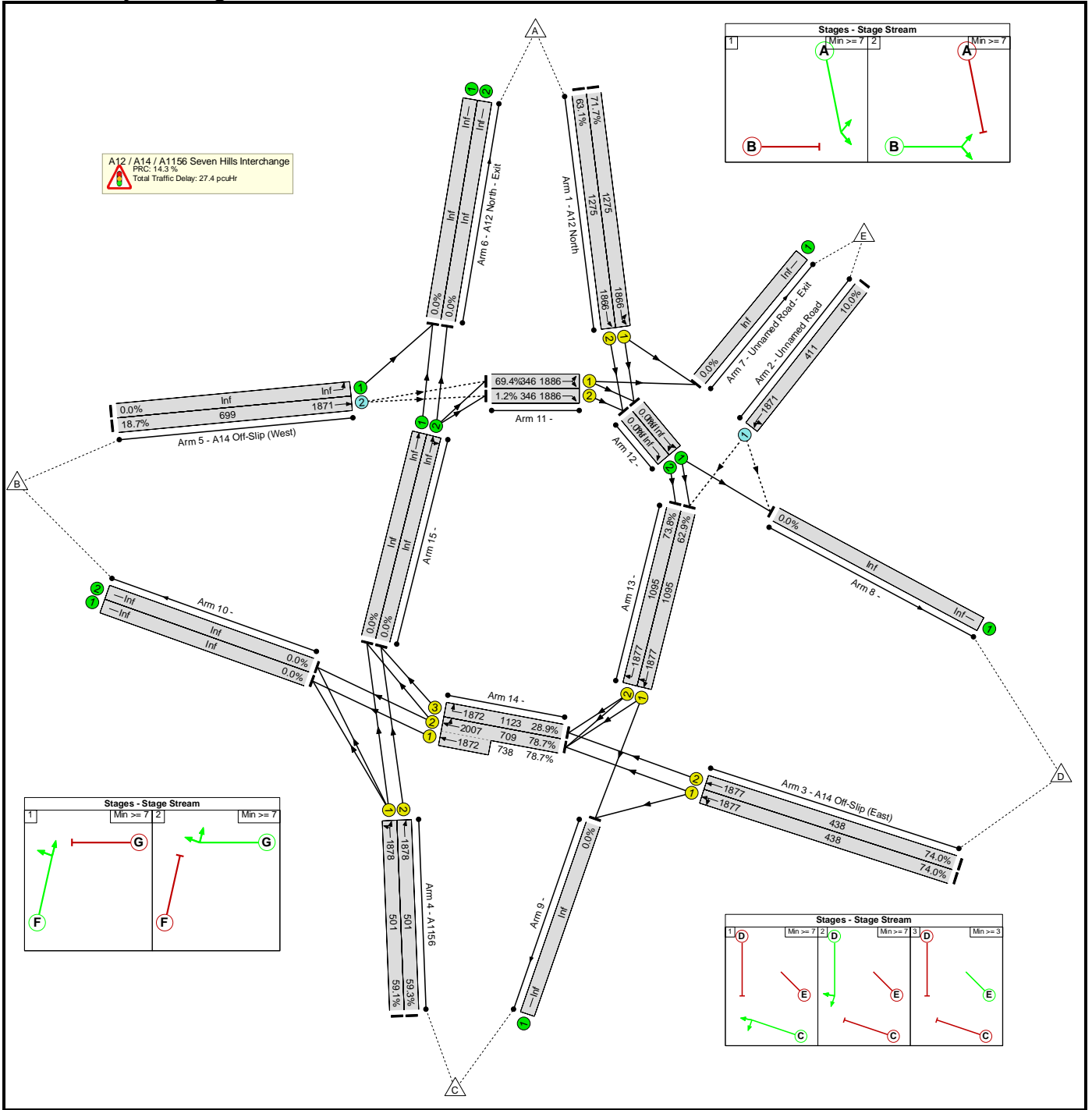
Network Layout Diagram



Basic Results Summary

Scenario 24: '28PC 15:00-16:00' (FG24: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

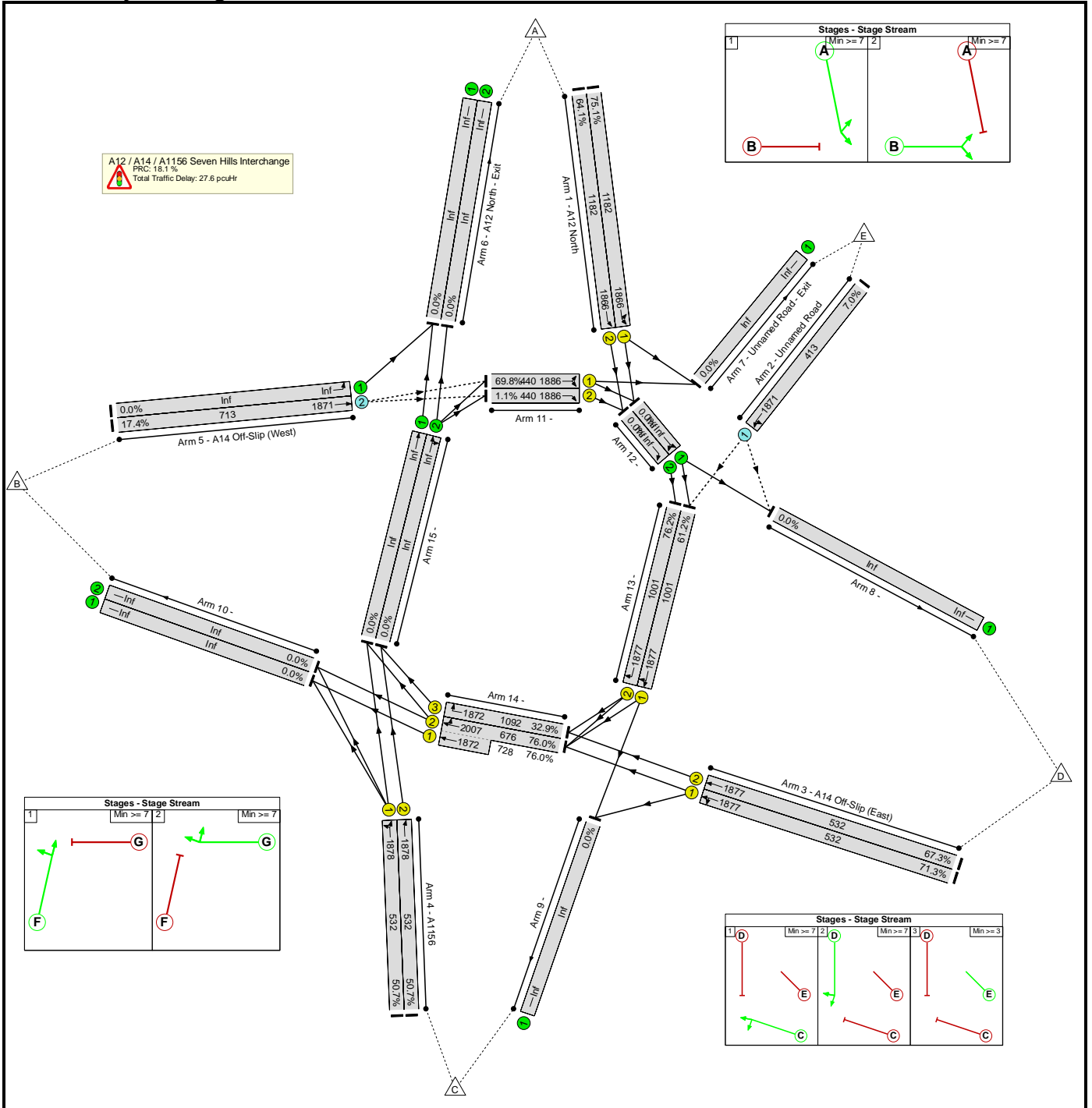
Network Layout Diagram



Basic Results Summary

Scenario 25: '28PC 17:00-18:00' (FG25: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

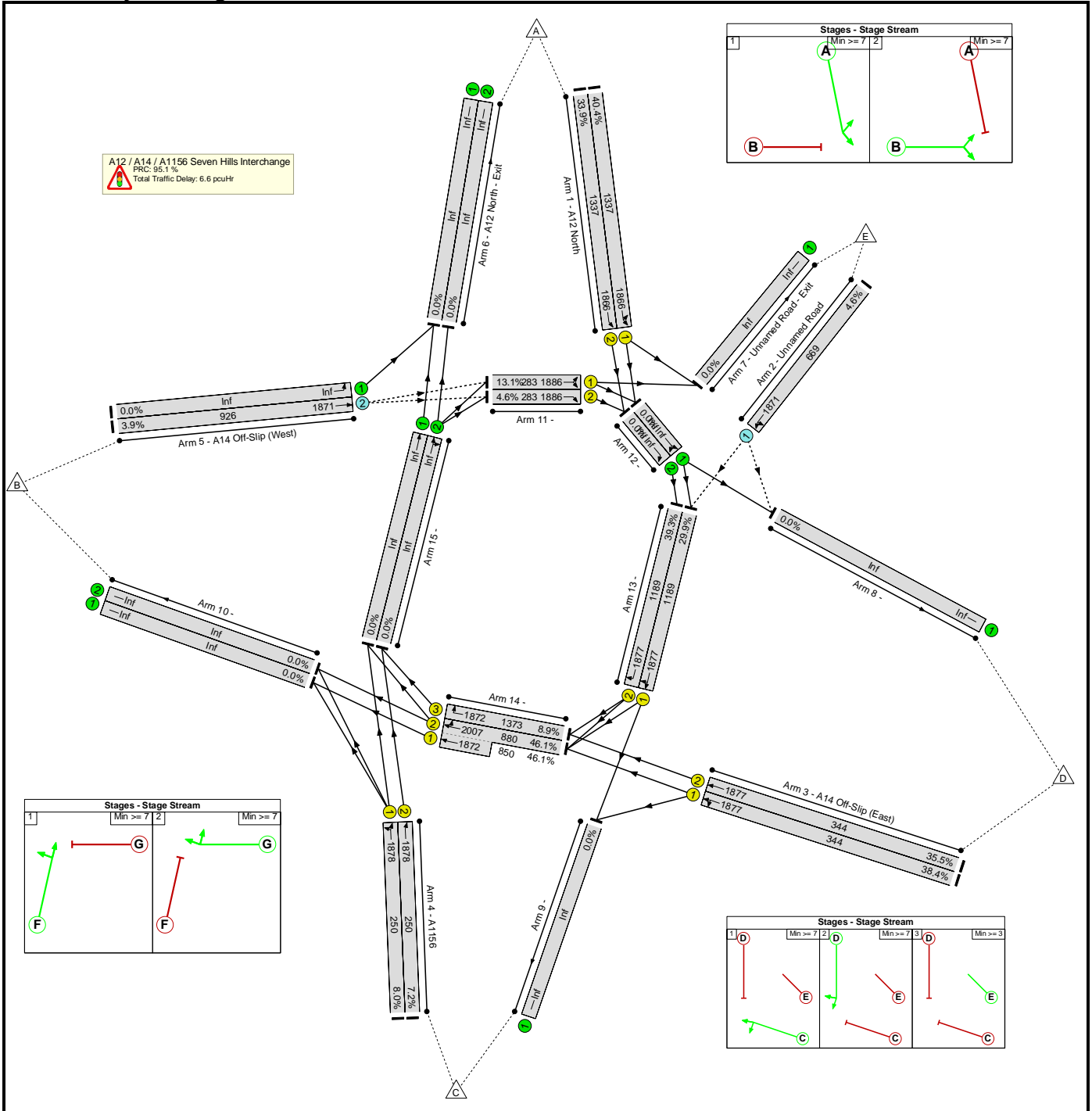
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	76.2%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	76.2%																												
1/1	A12 North Left Ahead	11.6	13.8	75.1%																												
1/2	A12 North Ahead	8.7	11.0	64.1%																												
2/1	Unnamed Road Left Ahead	0.2	7.2	7.0%																												
3/1	A14 Off-Slip (East) Left Ahead	6.8	30.9	71.3%																												
3/2	A14 Off-Slip (East) Ahead	6.3	29.3	67.3%																												
4/1	A1156 Left Ahead	4.3	24.8	50.7%																												
4/2	A1156 Ahead	4.3	24.8	50.7%																												
5/2	A14 Off-Slip (West) Ahead	0.1	3.1	17.4%																												
11/1	Left Right	6.1	33.0	69.8%																												
11/2	Right	0.1	22.2	1.1%																												
13/1	Ahead Right	5.3	12.0	61.2%																												
13/2	Right	5.6	14.4	76.2%																												
14/2+14/1	Ahead Right	13.3	6.6 (7.2:6.0)	76.0 : 76.0%																												
14/3	Right	6.2	19.7	32.9%																												
<table> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>19.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>8.56</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>18.1</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>11.26</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>18.5</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>7.64</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>18.1</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>27.61</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	19.8	Total Delay for Signalled Lanes (pcuHr):	8.56	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	18.1	Total Delay for Signalled Lanes (pcuHr):	11.26	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	18.5	Total Delay for Signalled Lanes (pcuHr):	7.64	Cycle Time (s):	60		PRC Over All Lanes (%)	18.1	Total Delay Over All Lanes(pcuHr):	27.61		
C1	Stream: 1 PRC for Signalled Lanes (%)	19.8	Total Delay for Signalled Lanes (pcuHr):	8.56	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	18.1	Total Delay for Signalled Lanes (pcuHr):	11.26	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	18.5	Total Delay for Signalled Lanes (pcuHr):	7.64	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	18.1	Total Delay Over All Lanes(pcuHr):	27.61																												

Basic Results Summary

Scenario 26: '34RC 06:00-07:00' (FG26: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

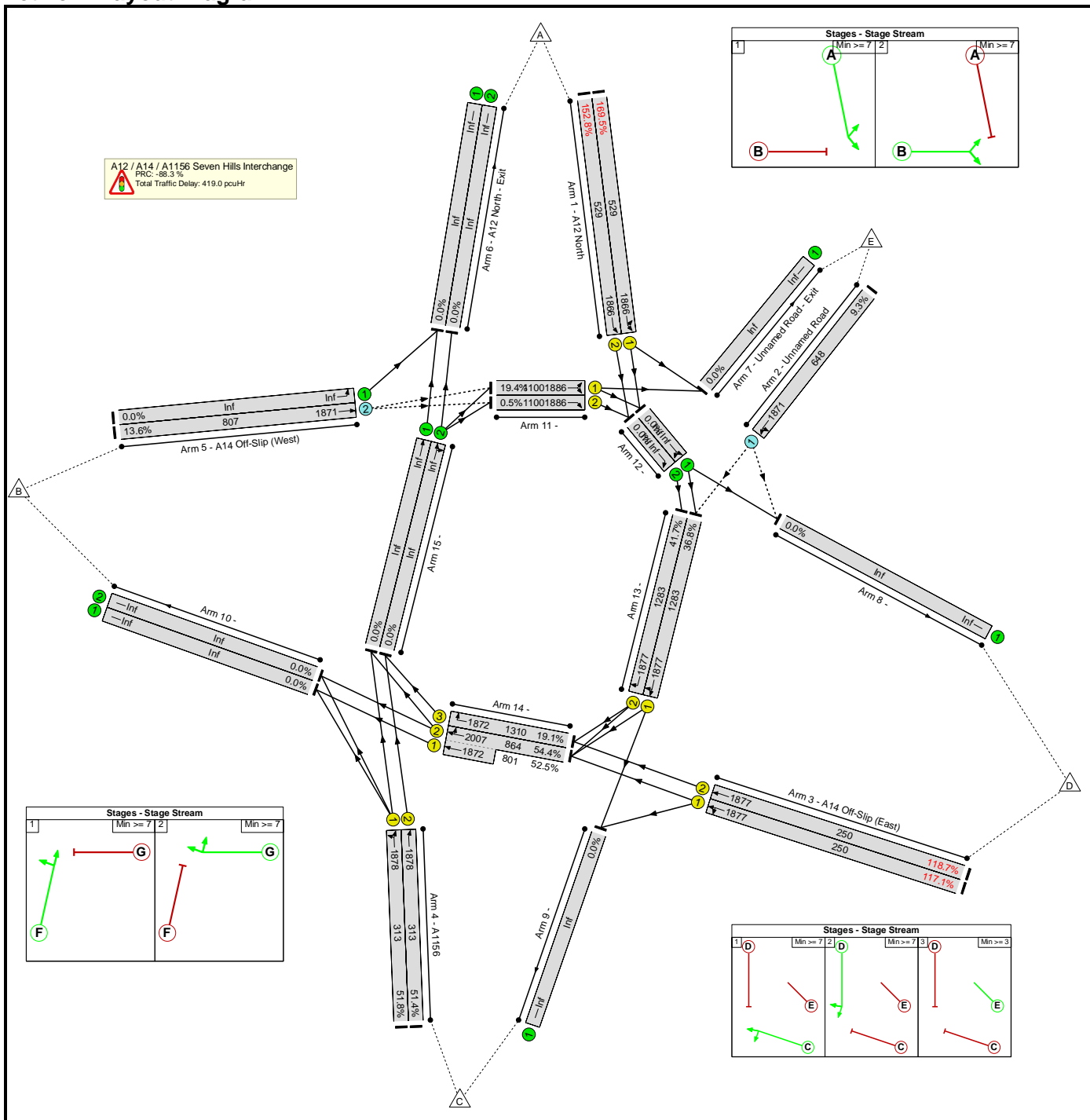
Network Layout Diagram



Basic Results Summary

Scenario 27: '34RC 07:00-08:00' (FG27: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

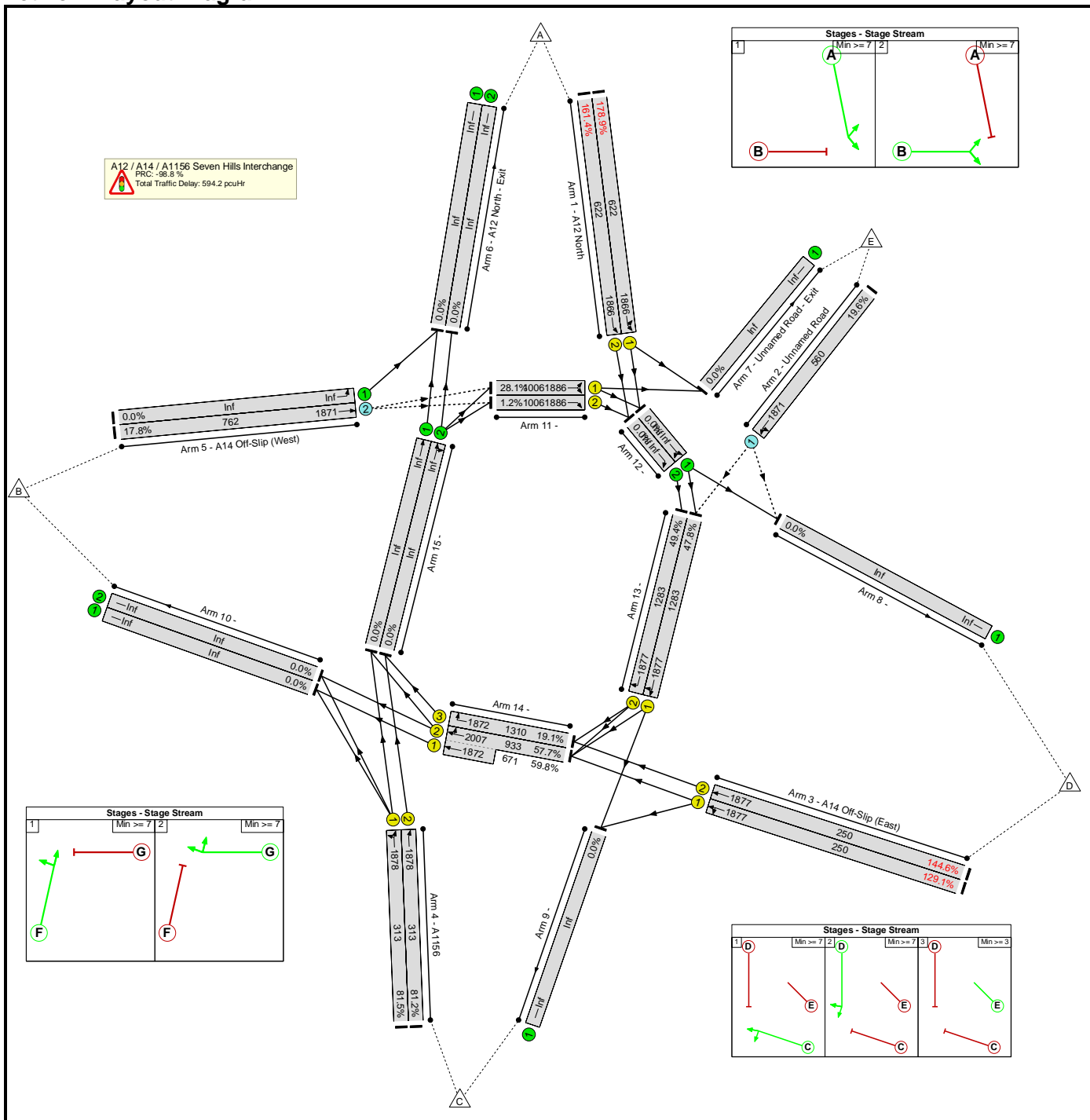
Network Layout Diagram



Basic Results Summary

Scenario 28: '34RC 08:00-09:00' (FG28: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

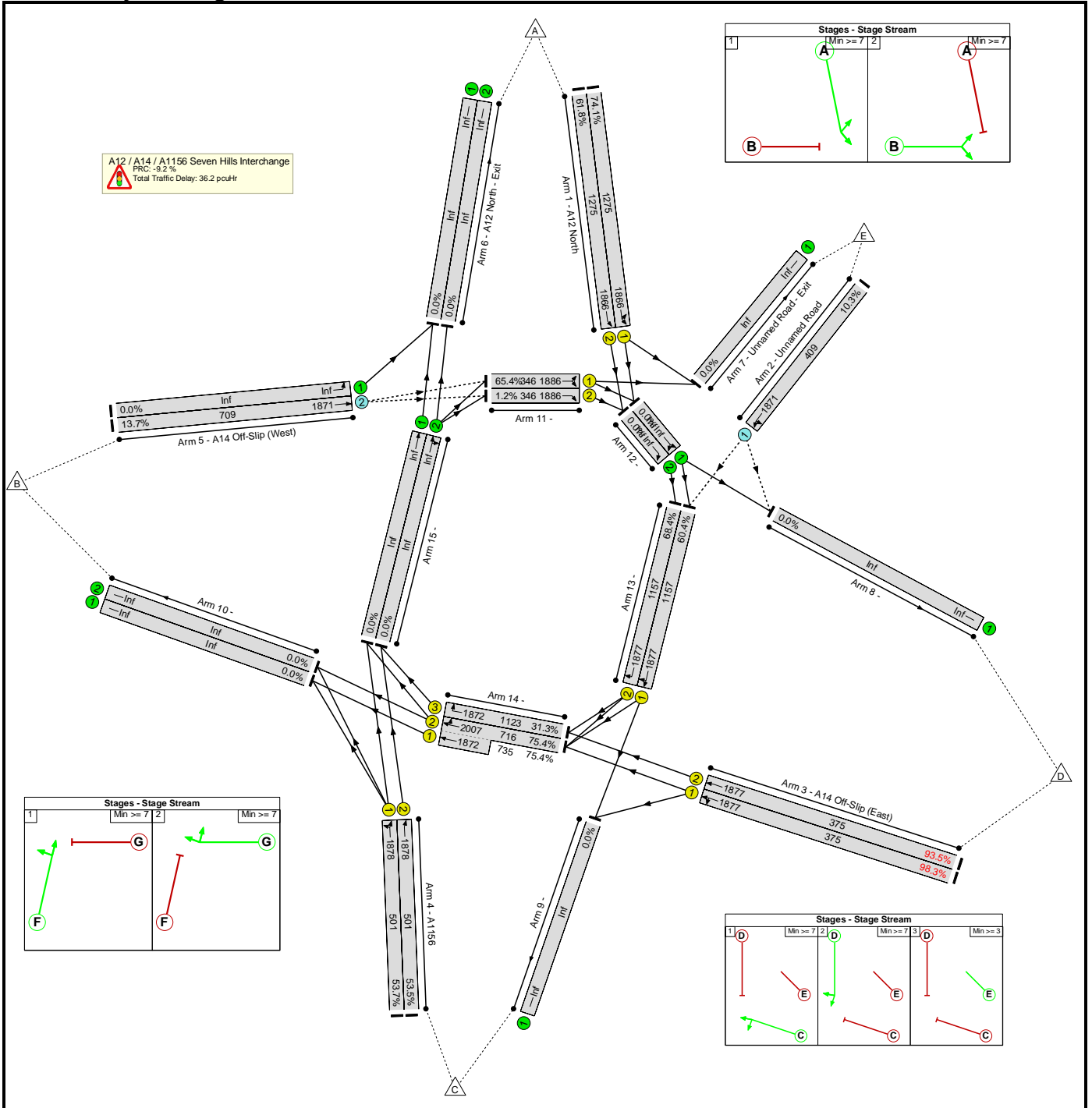
Network Layout Diagram



Basic Results Summary

Scenario 29: '34RC 15:00-16:00' (FG29: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

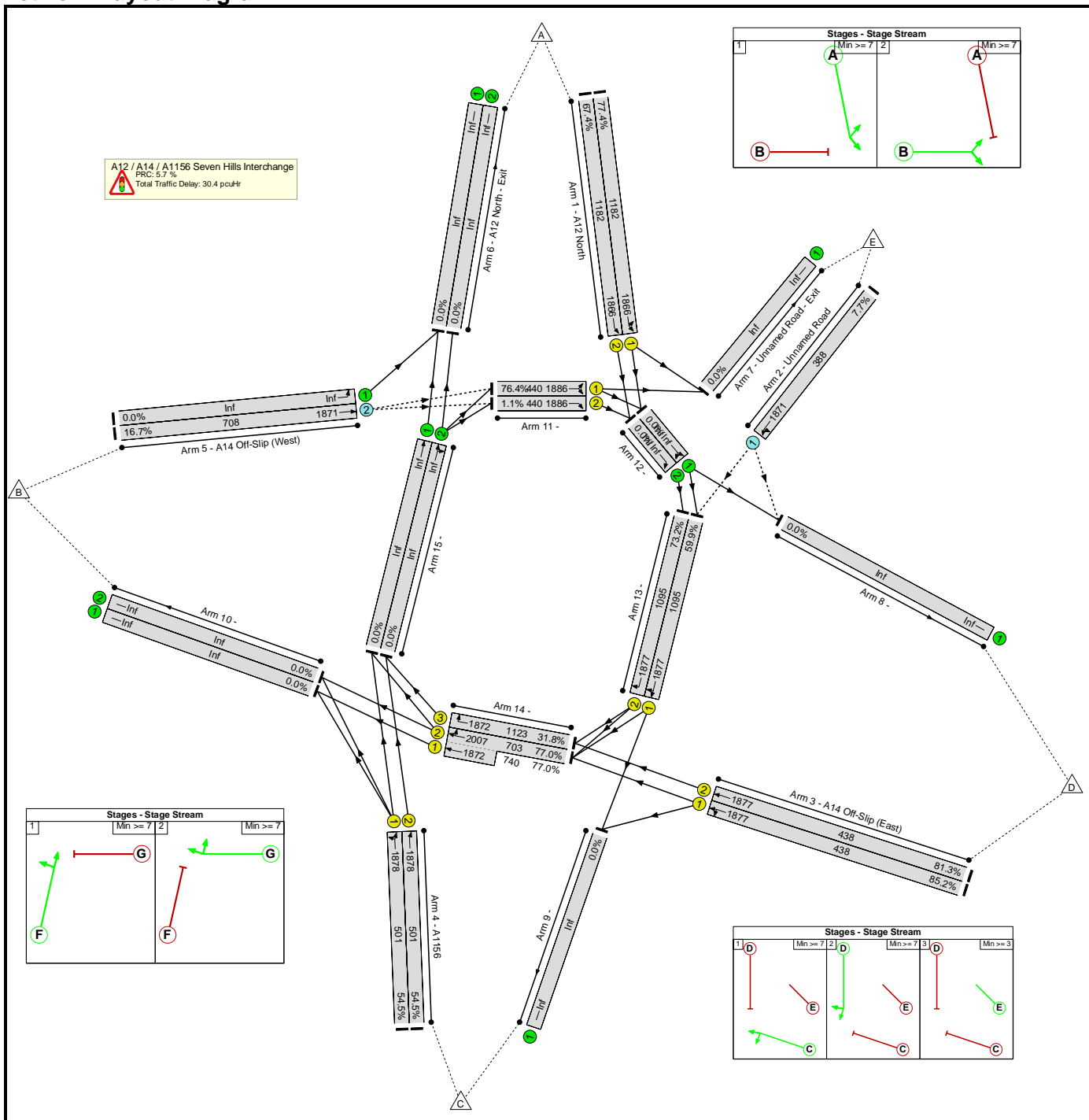
Network Layout Diagram



Basic Results Summary

Scenario 30: '34RC 17:00-18:00' (FG30: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

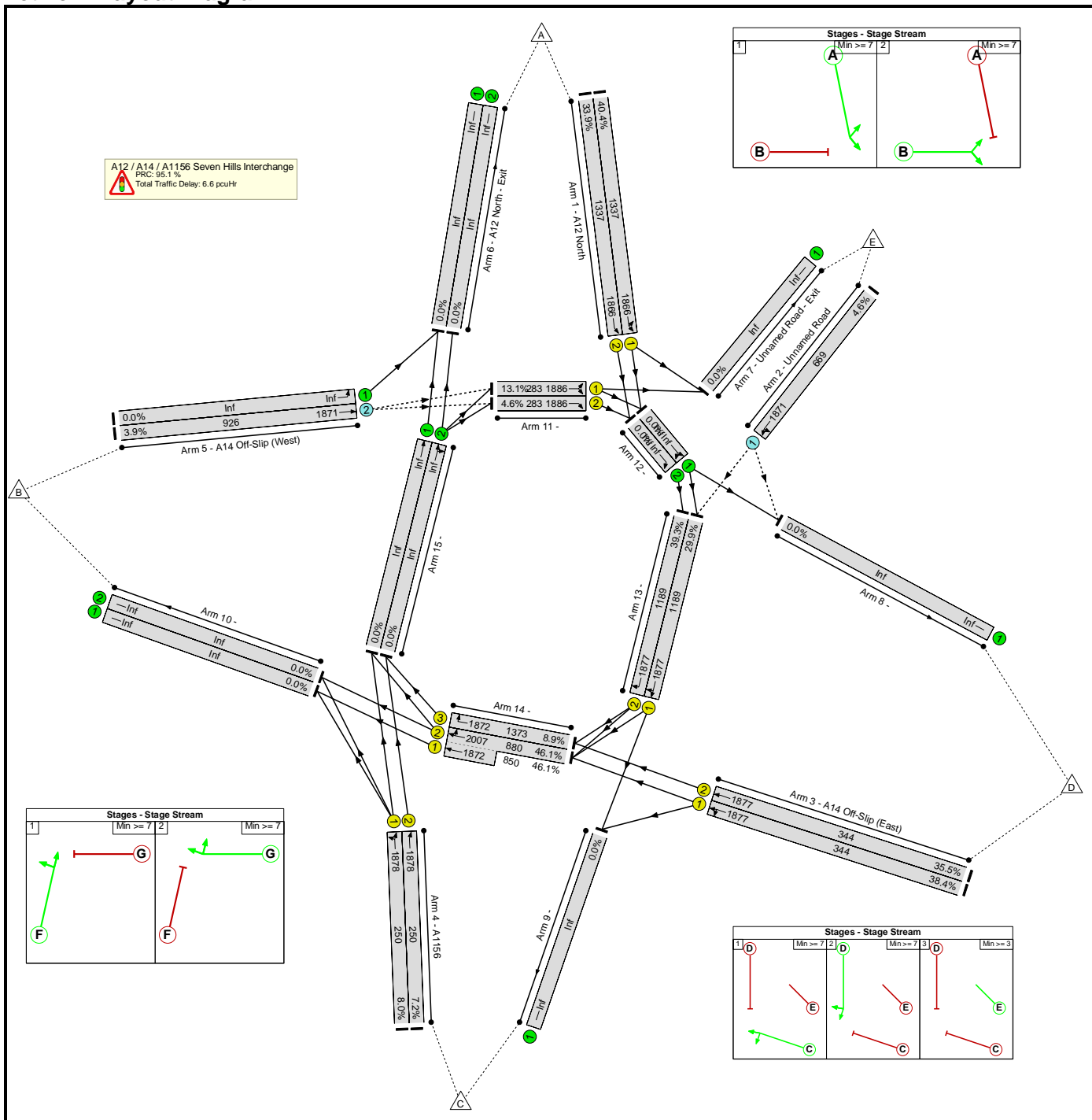
Network Layout Diagram



Basic Results Summary

Scenario 31: '34OP 06:00-07:00' (FG31: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

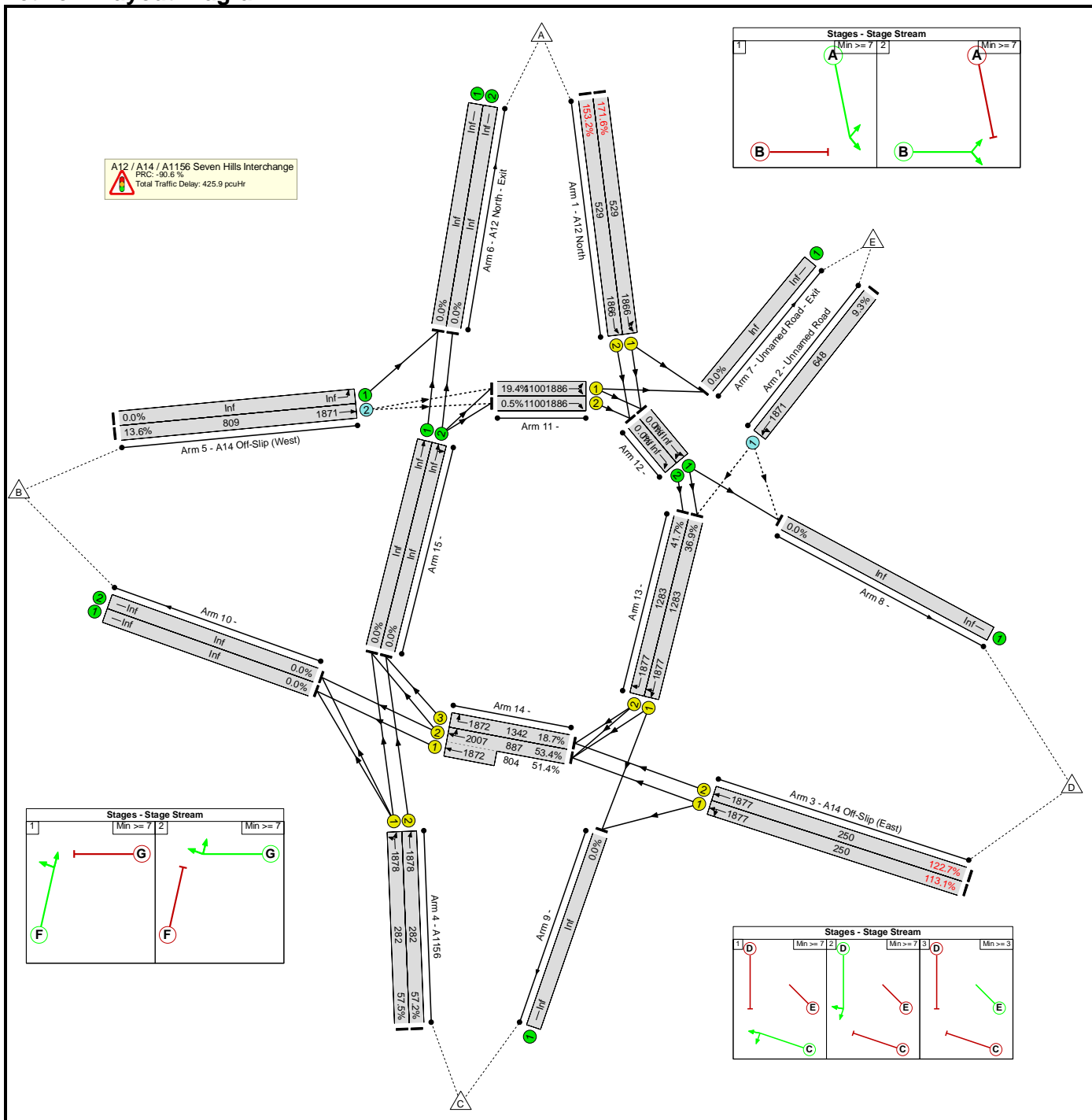
Network Layout Diagram



Basic Results Summary

Scenario 32: '34OP 07:00-08:00' (FG32: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

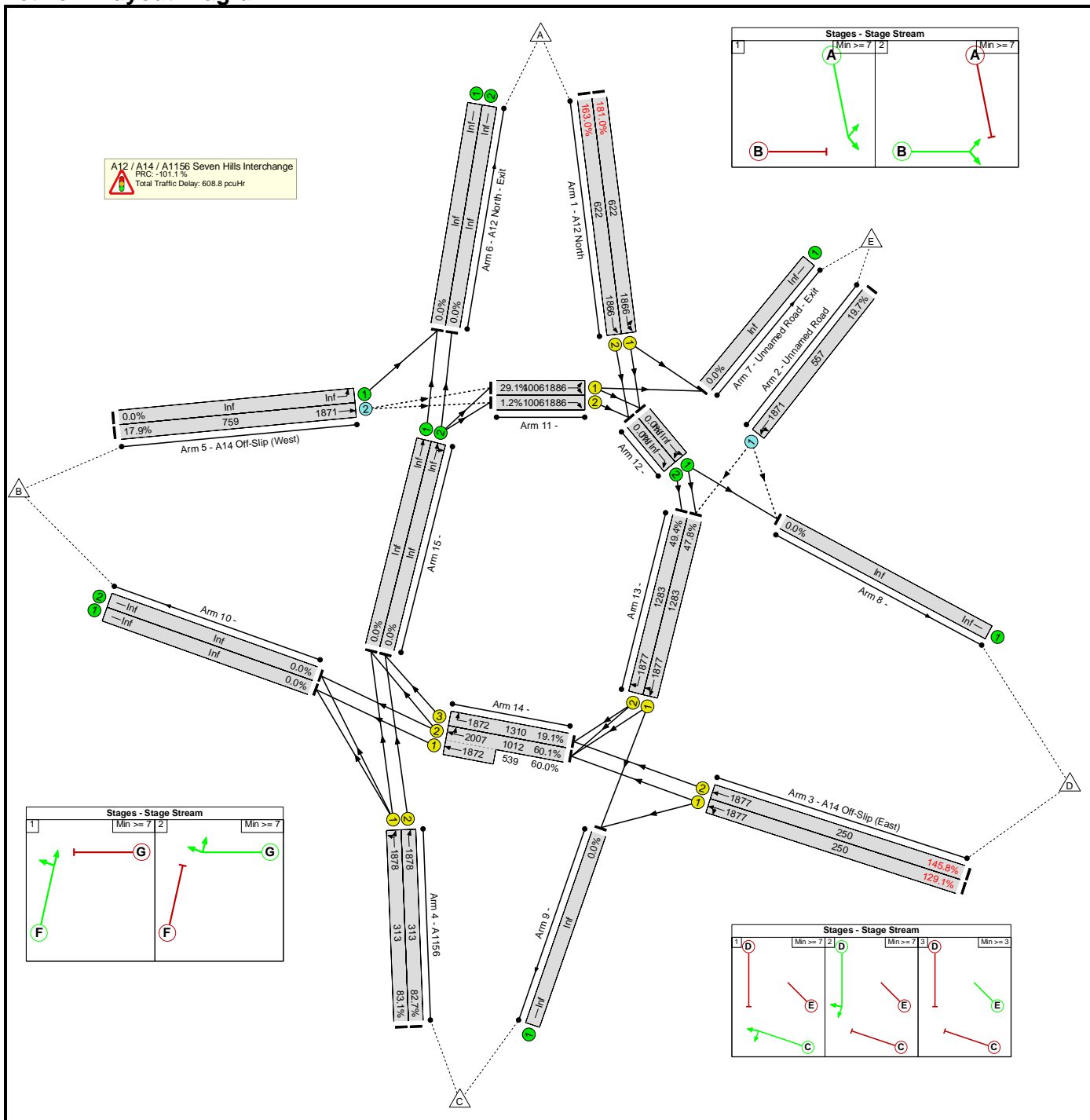
Network Layout Diagram



Basic Results Summary

Scenario 33: '34OP 08:00-09:00' (FG33: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

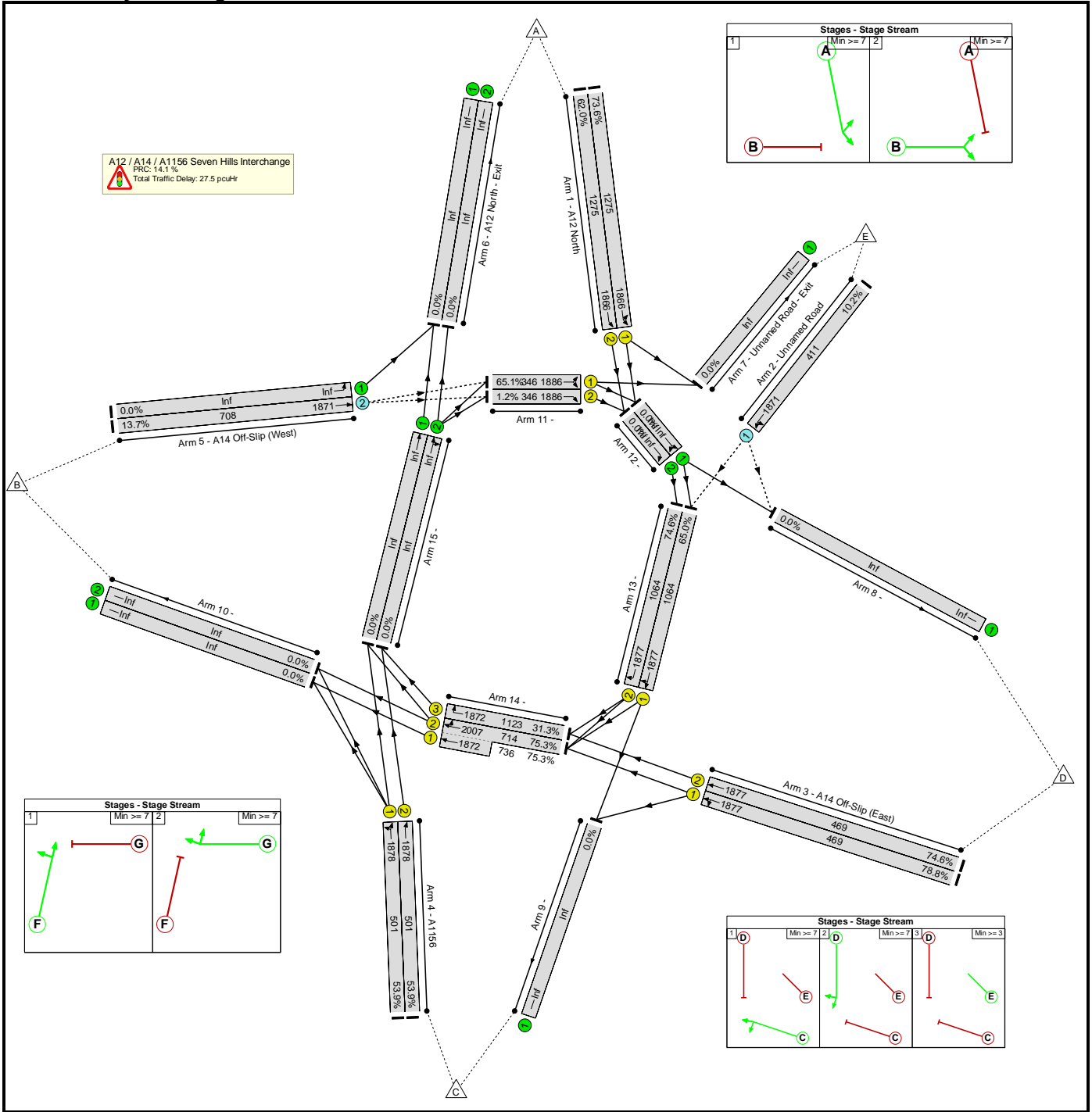
Network Results

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																												
Network: Junction 21 mitigation measures	-	-	-	181.0%																												
A12 / A14 / A1156 Seven Hills Interchange	-	-	-	181.0%																												
1/1	A12 North Left Ahead	280.3	875.6	181.0%																												
1/2	A12 North Ahead	220.7	760.4	163.0%																												
2/1	Unnamed Road Left Ahead	0.8	7.4	19.7%																												
3/1	A14 Off-Slip (East) Left Ahead	45.4	480.5	129.1%																												
3/2	A14 Off-Slip (East) Ahead	67.8	643.1	145.8%																												
4/1	A1156 Left Ahead	6.4	55.5	83.1%																												
4/2	A1156 Ahead	6.3	55.0	82.7%																												
5/2	A14 Off-Slip (West) Ahead	0.1	2.9	17.9%																												
11/1	Left Right	1.4	6.1	29.1%																												
11/2	Right	0.1	8.6	1.2%																												
13/1	Ahead Right	2.3	4.8	47.8%																												
13/2	Right	0.8	3.2	49.4%																												
14/2+14/1	Ahead Right	15.4	4.2 (4.4:3.7)	60.1 : 60.0%																												
14/3	Right	3.9	16.7	19.1%																												
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%)</td> <td>-101.1</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>488.57</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%)</td> <td>-62.0</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>109.71</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 3 PRC for Signalled Lanes (%)</td> <td>8.3</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>10.21</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%)</td> <td>-101.1</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>608.82</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%)	-101.1	Total Delay for Signalled Lanes (pcuHr):	488.57	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%)	-62.0	Total Delay for Signalled Lanes (pcuHr):	109.71	Cycle Time (s):	60	C1	Stream: 3 PRC for Signalled Lanes (%)	8.3	Total Delay for Signalled Lanes (pcuHr):	10.21	Cycle Time (s):	60		PRC Over All Lanes (%)	-101.1	Total Delay Over All Lanes(pcuHr):	608.82		
C1	Stream: 1 PRC for Signalled Lanes (%)	-101.1	Total Delay for Signalled Lanes (pcuHr):	488.57	Cycle Time (s):	60																										
C1	Stream: 2 PRC for Signalled Lanes (%)	-62.0	Total Delay for Signalled Lanes (pcuHr):	109.71	Cycle Time (s):	60																										
C1	Stream: 3 PRC for Signalled Lanes (%)	8.3	Total Delay for Signalled Lanes (pcuHr):	10.21	Cycle Time (s):	60																										
	PRC Over All Lanes (%)	-101.1	Total Delay Over All Lanes(pcuHr):	608.82																												

Basic Results Summary

Scenario 34: '34OP 15:00-16:00' (FG34: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

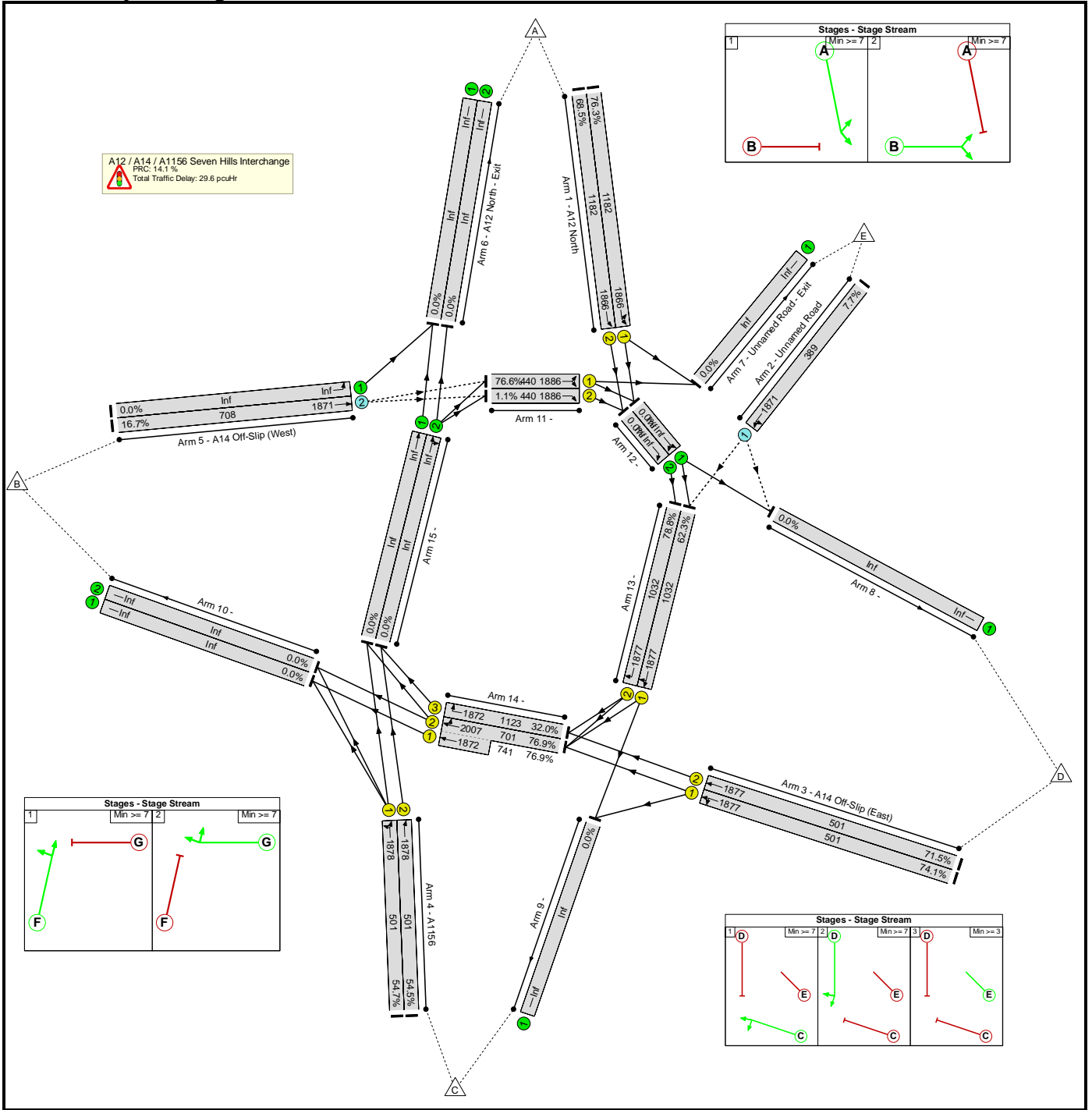
Network Layout Diagram



Basic Results Summary

Scenario 35: '34OP 17:00-18:00' (FG35: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: 2019.10.23_J22_Model_CV_v11 fixed.j9
 Path: \\ser01cam1uk.uk.wspgroup.com\projects\50400326 - Sizewell C transport planning\Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\For Issue\Scoped In\11 fixed\J22\Model
 Report generation date: 16/03/2020 13:44:45

- »2019 Base Year, 6-7 AM
- »2019 Base Year, 7-8 AM
- »2019 Base Year, 8-9 AM
- »2019 Base Year, 3-4 PM
- »2019 Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
- »2023 Reference Case, 8-9 AM
- »2023 Reference Case, 3-4 PM
- »2023 Reference Case, 5-6 PM
- »2023 Early Years, 6-7 AM
- »2023 Early Years, 7-8 AM
- »2023 Early Years, 8-9 AM
- »2023 Early Years, 3-4 PM
- »2023 Early Years, 5-6 PM
- »2028 Reference Case, 6-7 AM
- »2028 Reference Case, 7-8 AM
- »2028 Reference Case, 8-9 AM
- »2028 Reference Case, 3-4 PM
- »2028 Reference Case, 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case, 6-7 AM
- »2034 Reference Case, 7-8 AM
- »2034 Reference Case, 8-9 AM
- »2034 Reference Case, 3-4 PM
- »2034 Reference Case, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North	D1	0.8	3.11	0.44	A	D2	4.7	10.57	0.83	B	D3	6.1	13.59	0.87	B	D4	6.3	13.27	0.87	B	D5	7.3	14.53	0.88	B
B - Foxhall Rd West		0.2	4.39	0.20	A		5.9	48.34	0.88	E		18.6	141.44	1.03	F		2.3	19.01	0.70	C		1.4	13.00	0.58	B
C - A12 South		0.6	2.68	0.36	A		4.8	10.62	0.83	B		18.4	36.34	0.97	E		6.0	13.03	0.86	B		12.4	24.88	0.93	C
D - Newbourne Rd East		0.1	6.04	0.11	A		2.2	37.62	0.71	E		7.9	86.49	0.96	F		4.5	58.03	0.83	F		3.0	42.46	0.76	E
2023 Reference Case																									
A - A12 North	D6	0.9	3.28	0.47	A	D7	9.1	19.23	0.91	C	D8	5.9	13.16	0.86	B	D9	46.3	85.82	0.99	F	D10	54.6	96.37	1.00	F
B - Foxhall Rd West		0.3	4.75	0.25	A		28.1	175.03	1.09	F		18.4	140.00	1.03	F		5.8	44.72	0.86	E		2.5	19.71	0.71	C
C - A12 South		0.6	2.71	0.37	A		8.0	17.36	0.90	C		19.7	38.52	0.98	E		14.0	28.69	0.94	D		21.7	43.72	0.96	E
D - Newbourne Rd East		0.1	6.40	0.12	A		9.0	129.85	0.98	F		6.7	76.49	0.93	F		132.2	1624.57	1.35	F		64.8	862.91	1.18	F
2023 Early Years																									
A - A12 North	D11	0.9	3.32	0.48	A	D12	12.9	26.40	0.94	D	D13	6.0	13.37	0.87	B	D14	70.2	127.22	1.01	F	D15	113.6	192.27	1.03	F
B - Foxhall Rd West		0.4	5.10	0.26	A		96.9	574.40	1.45	F		24.2	176.40	1.07	F		8.2	60.79	0.90	F		2.7	21.73	0.73	C
C - A12 South		0.7	2.98	0.42	A		21.1	42.55	0.98	E		27.5	51.70	1.00	F		13.1	27.26	0.93	D		27.8	55.16	0.97	F
D - Newbourne Rd East		0.1	6.47	0.13	A		14.8	199.94	1.07	F		6.7	76.57	0.93	F		143.0	1805.73	1.38	F		77.7	1066.04	1.22	F
2028 Reference Case																									
A - A12 North	D16	0.9	3.26	0.47	A	D17	6.8	14.65	0.88	B	D18	5.9	13.14	0.86	B	D19	5.0	10.90	0.84	B	D20	6.6	13.39	0.87	B
B - Foxhall Rd West		0.4	4.87	0.26	A		68.4	384.43	1.29	F		18.3	139.00	1.03	F		10.2	79.77	0.93	F		3.1	26.70	0.76	D
C - A12 South		0.6	2.75	0.38	A		9.5	19.87	0.91	C		13.6	27.28	0.95	D		16.1	31.59	0.95	D		148.6	245.10	1.04	F
D - Newbourne Rd East		0.1	6.35	0.12	A		3.1	52.86	0.78	F		6.8	77.41	0.93	F		3.1	40.15	0.76	E		3.6	47.26	0.79	E
2028 Peak Construction																									
A - A12 North	D21	0.9	3.27	0.47	A	D22	6.6	14.14	0.88	B	D23	6.2	13.75	0.87	B	D24	6.3	13.48	0.87	B	D25	7.1	14.48	0.88	B
B - Foxhall Rd West		0.4	5.55	0.29	A		96.8	601.14	1.48	F		24.5	177.36	1.07	F		11.4	92.48	0.94	F		1.8	18.27	0.64	C
C - A12 South		0.8	3.18	0.46	A		27.1	51.11	0.99	F		18.2	35.93	0.97	E		25.8	50.49	0.97	F		170.8	281.44	1.05	F
D - Newbourne Rd East		0.1	6.36	0.13	A		3.0	50.51	0.77	F		7.3	81.50	0.95	F		4.5	58.95	0.83	F		3.9	52.09	0.80	F
2034 Reference Case																									
A - A12 North	D26	0.9	3.40	0.49	A	D27	9.8	20.16	0.92	C	D28	5.6	12.40	0.86	B	D29	12.6	24.60	0.93	C	D30	24.3	45.89	0.97	E
B - Foxhall Rd West		0.4	5.14	0.28	A		109.9	619.93	1.50	F		16.0	124.67	1.02	F		123.0	845.60	1.17	F		4.4	36.11	0.82	E
C - A12 South		0.7	2.85	0.40	A		16.3	32.50	0.96	D		13.2	26.60	0.95	D		115.7	198.53	1.03	F		393.6	631.94	1.12	F
D - Newbourne Rd East		0.2	6.55	0.13	A		5.6	93.67	0.90	F		5.8	67.07	0.91	F		42.2	495.16	1.08	F		49.4	602.16	1.11	F
2034 Operational Led																									
A - A12 North		0.9	3.40	0.49	A		9.6	19.78	0.92	C		5.6	12.42	0.86	B		12.0	23.57	0.93	C		25.3	47.85	0.97	E
B - Foxhall Rd West		0.4	5.15	0.28	A		104.9	597.43	1.48	F		16.3	126.53	1.02	F		116.0	800.52	1.16	F		4.7	37.82	0.83	E

C - A12 South	D31	0.7	2.85	0.40	A	D32	16.5	32.97	0.96	D	D33	13.2	26.61	0.95	D	D34	117.3	201.01	1.03	F	D35	377.6	605.65	1.12	F
D - Newbourne Rd East		0.2	6.55	0.13	A		5.5	91.18	0.89	F		5.9	67.71	0.91	F		38.7	452.71	1.07	F		50.9	622.77	1.12	F

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / Foxhall Road / Newbourne Road
Location	52° 2'52.64"N, 1° 16'28.90"E
Site number	22
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D3	2019 Base Year	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D4	2019 Base Year	3-4 PM	FLAT	14:45	16:15	90	15	✓
D5	2019 Base Year	5-6 PM	FLAT	16:45	18:15	90	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D8	2023 Reference Case	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D9	2023 Reference Case	3-4 PM	FLAT	14:45	16:15	90	15	✓
D10	2023 Reference Case	5-6 PM	FLAT	16:45	18:15	90	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D13	2023 Early Years	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D14	2023 Early Years	3-4 PM	FLAT	14:45	16:15	90	15	✓
D15	2023 Early Years	5-6 PM	FLAT	16:45	18:15	90	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D18	2028 Reference Case	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D19	2028 Reference Case	3-4 PM	FLAT	14:45	16:15	90	15	✓
D20	2028 Reference Case	5-6 PM	FLAT	16:45	18:15	90	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D23	2028 Peak Construction	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D24	2028 Peak Construction	3-4 PM	FLAT	14:45	16:15	90	15	✓
D25	2028 Peak Construction	5-6 PM	FLAT	16:45	18:15	90	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D28	2034 Reference Case	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D29	2034 Reference Case	3-4 PM	FLAT	14:45	16:15	90	15	✓
D30	2034 Reference Case	5-6 PM	FLAT	16:45	18:15	90	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D33	2034 Operational Led	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D34	2034 Operational Led	3-4 PM	FLAT	14:45	16:15	90	15	✓
D35	2034 Operational Led	5-6 PM	FLAT	16:45	18:15	90	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Foxhall Rd West	
C	A12 South	
D	Newbourne Rd East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	5.60	7.30	17.1	28.8	73.5	8.0	
B - Foxhall Rd West	3.10	7.50	15.8	26.5	73.5	25.0	
C - A12 South	7.10	7.10	0.0	23.9	73.5	14.0	
D - Newbourne Rd East	2.80	7.20	13.8	27.0	73.5	25.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	None		
B - Foxhall Rd West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-215
C - A12 South	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	80
D - Newbourne Rd East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-300

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.601	2278
B - Foxhall Rd West	0.497	1478
C - A12 South	0.596	2368
D - Newbourne Rd East	0.476	1254

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	813	100.000
B - Foxhall Rd West		ONE HOUR	✓	182	100.000
C - A12 South		ONE HOUR	✓	687	100.000
D - Newbourne Rd East		ONE HOUR	✓	66	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	744	29
	B - Foxhall Rd West	82	0	81	19
	C - A12 South	621	37	0	29
	D - Newbourne Rd East	14	19	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
A - A12 North		0	0	7	7

From	B - Foxhall Rd West	1	0	10	5
	C - A12 South	11	5	0	10
	D - Newbourne Rd East	0	16	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.44	3.11	0.8	A	746	1119
B - Foxhall Rd West	0.20	4.39	0.2	A	167	251
C - A12 South	0.36	2.68	0.6	A	630	946
D - Newbourne Rd East	0.11	6.04	0.1	A	61	91

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	612	153	97	2081	0.294	610	538	0.0	0.4	2.446	A
B - Foxhall Rd West	137	34	499	1141	0.120	136	72	0.0	0.1	3.581	A
C - A12 South	517	129	55	2115	0.245	516	644	0.0	0.3	2.248	A
D - Newbourne Rd East	50	12	649	802	0.062	49	58	0.0	0.1	4.781	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	731	183	116	2069	0.353	730	644	0.4	0.5	2.688	A
B - Foxhall Rd West	164	41	597	1090	0.150	163	86	0.1	0.2	3.884	A
C - A12 South	618	154	66	2109	0.293	617	771	0.3	0.4	2.413	A
D - Newbourne Rd East	59	15	777	746	0.080	59	69	0.1	0.1	5.243	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	895	224	142	2053	0.436	894	789	0.5	0.8	3.106	A
B - Foxhall Rd West	200	50	730	1021	0.196	200	106	0.2	0.2	4.387	A
C - A12 South	756	189	80	2101	0.360	756	944	0.4	0.6	2.674	A
D - Newbourne Rd East	73	18	951	669	0.109	73	85	0.1	0.1	6.034	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	895	224	142	2053	0.436	895	789	0.8	0.8	3.107	A
B - Foxhall Rd West	200	50	731	1020	0.196	200	106	0.2	0.2	4.390	A
C - A12 South	756	189	80	2101	0.360	756	945	0.6	0.6	2.677	A
D - Newbourne Rd East	73	18	952	668	0.109	73	85	0.1	0.1	6.041	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	731	183	116	2069	0.353	732	645	0.8	0.5	2.694	A
B - Foxhall Rd West	164	41	598	1090	0.150	164	86	0.2	0.2	3.890	A
C - A12 South	618	154	66	2109	0.293	618	772	0.6	0.4	2.416	A
D - Newbourne Rd East	59	15	779	745	0.080	59	69	0.1	0.1	5.252	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	612	153	97	2081	0.294	613	540	0.5	0.4	2.452	A
B - Foxhall Rd West	137	34	500	1140	0.120	137	72	0.2	0.1	3.591	A
C - A12 South	517	129	55	2115	0.245	518	647	0.4	0.3	2.255	A
D - Newbourne Rd East	50	12	652	801	0.062	50	58	0.1	0.1	4.791	A

2019 Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	16.61	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1487	100.000
B - Foxhall Rd West		ONE HOUR	✓	430	100.000
C - A12 South		ONE HOUR	✓	1509	100.000
D - Newbourne Rd East		ONE HOUR	✓	206	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	144	1285	58
	B - Foxhall Rd West	219	0	163	48
	C - A12 South	1375	92	0	42
	D - Newbourne Rd East	117	28	61	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	12
	B - Foxhall Rd West	2	0	8	8
	C - A12 South	8	5	0	19
	D - Newbourne Rd East	12	21	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	10.57	4.7	B	1365	2047
B - Foxhall Rd West	0.88	48.34	5.9	E	395	592
C - A12 South	0.83	10.62	4.8	B	1385	2077
D - Newbourne Rd East	0.71	37.62	2.2	E	189	284

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1119	280	189	2030	0.551	1115	1282	0.0	1.2	3.912	A
B - Foxhall Rd West	324	81	1149	816	0.397	321	198	0.0	0.6	7.238	A
C - A12 South	1136	284	216	2058	0.552	1131	1130	0.0	1.2	3.865	A
D - Newbourne Rd East	155	39	1193	564	0.275	154	111	0.0	0.4	8.744	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1337	334	226	2007	0.666	1334	1534	1.2	2.0	5.324	A
B - Foxhall Rd West	387	97	1376	699	0.553	384	237	0.6	1.2	11.351	B

C - A12 South	1357	339	259	2033	0.667	1354	1353	1.2	2.0	5.277	A
D - Newbourne Rd East	185	46	1427	461	0.401	184	133	0.4	0.7	12.930	B

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1637	409	271	1979	0.827	1627	1863	2.0	4.5	9.943	A
B - Foxhall Rd West	473	118	1676	544	0.870	458	288	1.2	5.0	36.789	E
C - A12 South	1661	415	313	2001	0.830	1651	1645	2.0	4.6	10.003	B
D - Newbourne Rd East	227	57	1737	326	0.696	221	161	0.7	2.0	32.805	D

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1637	409	277	1976	0.829	1637	1881	4.5	4.7	10.567	B
B - Foxhall Rd West	473	118	1688	538	0.880	470	290	5.0	5.9	48.337	E
C - A12 South	1661	415	318	1998	0.832	1661	1659	4.6	4.8	10.621	B
D - Newbourne Rd East	227	57	1751	320	0.709	226	163	2.0	2.2	37.621	E

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1337	334	237	2001	0.668	1347	1561	4.7	2.0	5.598	A
B - Foxhall Rd West	387	97	1393	690	0.560	405	240	5.9	1.3	13.381	B
C - A12 South	1357	339	265	2029	0.669	1367	1374	4.8	2.1	5.530	A
D - Newbourne Rd East	185	46	1448	452	0.410	191	136	2.2	0.7	14.103	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1119	280	192	2028	0.552	1123	1293	2.0	1.2	3.989	A
B - Foxhall Rd West	324	81	1159	811	0.399	326	199	1.3	0.7	7.461	A
C - A12 South	1136	284	219	2056	0.552	1139	1140	2.1	1.2	3.939	A
D - Newbourne Rd East	155	39	1203	560	0.277	156	112	0.7	0.4	8.957	A

2019 Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	39.66	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	174	1446	122
	B - Foxhall Rd West	262	0	193	52
	C - A12 South	1778	166	1	96
	D - Newbourne Rd East	187	72	76	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	3	0	5	2
	C - A12 South	8	8	0	10
	D - Newbourne Rd East	9	3	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.59	6.1	B	1122	1683
B - Foxhall Rd West	1.03	141.44	18.6	F	234	351
C - A12 South	0.97	36.34	18.4	E	1136	1704
D - Newbourne Rd East	0.96	86.49	7.9	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	298	1949	0.859	1652	1984	0.0	5.6	11.384	B
B - Foxhall Rd West	487	122	1845	471	1.033	436	375	0.0	12.6	71.408	F
C - A12 South	1893	473	382	1973	0.959	1838	1602	0.0	13.6	21.574	C
D - Newbourne Rd East	297	74	1703	353	0.839	281	247	0.0	3.9	43.447	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	298	1950	0.867	1689	2034	5.6	6.1	13.587	B
B - Foxhall Rd West	455	114	1900	442	1.029	431	388	12.6	18.6	141.445	F
C - A12 South	1900	475	408	1958	0.970	1881	1637	13.6	18.4	36.339	E
D - Newbourne Rd East	325	81	1736	339	0.960	309	251	3.9	7.9	86.494	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	182	2018	0.661	1351	1289	6.1	2.0	5.525	A
B - Foxhall Rd West	192	48	1206	803	0.239	265	288	18.6	0.3	7.698	A
C - A12 South	1072	268	353	1989	0.539	1141	1287	18.4	1.2	4.604	A
D - Newbourne Rd East	255	64	1358	512	0.497	282	175	7.9	1.0	17.439	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	75	2082	0.399	836	705	2.0	0.7	2.902	A
B - Foxhall Rd West	90	23	689	1072	0.084	91	171	0.3	0.1	3.676	A
C - A12 South	650	163	207	2074	0.313	653	765	1.2	0.5	2.538	A
D - Newbourne Rd East	157	39	813	763	0.205	160	99	1.0	0.3	5.991	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	74	2082	0.288	601	676	0.7	0.4	2.432	A
B - Foxhall Rd West	90	23	660	1087	0.083	90	137	0.1	0.1	3.613	A
C - A12 South	650	163	147	2108	0.308	650	559	0.5	0.4	2.470	A
D - Newbourne Rd East	112	28	594	864	0.130	112	82	0.3	0.1	4.791	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	74	2082	0.288	600	675	0.4	0.4	2.430	A
B - Foxhall Rd West	90	23	660	1087	0.083	90	137	0.1	0.1	3.613	A
C - A12 South	650	163	147	2108	0.308	650	558	0.4	0.4	2.468	A
D - Newbourne Rd East	112	28	593	865	0.129	112	82	0.1	0.1	4.782	A

2019 Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourn Road	Standard Roundabout		A, D, C, B	16.93	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1748	100.000
B - Foxhall Rd West		FLAT	✓	437	100.000
C - A12 South		FLAT	✓	1676	100.000
D - Newbourn Rd East		FLAT	✓	291	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	2	294	1317	135
	B - Foxhall Rd West	246	0	146	45
	C - A12 South	1407	216	1	52
	D - Newbourn Rd East	109	104	77	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	0	1	6	5
	B - Foxhall Rd West	4	0	6	2
	C - A12 South	5	5	0	8
	D - Newbourn Rd East	4	6	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.27	6.3	B	1748	2622
B - Foxhall Rd West	0.70	19.01	2.3	C	437	655
C - A12 South	0.86	13.03	6.0	B	1676	2514
D - Newbourn Rd East	0.83	58.03	4.5	F	291	436

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	241	2021	0.865	1725	1736	0.0	5.8	11.391	B
B - Foxhall Rd West	437	109	1548	638	0.685	429	603	0.0	2.0	16.624	C
C - A12 South	1676	419	496	1959	0.855	1654	1517	0.0	5.4	11.120	B
D - Newbourn Rd East	291	73	1736	363	0.802	278	230	0.0	3.3	38.082	E

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	245	2019	0.866	1747	1762	5.8	6.1	13.104	B
B - Foxhall Rd West	437	109	1570	627	0.697	436	613	2.0	2.2	18.761	C

C - A12 South	1676	419	508	1953	0.858	1675	1539	5.4	5.7	12.817	B
D - Newbourne Rd East	291	73	1759	352	0.827	288	233	3.3	4.0	52.841	F

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	245	2018	0.866	1748	1763	6.1	6.2	13.207	B
B - Foxhall Rd West	437	109	1571	626	0.698	437	613	2.2	2.2	18.929	C
C - A12 South	1676	419	509	1952	0.859	1676	1540	5.7	5.9	12.947	B
D - Newbourne Rd East	291	73	1760	352	0.828	290	233	4.0	4.2	55.856	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	245	2018	0.866	1748	1764	6.2	6.3	13.242	B
B - Foxhall Rd West	437	109	1572	626	0.698	437	614	2.2	2.3	18.976	C
C - A12 South	1676	419	510	1952	0.859	1676	1541	5.9	5.9	12.991	B
D - Newbourne Rd East	291	73	1760	351	0.828	290	233	4.2	4.4	57.022	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	245	2018	0.866	1748	1764	6.3	6.3	13.261	B
B - Foxhall Rd West	437	109	1572	626	0.698	437	614	2.3	2.3	18.995	C
C - A12 South	1676	419	510	1952	0.859	1676	1541	5.9	6.0	13.014	B
D - Newbourne Rd East	291	73	1760	351	0.828	291	233	4.4	4.5	57.642	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	245	2018	0.866	1748	1764	6.3	6.3	13.272	B
B - Foxhall Rd West	437	109	1572	626	0.698	437	614	2.3	2.3	19.007	C
C - A12 South	1676	419	510	1951	0.859	1676	1541	6.0	6.0	13.026	B
D - Newbourne Rd East	291	73	1760	351	0.828	291	233	4.5	4.5	58.027	F

2019 Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	20.51	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1844	100.000
B - Foxhall Rd West		FLAT	✓	380	100.000
C - A12 South		FLAT	✓	1850	100.000
D - Newbourne Rd East		FLAT	✓	263	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	336	1379	128
	B - Foxhall Rd West	188	0	137	55
	C - A12 South	1488	331	1	30
	D - Newbourne Rd East	70	121	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	3	2
	B - Foxhall Rd West	1	0	0	4
	C - A12 South	3	2	0	7
	D - Newbourne Rd East	1	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	14.53	7.3	B	1844	2766
B - Foxhall Rd West	0.58	13.00	1.4	B	380	570
C - A12 South	0.93	24.88	12.4	C	1850	2775
D - Newbourne Rd East	0.76	42.46	3.0	E	263	394

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	220	2092	0.881	1818	1711	0.0	6.6	12.130	B
B - Foxhall Rd West	380	95	1555	674	0.564	375	772	0.0	1.3	11.850	B
C - A12 South	1850	462	516	1997	0.926	1811	1565	0.0	9.7	16.830	C
D - Newbourne Rd East	263	66	1828	360	0.731	253	210	0.0	2.4	31.591	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	223	2091	0.882	1842	1742	6.6	7.0	14.283	B
B - Foxhall Rd West	380	95	1585	659	0.577	380	786	1.3	1.3	12.869	B

C - A12 South	1850	462	527	1991	0.929	1845	1587	9.7	11.1	22.952	C
D - Newbourne Rd East	263	66	1852	348	0.756	261	213	2.4	2.8	40.480	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	223	2091	0.882	1843	1745	7.0	7.2	14.432	B
B - Foxhall Rd West	380	95	1588	658	0.578	380	787	1.3	1.3	12.957	B
C - A12 South	1850	462	528	1991	0.929	1848	1588	11.1	11.7	23.995	C
D - Newbourne Rd East	263	66	1853	347	0.757	263	213	2.8	2.9	41.750	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	223	2090	0.882	1844	1746	7.2	7.2	14.487	B
B - Foxhall Rd West	380	95	1589	657	0.579	380	788	1.3	1.4	12.984	B
C - A12 South	1850	462	528	1990	0.929	1849	1589	11.7	12.0	24.457	C
D - Newbourne Rd East	263	66	1854	347	0.758	263	213	2.9	3.0	42.151	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	223	2090	0.882	1844	1746	7.2	7.3	14.516	B
B - Foxhall Rd West	380	95	1589	657	0.579	380	788	1.4	1.4	12.997	B
C - A12 South	1850	462	528	1990	0.929	1849	1589	12.0	12.2	24.716	C
D - Newbourne Rd East	263	66	1854	347	0.758	263	213	3.0	3.0	42.344	E

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	223	2090	0.882	1844	1746	7.3	7.3	14.534	B
B - Foxhall Rd West	380	95	1589	657	0.579	380	788	1.4	1.4	13.005	B
C - A12 South	1850	462	528	1990	0.929	1849	1589	12.2	12.4	24.884	C
D - Newbourne Rd East	263	66	1854	347	0.758	263	213	3.0	3.0	42.457	E

2023 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	882	100.000
B - Foxhall Rd West		ONE HOUR	✓	227	100.000
C - A12 South		ONE HOUR	✓	717	100.000
D - Newbourne Rd East		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	811	31
	B - Foxhall Rd West	123	0	81	22
	C - A12 South	650	37	0	30
	D - Newbourne Rd East	17	20	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	8
	B - Foxhall Rd West	1	0	10	10
	C - A12 South	10	5	0	5
	D - Newbourne Rd East	0	16	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.47	3.28	0.9	A	809	1214
B - Foxhall Rd West	0.25	4.75	0.3	A	208	312
C - A12 South	0.37	2.71	0.6	A	658	987
D - Newbourne Rd East	0.12	6.40	0.1	A	67	100

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	664	166	100	2096	0.317	662	593	0.0	0.5	2.507	A
B - Foxhall Rd West	171	43	523	1134	0.151	170	73	0.0	0.2	3.733	A
C - A12 South	540	135	58	2131	0.253	538	696	0.0	0.3	2.257	A
D - Newbourne Rd East	55	14	700	786	0.069	54	62	0.0	0.1	4.920	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	793	198	120	2084	0.381	792	710	0.5	0.6	2.785	A
B - Foxhall Rd West	204	51	626	1081	0.189	204	88	0.2	0.2	4.103	A

C - A12 South	644	161	70	2125	0.303	644	833	0.3	0.4	2.431	A
D - Newbourne Rd East	65	16	838	725	0.090	65	74	0.1	0.1	5.454	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	971	243	147	2067	0.470	970	869	0.6	0.9	3.278	A
B - Foxhall Rd West	250	62	767	1008	0.248	249	108	0.2	0.3	4.742	A
C - A12 South	789	197	86	2116	0.373	789	1020	0.4	0.6	2.710	A
D - Newbourne Rd East	80	20	1026	643	0.124	80	91	0.1	0.1	6.394	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	971	243	147	2067	0.470	971	870	0.9	0.9	3.283	A
B - Foxhall Rd West	250	62	767	1008	0.248	250	108	0.3	0.3	4.748	A
C - A12 South	789	197	86	2116	0.373	789	1021	0.6	0.6	2.713	A
D - Newbourne Rd East	80	20	1027	642	0.124	80	91	0.1	0.1	6.402	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	793	198	120	2084	0.381	794	711	0.9	0.6	2.793	A
B - Foxhall Rd West	204	51	627	1080	0.189	204	88	0.3	0.2	4.112	A
C - A12 South	644	161	70	2125	0.303	645	835	0.6	0.4	2.433	A
D - Newbourne Rd East	65	16	840	724	0.090	65	75	0.1	0.1	5.466	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	664	166	100	2096	0.317	665	595	0.6	0.5	2.515	A
B - Foxhall Rd West	171	43	525	1133	0.151	171	74	0.2	0.2	3.741	A
C - A12 South	540	135	59	2131	0.253	540	699	0.4	0.3	2.264	A
D - Newbourne Rd East	55	14	703	784	0.070	55	62	0.1	0.1	4.933	A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	44.04	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1635	100.000
B - Foxhall Rd West		ONE HOUR	✓	486	100.000
C - A12 South		ONE HOUR	✓	1590	100.000
D - Newbourne Rd East		ONE HOUR	✓	232	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	213	1362	61
	B - Foxhall Rd West	270	0	164	52
	C - A12 South	1449	93	0	49
	D - Newbourne Rd East	128	35	69	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	7	11
	B - Foxhall Rd West	1	0	8	10
	C - A12 South	8	5	0	12
	D - Newbourne Rd East	11	17	16	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	19.23	9.1	C	1501	2251
B - Foxhall Rd West	1.09	175.03	28.1	F	446	668
C - A12 South	0.90	17.36	8.0	C	1459	2189
D - Newbourne Rd East	0.98	129.85	9.0	F	213	319

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1231	308	197	2023	0.609	1225	1382	0.0	1.5	4.481	A
B - Foxhall Rd West	366	91	1217	783	0.467	362	255	0.0	0.9	8.478	A
C - A12 South	1197	299	281	2022	0.592	1191	1193	0.0	1.4	4.306	A
D - Newbourne Rd East	174	44	1301	525	0.332	172	121	0.0	0.5	10.155	B

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1470	368	236	1999	0.736	1466	1653	1.5	2.7	6.692	A
B - Foxhall Rd West	436	109	1456	660	0.661	432	305	0.9	1.9	15.563	C

C - A12 South	1430	357	336	1990	0.718	1425	1427	1.4	2.5	6.327	A
D - Newbourne Rd East	208	52	1557	411	0.506	206	145	0.5	1.0	17.392	C

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1801	450	265	1980	0.909	1778	1973	2.7	8.3	16.245	C
B - Foxhall Rd West	535	134	1760	503	1.063	478	368	1.9	15.9	86.443	F
C - A12 South	1751	438	396	1955	0.896	1731	1711	2.5	7.4	14.930	B
D - Newbourne Rd East	255	64	1873	270	0.944	235	170	1.0	6.0	77.953	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1801	450	269	1978	0.910	1798	1998	8.3	9.1	19.231	C
B - Foxhall Rd West	535	134	1781	492	1.086	486	372	15.9	28.1	175.034	F
C - A12 South	1751	438	405	1950	0.898	1748	1733	7.4	8.0	17.363	C
D - Newbourne Rd East	255	64	1894	261	0.978	243	173	6.0	9.0	129.849	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1470	368	284	1969	0.747	1495	1754	9.1	3.0	7.945	A
B - Foxhall Rd West	436	109	1499	638	0.684	539	315	28.1	2.4	62.598	F
C - A12 South	1430	357	363	1974	0.724	1451	1497	8.0	2.7	7.155	A
D - Newbourne Rd East	208	52	1620	383	0.544	239	158	9.0	1.3	30.013	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1231	308	202	2020	0.610	1237	1400	3.0	1.6	4.634	A
B - Foxhall Rd West	366	91	1230	777	0.471	372	258	2.4	0.9	9.011	A
C - A12 South	1197	299	286	2019	0.593	1202	1208	2.7	1.5	4.432	A
D - Newbourne Rd East	174	44	1316	518	0.336	177	123	1.3	0.5	10.642	B

2023 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	39.45	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	230	1565	127
	B - Foxhall Rd West	307	0	194	58
	C - A12 South	1893	166	1	110
	D - Newbourne Rd East	212	76	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	8	11
	B - Foxhall Rd West	2	0	5	4
	C - A12 South	8	8	0	7
	D - Newbourne Rd East	7	2	16	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	13.16	5.9	B	1122	1683
B - Foxhall Rd West	1.03	140.00	18.4	F	234	351
C - A12 South	0.98	38.52	19.7	E	1136	1704
D - Newbourne Rd East	0.93	76.49	6.7	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	290	1959	0.855	1653	1998	0.0	5.4	11.095	B
B - Foxhall Rd West	487	122	1852	472	1.031	437	395	0.0	12.5	70.780	F
C - A12 South	1893	473	411	1964	0.964	1836	1568	0.0	14.3	22.345	C
D - Newbourne Rd East	297	74	1696	364	0.816	283	247	0.0	3.5	39.556	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	290	1959	0.863	1689	2049	5.4	5.9	13.158	B
B - Foxhall Rd West	455	114	1908	443	1.028	431	408	12.5	18.4	139.996	F
C - A12 South	1900	475	438	1949	0.975	1879	1603	14.3	19.7	38.522	E
D - Newbourne Rd East	325	81	1728	349	0.932	312	251	3.5	6.7	76.486	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	178	2025	0.659	1350	1299	5.9	2.0	5.454	A
B - Foxhall Rd West	192	48	1212	803	0.239	264	305	18.4	0.3	7.668	A
C - A12 South	1072	268	371	1986	0.540	1146	1260	19.7	1.2	4.679	A
D - Newbourne Rd East	255	64	1353	524	0.486	278	174	6.7	1.0	15.942	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	74	2086	0.398	836	708	2.0	0.7	2.893	A
B - Foxhall Rd West	90	23	691	1073	0.084	91	182	0.3	0.1	3.668	A
C - A12 South	650	163	220	2073	0.314	653	752	1.2	0.5	2.541	A
D - Newbourne Rd East	157	39	813	777	0.202	159	98	1.0	0.3	5.857	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	74	2087	0.288	601	679	0.7	0.4	2.426	A
B - Foxhall Rd West	90	23	663	1088	0.083	90	144	0.1	0.1	3.607	A
C - A12 South	650	163	157	2109	0.308	650	549	0.5	0.4	2.468	A
D - Newbourne Rd East	112	28	593	880	0.127	112	82	0.3	0.1	4.692	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	74	2087	0.288	600	679	0.4	0.4	2.423	A
B - Foxhall Rd West	90	23	662	1088	0.083	90	144	0.1	0.1	3.606	A
C - A12 South	650	163	156	2110	0.308	650	548	0.4	0.4	2.466	A
D - Newbourne Rd East	112	28	592	880	0.127	112	82	0.1	0.1	4.686	A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	177.59	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1987	100.000
B - Foxhall Rd West		FLAT	✓	487	100.000
C - A12 South		FLAT	✓	1816	100.000
D - Newbourne Rd East		FLAT	✓	363	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	365	1447	173
	B - Foxhall Rd West	274	0	147	66
	C - A12 South	1522	213	1	80
	D - Newbourne Rd East	132	115	115	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	4
	B - Foxhall Rd West	4	0	6	3
	C - A12 South	5	5	0	0
	D - Newbourne Rd East	3	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.99	85.82	46.3	F	1987	2980
B - Foxhall Rd West	0.86	44.72	5.8	E	487	730
C - A12 South	0.94	28.69	14.0	D	1816	2724
D - Newbourne Rd East	1.35	1624.57	132.2	F	363	544

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	284	2003	0.992	1907	1857	0.0	19.9	27.530	D
B - Foxhall Rd West	487	122	1671	581	0.838	470	649	0.0	4.2	29.070	D
C - A12 South	1816	454	548	1936	0.938	1772	1622	0.0	10.8	18.663	C
D - Newbourne Rd East	363	91	1884	301	1.205	286	308	0.0	19.2	144.314	F

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	292	1999	0.994	1955	1892	19.9	27.9	50.910	F
B - Foxhall Rd West	487	122	1701	566	0.859	483	659	4.2	5.1	40.537	E

C - A12 South	1816	454	550	1935	0.938	1809	1658	10.8	12.4	26.202	D
D - Newbourne Rd East	363	91	1932	278	1.305	277	315	19.2	40.7	414.578	F

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	293	1998	0.994	1963	1895	27.9	33.8	62.567	F
B - Foxhall Rd West	487	122	1702	565	0.861	485	660	5.1	5.5	43.011	E
C - A12 South	1816	454	550	1935	0.938	1813	1664	12.4	13.1	27.516	D
D - Newbourne Rd East	363	91	1940	274	1.324	274	316	40.7	63.0	704.088	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	293	1998	0.995	1968	1895	33.8	38.6	71.624	F
B - Foxhall Rd West	487	122	1703	565	0.861	486	660	5.5	5.6	43.960	E
C - A12 South	1816	454	549	1936	0.938	1814	1667	13.1	13.5	28.120	D
D - Newbourne Rd East	363	91	1944	272	1.334	272	317	63.0	85.8	1005.970	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	293	1998	0.995	1971	1896	38.6	42.7	79.213	F
B - Foxhall Rd West	487	122	1703	565	0.861	486	661	5.6	5.8	44.440	E
C - A12 South	1816	454	549	1936	0.938	1815	1669	13.5	13.8	28.468	D
D - Newbourne Rd East	363	91	1947	271	1.341	271	317	85.8	108.9	1313.005	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	294	1998	0.995	1973	1896	42.7	46.3	85.817	F
B - Foxhall Rd West	487	122	1703	565	0.861	486	661	5.8	5.8	44.724	E
C - A12 South	1816	454	549	1936	0.938	1815	1670	13.8	14.0	28.693	D
D - Newbourne Rd East	363	91	1949	270	1.345	270	317	108.9	132.2	1624.575	F

2023 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourn Road	Standard Roundabout		A, D, C, B	115.94	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	2069	100.000
B - Foxhall Rd West		FLAT	✓	455	100.000
C - A12 South		FLAT	✓	1862	100.000
D - Newbourn Rd East		FLAT	✓	298	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	1	423	1500	145
	B - Foxhall Rd West	249	0	137	68
	C - A12 South	1504	313	1	44
	D - Newbourn Rd East	81	136	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	100	1	3	2
	B - Foxhall Rd West	0	0	0	3
	C - A12 South	4	2	0	4
	D - Newbourn Rd East	1	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	96.37	54.6	F	2069	3103
B - Foxhall Rd West	0.71	19.71	2.5	C	455	682
C - A12 South	0.96	43.72	21.7	E	1862	2793
D - Newbourn Rd East	1.18	862.91	64.8	F	298	447

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2069	517	245	2072	0.998	1981	1775	0.0	21.8	28.448	D
B - Foxhall Rd West	455	114	1574	658	0.690	446	827	0.0	2.1	16.372	C
C - A12 South	1862	466	594	1939	0.961	1807	1643	0.0	13.8	22.052	C
D - Newbourn Rd East	298	75	1979	284	1.048	258	248	0.0	9.9	95.245	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2069	517	250	2070	1.000	2031	1812	21.8	31.2	53.986	F
B - Foxhall Rd West	455	114	1609	641	0.709	454	843	2.1	2.3	18.956	C

C - A12 South	1862	466	603	1933	0.963	1849	1681	13.8	17.1	34.920	D
D - Newbourne Rd East	298	75	2027	261	1.142	256	254	9.9	20.3	240.909	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2069	517	250	2069	1.000	2040	1817	31.2	38.4	67.494	F
B - Foxhall Rd West	455	114	1613	639	0.712	454	845	2.3	2.4	19.458	C
C - A12 South	1862	466	604	1933	0.963	1855	1687	17.1	19.0	38.850	E
D - Newbourne Rd East	298	75	2035	257	1.160	255	255	20.3	31.1	387.863	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2069	517	250	2069	1.000	2044	1819	38.4	44.5	78.419	F
B - Foxhall Rd West	455	114	1615	638	0.713	454	846	2.4	2.4	19.600	C
C - A12 South	1862	466	604	1933	0.963	1857	1690	19.0	20.2	41.124	E
D - Newbourne Rd East	298	75	2040	255	1.169	254	255	31.1	42.1	541.685	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2069	517	250	2069	1.000	2047	1820	44.5	49.8	87.883	F
B - Foxhall Rd West	455	114	1616	637	0.713	454	846	2.4	2.4	19.668	C
C - A12 South	1862	466	604	1933	0.963	1859	1692	20.2	21.0	42.633	E
D - Newbourne Rd East	298	75	2043	254	1.175	253	255	42.1	53.4	700.892	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2069	517	251	2069	1.000	2049	1820	49.8	54.6	96.368	F
B - Foxhall Rd West	455	114	1616	637	0.714	454	847	2.4	2.5	19.709	C
C - A12 South	1862	466	603	1933	0.963	1860	1693	21.0	21.7	43.715	E
D - Newbourne Rd East	298	75	2044	253	1.180	252	256	53.4	64.8	862.913	F

2023 Early Years, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	895	100.000
B - Foxhall Rd West		ONE HOUR	✓	229	100.000
C - A12 South		ONE HOUR	✓	791	100.000
D - Newbourne Rd East		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	824	31
	B - Foxhall Rd West	125	0	81	22
	C - A12 South	724	37	0	30
	D - Newbourne Rd East	17	20	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	8
	B - Foxhall Rd West	1	0	10	10
	C - A12 South	12	5	0	5
	D - Newbourne Rd East	0	16	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.48	3.32	0.9	A	821	1232
B - Foxhall Rd West	0.26	5.10	0.4	A	210	315
C - A12 South	0.42	2.98	0.7	A	726	1089
D - Newbourne Rd East	0.13	6.47	0.1	A	67	100

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	674	168	100	2098	0.321	672	650	0.0	0.5	2.521	A
B - Foxhall Rd West	172	43	579	1100	0.157	172	73	0.0	0.2	3.874	A
C - A12 South	595	149	58	2093	0.285	594	706	0.0	0.4	2.400	A
D - Newbourne Rd East	55	14	710	782	0.070	54	62	0.0	0.1	4.947	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	805	201	120	2086	0.386	804	778	0.5	0.6	2.807	A
B - Foxhall Rd West	206	51	692	1040	0.198	205	88	0.2	0.2	4.312	A

C - A12 South	711	178	70	2086	0.341	710	845	0.4	0.5	2.617	A
D - Newbourne Rd East	65	16	849	720	0.090	65	74	0.1	0.1	5.495	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	986	246	147	2069	0.476	984	953	0.6	0.9	3.316	A
B - Foxhall Rd West	252	63	848	958	0.263	251	108	0.2	0.4	5.091	A
C - A12 South	871	218	86	2077	0.419	870	1034	0.5	0.7	2.980	A
D - Newbourne Rd East	80	20	1040	637	0.125	80	91	0.1	0.1	6.462	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	986	246	147	2069	0.476	985	954	0.9	0.9	3.322	A
B - Foxhall Rd West	252	63	849	958	0.263	252	108	0.4	0.4	5.100	A
C - A12 South	871	218	86	2077	0.419	871	1035	0.7	0.7	2.982	A
D - Newbourne Rd East	80	20	1041	636	0.125	80	91	0.1	0.1	6.471	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	805	201	120	2085	0.386	806	780	0.9	0.6	2.815	A
B - Foxhall Rd West	206	51	694	1039	0.198	206	88	0.4	0.2	4.322	A
C - A12 South	711	178	70	2086	0.341	712	847	0.7	0.5	2.622	A
D - Newbourne Rd East	65	16	851	719	0.091	65	75	0.1	0.1	5.507	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	674	168	101	2097	0.321	674	653	0.6	0.5	2.532	A
B - Foxhall Rd West	172	43	581	1099	0.157	172	74	0.2	0.2	3.886	A
C - A12 South	595	149	59	2092	0.285	596	709	0.5	0.4	2.405	A
D - Newbourne Rd East	55	14	713	780	0.070	55	62	0.1	0.1	4.963	A

2023 Early Years, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourn Road	Standard Roundabout		A, D, C, B	113.30	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1703	100.000
B - Foxhall Rd West		ONE HOUR	✓	560	100.000
C - A12 South		ONE HOUR	✓	1683	100.000
D - Newbourn Rd East		ONE HOUR	✓	233	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	0	215	1428	61
	B - Foxhall Rd West	334	0	170	56
	C - A12 South	1546	93	0	45
	D - Newbourn Rd East	129	35	69	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	0	0	8	11
	B - Foxhall Rd West	1	0	8	9
	C - A12 South	12	5	0	13
	D - Newbourn Rd East	11	17	16	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.94	26.40	12.9	D	1563	2345
B - Foxhall Rd West	1.45	574.40	96.9	F	513	770
C - A12 South	0.98	42.55	21.1	E	1545	2317
D - Newbourn Rd East	1.07	199.94	14.8	F	213	320

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1282	321	201	2006	0.639	1275	1502	0.0	1.7	4.883	A
B - Foxhall Rd West	421	105	1287	732	0.576	416	256	0.0	1.3	11.224	B
C - A12 South	1267	317	283	1961	0.646	1260	1246	0.0	1.8	5.081	A
D - Newbourn Rd East	175	44	1356	497	0.352	173	121	0.0	0.5	11.043	B

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1531	383	238	1984	0.772	1525	1791	1.7	3.3	7.752	A
B - Foxhall Rd West	503	126	1538	597	0.842	491	306	1.3	4.4	30.862	D

C - A12 South	1513	378	338	1930	0.784	1506	1488	1.8	3.5	8.358	A
D - Newbourne Rd East	209	52	1619	379	0.552	207	144	0.5	1.2	20.625	C

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1876	469	224	1992	0.942	1843	2042	3.3	11.4	20.739	C
B - Foxhall Rd West	616	154	1828	442	1.394	438	365	4.4	48.9	239.399	F
C - A12 South	1853	463	392	1901	0.975	1802	1744	3.5	16.3	27.859	D
D - Newbourne Rd East	256	64	1910	248	1.031	226	158	1.2	8.7	106.928	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1876	469	219	1994	0.940	1870	2066	11.4	12.9	26.403	D
B - Foxhall Rd West	616	154	1862	424	1.452	424	371	48.9	96.9	574.396	F
C - A12 South	1853	463	399	1897	0.977	1834	1764	16.3	21.1	42.553	E
D - Newbourne Rd East	256	64	1931	239	1.072	232	158	8.7	14.8	199.937	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1531	383	259	1971	0.777	1569	1918	12.9	3.6	9.711	A
B - Foxhall Rd West	503	126	1639	543	0.926	538	324	96.9	88.3	569.299	F
C - A12 South	1513	378	382	1904	0.795	1581	1555	21.1	4.1	13.298	B
D - Newbourne Rd East	209	52	1675	353	0.592	262	152	14.8	1.6	57.175	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1282	321	322	1933	0.664	1289	1697	3.6	2.0	5.648	A
B - Foxhall Rd West	421	105	1305	722	0.584	714	260	88.3	15.1	266.115	F
C - A12 South	1267	317	288	1958	0.647	1276	1350	4.1	1.9	5.347	A
D - Newbourne Rd East	175	44	1459	450	0.389	179	151	1.6	0.7	13.442	B

2023 Early Years, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	48.08	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	215	1570	127
	B - Foxhall Rd West	337	0	196	61
	C - A12 South	1886	166	1	107
	D - Newbourne Rd East	212	73	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	8	11
	B - Foxhall Rd West	2	0	5	4
	C - A12 South	11	8	0	7
	D - Newbourne Rd East	7	2	16	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.37	6.0	B	1122	1683
B - Foxhall Rd West	1.07	176.40	24.2	F	234	351
C - A12 South	1.00	51.70	27.5	F	1136	1704
D - Newbourne Rd East	0.93	76.57	6.7	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	275	1954	0.857	1652	1988	0.0	5.5	11.250	B
B - Foxhall Rd West	487	122	1836	455	1.070	426	380	0.0	15.1	83.164	F
C - A12 South	1893	473	397	1919	0.986	1820	1570	0.0	18.2	26.931	D
D - Newbourne Rd East	297	74	1684	364	0.816	283	243	0.0	3.5	39.608	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	274	1954	0.865	1689	2037	5.5	6.0	13.367	B
B - Foxhall Rd West	455	114	1893	425	1.071	418	393	15.1	24.2	176.399	F
C - A12 South	1900	475	423	1905	0.998	1863	1605	18.2	27.5	51.697	F
D - Newbourne Rd East	325	81	1716	349	0.932	312	247	3.5	6.7	76.574	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	183	2008	0.665	1351	1345	6.0	2.0	5.608	A
B - Foxhall Rd West	192	48	1241	773	0.248	287	296	24.2	0.3	9.117	A
C - A12 South	1072	268	359	1940	0.553	1177	1275	27.5	1.3	5.434	A
D - Newbourne Rd East	255	64	1356	518	0.492	278	177	6.7	1.0	16.351	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	72	2073	0.401	836	710	2.0	0.7	2.923	A
B - Foxhall Rd West	90	22	691	1065	0.084	91	175	0.3	0.1	3.699	A
C - A12 South	650	162	213	2021	0.322	653	758	1.3	0.5	2.636	A
D - Newbourne Rd East	157	39	811	775	0.202	160	97	1.0	0.3	5.880	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	71	2073	0.289	601	681	0.7	0.4	2.446	A
B - Foxhall Rd West	90	22	662	1080	0.083	90	139	0.1	0.1	3.636	A
C - A12 South	650	162	152	2056	0.316	650	552	0.5	0.5	2.562	A
D - Newbourne Rd East	112	28	591	879	0.127	112	81	0.3	0.1	4.702	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	71	2073	0.289	600	681	0.4	0.4	2.443	A
B - Foxhall Rd West	90	22	662	1081	0.083	90	139	0.1	0.1	3.636	A
C - A12 South	650	162	151	2056	0.316	650	551	0.5	0.5	2.561	A
D - Newbourne Rd East	112	28	590	879	0.127	112	81	0.1	0.1	4.692	A

2023 Early Years, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourn Road	Standard Roundabout		A, D, C, B	208.82	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1987	100.000
B - Foxhall Rd West		FLAT	✓	508	100.000
C - A12 South		FLAT	✓	1790	100.000
D - Newbourn Rd East		FLAT	✓	363	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	2	341	1471	173
	B - Foxhall Rd West	292	0	147	69
	C - A12 South	1499	213	1	77
	D - Newbourn Rd East	132	115	115	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	0	1	8	4
	B - Foxhall Rd West	3	0	6	2
	C - A12 South	8	5	0	0
	D - Newbourn Rd East	3	5	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	127.22	70.2	F	1987	2980
B - Foxhall Rd West	0.90	60.79	8.2	F	508	761
C - A12 South	0.93	27.26	13.1	D	1790	2685
D - Newbourn Rd East	1.38	1805.73	143.0	F	363	544

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	283	1973	1.007	1893	1848	0.0	23.6	31.260	D
B - Foxhall Rd West	508	127	1645	578	0.878	486	622	0.0	5.3	33.884	D
C - A12 South	1790	447	518	1916	0.934	1748	1632	0.0	10.4	18.309	C
D - Newbourn Rd East	363	91	1870	294	1.236	280	306	0.0	20.7	156.746	F

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	291	1968	1.009	1939	1883	23.6	35.5	62.365	F
B - Foxhall Rd West	508	127	1673	564	0.900	502	631	5.3	6.7	51.289	F

C - A12 South	1790	447	519	1916	0.934	1784	1667	10.4	11.8	25.243	D
D - Newbourne Rd East	363	91	1917	271	1.341	270	313	20.7	44.0	457.885	F

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	292	1967	1.010	1947	1887	35.5	45.4	81.300	F
B - Foxhall Rd West	508	127	1674	563	0.901	505	631	6.7	7.4	56.286	F
C - A12 South	1790	447	518	1917	0.934	1787	1673	11.8	12.4	26.326	D
D - Newbourne Rd East	363	91	1925	267	1.362	266	315	44.0	68.2	781.558	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	293	1967	1.010	1951	1887	45.4	54.2	97.807	F
B - Foxhall Rd West	508	127	1674	563	0.902	506	632	7.4	7.8	58.609	F
C - A12 South	1790	447	518	1917	0.934	1788	1676	12.4	12.7	26.810	D
D - Newbourne Rd East	363	91	1929	265	1.372	264	315	68.2	92.9	1114.899	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	293	1967	1.010	1954	1888	54.2	62.5	112.962	F
B - Foxhall Rd West	508	127	1674	563	0.902	507	632	7.8	8.0	59.935	F
C - A12 South	1790	447	517	1917	0.934	1789	1678	12.7	13.0	27.082	D
D - Newbourne Rd East	363	91	1932	263	1.379	263	316	92.9	117.8	1459.882	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	293	1967	1.010	1956	1888	62.5	70.2	127.216	F
B - Foxhall Rd West	508	127	1674	563	0.902	507	632	8.0	8.2	60.787	F
C - A12 South	1790	447	517	1917	0.933	1789	1679	13.0	13.1	27.257	D
D - Newbourne Rd East	363	91	1933	262	1.383	262	316	117.8	143.0	1805.732	F

2023 Early Years, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourn Road	Standard Roundabout		A, D, C, B	175.01	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	2094	100.000
B - Foxhall Rd West		FLAT	✓	455	100.000
C - A12 South		FLAT	✓	1892	100.000
D - Newbourn Rd East		FLAT	✓	298	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	1	410	1537	146
	B - Foxhall Rd West	248	0	137	69
	C - A12 South	1534	313	1	44
	D - Newbourn Rd East	81	136	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	100	1	5	2
	B - Foxhall Rd West	0	0	0	3
	C - A12 South	5	2	0	4
	D - Newbourn Rd East	1	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.03	192.27	113.6	F	2094	3140
B - Foxhall Rd West	0.73	21.73	2.7	C	455	682
C - A12 South	0.97	55.16	27.8	F	1892	2838
D - Newbourn Rd East	1.22	1066.04	77.7	F	298	447

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2094	523	246	2038	1.027	1973	1795	0.0	30.2	36.027	E
B - Foxhall Rd West	455	114	1595	644	0.706	446	803	0.0	2.2	17.439	C
C - A12 South	1892	473	570	1945	0.973	1829	1653	0.0	15.8	24.178	C
D - Newbourn Rd East	298	75	1971	272	1.095	251	248	0.0	11.8	111.067	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2094	523	251	2036	1.028	2019	1835	30.2	48.9	78.116	F
B - Foxhall Rd West	455	114	1632	625	0.727	453	818	2.2	2.5	20.748	C

C - A12 South	1892	473	576	1941	0.975	1874	1688	15.8	20.4	40.488	E
D - Newbourne Rd East	298	75	2016	250	1.191	247	253	11.8	24.5	292.954	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2094	523	251	2035	1.029	2025	1840	48.9	65.9	108.427	F
B - Foxhall Rd West	455	114	1637	622	0.730	454	820	2.5	2.6	21.297	C
C - A12 South	1892	473	576	1941	0.975	1881	1692	20.4	23.2	46.430	E
D - Newbourne Rd East	298	75	2023	247	1.207	246	254	24.5	37.5	479.103	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2094	523	251	2035	1.029	2029	1843	65.9	82.2	137.066	F
B - Foxhall Rd West	455	114	1640	621	0.732	454	821	2.6	2.6	21.523	C
C - A12 South	1892	473	576	1941	0.975	1884	1694	23.2	25.2	50.262	F
D - Newbourne Rd East	298	75	2026	246	1.214	245	254	37.5	50.8	671.669	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2094	523	251	2035	1.029	2030	1844	82.2	98.1	164.906	F
B - Foxhall Rd West	455	114	1641	620	0.733	454	821	2.6	2.7	21.649	C
C - A12 South	1892	473	576	1941	0.975	1886	1696	25.2	26.7	53.031	F
D - Newbourne Rd East	298	75	2027	245	1.218	244	254	50.8	64.2	888.097	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2094	523	251	2035	1.029	2031	1845	98.1	113.6	192.270	F
B - Foxhall Rd West	455	114	1642	620	0.734	454	821	2.7	2.7	21.731	C
C - A12 South	1892	473	576	1941	0.975	1888	1696	26.7	27.8	55.157	F
D - Newbourne Rd East	298	75	2028	244	1.220	244	254	64.2	77.7	1066.044	F

2028 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	872	100.000
B - Foxhall Rd West		ONE HOUR	✓	237	100.000
C - A12 South		ONE HOUR	✓	738	100.000
D - Newbourne Rd East		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	800	32
	B - Foxhall Rd West	130	0	82	24
	C - A12 South	669	37	0	32
	D - Newbourne Rd East	14	21	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	8
	B - Foxhall Rd West	1	0	10	9
	C - A12 South	10	5	0	5
	D - Newbourne Rd East	0	15	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.47	3.26	0.9	A	800	1200
B - Foxhall Rd West	0.26	4.87	0.4	A	217	326
C - A12 South	0.38	2.75	0.6	A	677	1016
D - Newbourne Rd East	0.12	6.35	0.1	A	66	98

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	657	164	104	2093	0.314	655	611	0.0	0.5	2.500	A
B - Foxhall Rd West	178	45	537	1129	0.158	178	74	0.0	0.2	3.785	A
C - A12 South	556	139	57	2135	0.260	554	689	0.0	0.4	2.275	A
D - Newbourne Rd East	54	13	693	787	0.068	54	66	0.0	0.1	4.903	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	784	196	124	2080	0.377	783	731	0.5	0.6	2.774	A
B - Foxhall Rd West	213	53	642	1074	0.198	213	89	0.2	0.2	4.177	A

C - A12 South	663	166	68	2128	0.312	663	825	0.4	0.5	2.456	A
D - Newbourne Rd East	64	16	829	727	0.088	64	79	0.1	0.1	5.427	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	960	240	152	2063	0.465	959	895	0.6	0.9	3.258	A
B - Foxhall Rd West	261	65	786	1000	0.261	260	109	0.2	0.4	4.867	A
C - A12 South	812	203	83	2120	0.383	812	1010	0.5	0.6	2.750	A
D - Newbourne Rd East	79	20	1015	646	0.122	79	97	0.1	0.1	6.344	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	960	240	152	2063	0.465	960	895	0.9	0.9	3.264	A
B - Foxhall Rd West	261	65	787	999	0.261	261	109	0.4	0.4	4.873	A
C - A12 South	812	203	83	2120	0.383	812	1011	0.6	0.6	2.753	A
D - Newbourne Rd East	79	20	1016	645	0.122	79	97	0.1	0.1	6.352	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	784	196	125	2080	0.377	785	732	0.9	0.6	2.784	A
B - Foxhall Rd West	213	53	643	1074	0.198	213	89	0.4	0.2	4.185	A
C - A12 South	663	166	68	2128	0.312	664	827	0.6	0.5	2.459	A
D - Newbourne Rd East	64	16	831	727	0.088	64	79	0.1	0.1	5.438	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	657	164	104	2092	0.314	657	613	0.6	0.5	2.508	A
B - Foxhall Rd West	178	45	539	1128	0.158	179	74	0.2	0.2	3.795	A
C - A12 South	556	139	57	2135	0.260	556	692	0.5	0.4	2.280	A
D - Newbourne Rd East	54	13	695	786	0.068	54	66	0.1	0.1	4.917	A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	67.62	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1587	100.000
B - Foxhall Rd West		ONE HOUR	✓	542	100.000
C - A12 South		ONE HOUR	✓	1660	100.000
D - Newbourne Rd East		ONE HOUR	✓	203	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	158	1371	59
	B - Foxhall Rd West	317	0	165	60
	C - A12 South	1518	93	0	50
	D - Newbourne Rd East	109	29	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	11
	B - Foxhall Rd West	1	0	8	9
	C - A12 South	8	5	0	12
	D - Newbourne Rd East	13	20	17	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	14.65	6.8	B	1457	2185
B - Foxhall Rd West	1.29	384.43	68.4	F	497	745
C - A12 South	0.91	19.87	9.5	C	1523	2285
D - Newbourne Rd East	0.78	52.86	3.1	F	186	279

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1195	299	204	2015	0.593	1189	1455	0.0	1.4	4.331	A
B - Foxhall Rd West	408	102	1256	768	0.531	403	209	0.0	1.1	9.765	A
C - A12 South	1250	312	221	2059	0.607	1244	1198	0.0	1.5	4.383	A
D - Newbourne Rd East	153	38	1268	530	0.288	151	126	0.0	0.4	9.455	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1427	357	243	1991	0.717	1423	1738	1.4	2.5	6.292	A
B - Foxhall Rd West	487	122	1502	640	0.761	480	250	1.1	2.9	21.571	C

C - A12 South	1493	373	264	2033	0.734	1488	1432	1.5	2.7	6.542	A
D - Newbourne Rd East	182	46	1516	421	0.433	181	150	0.4	0.7	14.890	B

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	248	1988	0.879	1732	2039	2.5	6.5	13.284	B
B - Foxhall Rd West	596	149	1819	475	1.254	468	303	2.9	35.1	165.352	F
C - A12 South	1828	457	319	2002	0.913	1804	1706	2.7	8.7	16.535	C
D - Newbourne Rd East	223	56	1809	292	0.763	215	170	0.7	2.7	43.124	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	246	1989	0.879	1746	2058	6.5	6.8	14.652	B
B - Foxhall Rd West	596	149	1842	464	1.286	463	307	35.1	68.4	384.426	F
C - A12 South	1828	457	324	1998	0.915	1824	1720	8.7	9.5	19.870	C
D - Newbourne Rd East	223	56	1822	287	0.778	222	171	2.7	3.1	52.862	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1427	357	299	1957	0.729	1443	1850	6.8	2.8	7.226	A
B - Foxhall Rd West	487	122	1537	622	0.783	613	255	68.4	36.9	306.350	F
C - A12 South	1493	373	273	2028	0.736	1519	1493	9.5	2.9	7.425	A
D - Newbourne Rd East	182	46	1576	395	0.462	191	167	3.1	0.9	18.362	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1195	299	266	1977	0.604	1200	1553	2.8	1.5	4.659	A
B - Foxhall Rd West	408	102	1268	761	0.536	551	211	36.9	1.2	33.624	D
C - A12 South	1250	312	224	2057	0.608	1255	1253	2.9	1.6	4.516	A
D - Newbourne Rd East	153	38	1323	506	0.302	154	143	0.9	0.4	10.298	B

2028 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	34.69	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	154	1560	124
	B - Foxhall Rd West	344	0	194	70
	C - A12 South	1920	166	1	107
	D - Newbourne Rd East	167	33	129	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	8	8	0	7
	D - Newbourne Rd East	9	7	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	13.14	5.9	B	1122	1683
B - Foxhall Rd West	1.03	139.00	18.3	F	234	351
C - A12 South	0.95	27.28	13.6	D	1136	1704
D - Newbourne Rd East	0.93	77.41	6.8	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	280	1959	0.855	1653	2008	0.0	5.4	11.079	B
B - Foxhall Rd West	487	122	1852	471	1.032	436	307	0.0	12.5	71.057	F
C - A12 South	1893	473	310	2018	0.938	1849	1654	0.0	10.9	18.105	C
D - Newbourne Rd East	297	74	1682	363	0.818	283	251	0.0	3.5	39.858	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	280	1959	0.863	1689	2056	5.4	5.9	13.143	B
B - Foxhall Rd West	455	114	1904	444	1.025	432	316	12.5	18.3	139.004	F
C - A12 South	1900	475	331	2006	0.947	1890	1695	10.9	13.6	27.285	D
D - Newbourne Rd East	325	81	1714	348	0.934	312	255	3.5	6.8	77.414	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	169	2024	0.659	1350	1272	5.9	2.0	5.462	A
B - Foxhall Rd West	192	48	1178	822	0.233	264	226	18.3	0.3	7.359	A
C - A12 South	1072	268	282	2034	0.527	1122	1340	13.6	1.1	4.166	A
D - Newbourne Rd East	255	64	1344	519	0.491	278	176	6.8	1.0	16.348	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	71	2082	0.399	836	704	2.0	0.7	2.903	A
B - Foxhall Rd West	90	22	684	1079	0.083	91	136	0.3	0.1	3.649	A
C - A12 South	650	163	167	2101	0.309	653	802	1.1	0.4	2.489	A
D - Newbourne Rd East	157	39	809	766	0.204	159	98	1.0	0.3	5.964	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	71	2082	0.288	601	677	0.7	0.4	2.433	A
B - Foxhall Rd West	90	22	658	1092	0.082	90	111	0.1	0.1	3.593	A
C - A12 South	650	163	119	2130	0.305	650	583	0.4	0.4	2.432	A
D - Newbourne Rd East	112	28	590	868	0.129	112	82	0.3	0.1	4.771	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	71	2082	0.288	600	677	0.4	0.4	2.430	A
B - Foxhall Rd West	90	22	658	1093	0.082	90	111	0.1	0.1	3.592	A
C - A12 South	650	163	118	2130	0.305	650	582	0.4	0.4	2.434	A
D - Newbourne Rd East	112	28	589	868	0.129	112	82	0.1	0.1	4.761	A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	29.42	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1685	100.000
B - Foxhall Rd West		FLAT	✓	485	100.000
C - A12 South		FLAT	✓	1912	100.000
D - Newbourne Rd East		FLAT	✓	285	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	233	1334	116
	B - Foxhall Rd West	295	0	148	42
	C - A12 South	1638	224	1	49
	D - Newbourne Rd East	98	74	112	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	6
	B - Foxhall Rd West	3	0	6	4
	C - A12 South	5	5	0	0
	D - Newbourne Rd East	4	7	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	10.90	5.0	B	1685	2527
B - Foxhall Rd West	0.93	79.77	10.2	F	485	727
C - A12 South	0.95	31.59	16.1	D	1912	2868
D - Newbourne Rd East	0.76	40.15	3.1	E	285	427

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1685	421	230	2020	0.834	1666	1976	0.0	4.7	9.705	A
B - Foxhall Rd West	485	121	1744	545	0.888	462	520	0.0	5.6	36.902	E
C - A12 South	1912	478	399	2024	0.945	1865	1569	0.0	11.7	19.002	C
D - Newbourne Rd East	285	71	1694	385	0.740	275	202	0.0	2.5	30.402	D

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1685	421	237	2016	0.836	1684	2021	4.7	4.9	10.777	B
B - Foxhall Rd West	485	121	1781	527	0.920	477	530	5.6	7.6	59.976	F

C - A12 South	1912	478	407	2019	0.947	1903	1591	11.7	13.8	27.707	D
D - Newbourne Rd East	285	71	1715	375	0.760	284	206	2.5	2.9	38.249	E

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1685	421	238	2015	0.836	1685	2027	4.9	5.0	10.848	B
B - Foxhall Rd West	485	121	1785	525	0.923	480	530	7.6	8.7	69.041	F
C - A12 South	1912	478	408	2019	0.947	1908	1593	13.8	14.8	29.633	D
D - Newbourne Rd East	285	71	1716	374	0.761	284	206	2.9	3.0	39.402	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1685	421	239	2015	0.836	1685	2030	5.0	5.0	10.876	B
B - Foxhall Rd West	485	121	1786	524	0.925	482	531	8.7	9.3	74.100	F
C - A12 South	1912	478	408	2019	0.947	1909	1594	14.8	15.4	30.598	D
D - Newbourne Rd East	285	71	1717	374	0.762	285	207	3.0	3.0	39.814	E

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1685	421	239	2015	0.836	1685	2031	5.0	5.0	10.889	B
B - Foxhall Rd West	485	121	1787	524	0.925	483	531	9.3	9.8	77.416	F
C - A12 South	1912	478	408	2019	0.947	1910	1594	15.4	15.8	31.188	D
D - Newbourne Rd East	285	71	1717	374	0.762	285	207	3.0	3.1	39.993	E

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1685	421	239	2015	0.836	1685	2031	5.0	5.0	10.897	B
B - Foxhall Rd West	485	121	1788	524	0.926	483	531	9.8	10.2	79.774	F
C - A12 South	1912	478	408	2019	0.947	1911	1594	15.8	16.1	31.586	D
D - Newbourne Rd East	285	71	1717	374	0.762	285	207	3.1	3.1	40.151	E

2028 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	123.71	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1809	100.000
B - Foxhall Rd West		FLAT	✓	424	100.000
C - A12 South		FLAT	✓	2145	100.000
D - Newbourne Rd East		FLAT	✓	279	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	212	1476	120
	B - Foxhall Rd West	232	0	137	54
	C - A12 South	1756	357	1	31
	D - Newbourne Rd East	63	122	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	3	3	3
	B - Foxhall Rd West	0	0	0	4
	C - A12 South	4	1	0	5
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.39	6.6	B	1809	2713
B - Foxhall Rd West	0.76	26.70	3.1	D	424	635
C - A12 South	1.04	245.10	148.6	F	2145	3218
D - Newbourne Rd East	0.79	47.26	3.6	E	279	419

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1809	452	217	2080	0.870	1784	1931	0.0	6.0	11.405	B
B - Foxhall Rd West	424	106	1734	580	0.730	414	660	0.0	2.5	20.539	C
C - A12 South	2145	536	388	2065	1.039	2007	1682	0.0	34.6	39.247	E
D - Newbourne Rd East	279	70	1801	367	0.761	268	200	0.0	2.7	33.644	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1809	452	221	2077	0.871	1807	1971	6.0	6.4	13.197	B
B - Foxhall Rd West	424	106	1771	562	0.754	422	674	2.5	2.8	25.353	D

C - A12 South	2145	536	396	2060	1.041	2048	1706	34.6	58.9	89.623	F
D - Newbourne Rd East	279	70	1826	355	0.786	277	203	2.7	3.2	44.379	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1809	452	222	2077	0.871	1808	1976	6.4	6.5	13.312	B
B - Foxhall Rd West	424	106	1775	559	0.757	423	675	2.8	3.0	26.150	D
C - A12 South	2145	536	397	2059	1.042	2053	1708	58.9	81.9	129.506	F
D - Newbourne Rd East	279	70	1827	354	0.787	278	203	3.2	3.4	46.161	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1809	452	222	2077	0.871	1808	1978	6.5	6.6	13.355	B
B - Foxhall Rd West	424	106	1777	558	0.758	423	676	3.0	3.0	26.447	D
C - A12 South	2145	536	397	2059	1.042	2055	1708	81.9	104.4	168.390	F
D - Newbourne Rd East	279	70	1827	354	0.788	279	204	3.4	3.5	46.771	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1809	452	222	2077	0.871	1809	1979	6.6	6.6	13.378	B
B - Foxhall Rd West	424	106	1778	558	0.759	423	676	3.0	3.1	26.602	D
C - A12 South	2145	536	398	2059	1.042	2056	1708	104.4	126.6	206.859	F
D - Newbourne Rd East	279	70	1827	354	0.788	279	204	3.5	3.5	47.074	E

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1809	452	222	2077	0.871	1809	1980	6.6	6.6	13.389	B
B - Foxhall Rd West	424	106	1778	558	0.759	423	676	3.1	3.1	26.701	D
C - A12 South	2145	536	398	2059	1.042	2057	1709	126.6	148.6	245.101	F
D - Newbourne Rd East	279	70	1827	354	0.788	279	204	3.5	3.6	47.257	E

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourn Road	Standard Roundabout		A, D, C, B	3.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	874	100.000
B - Foxhall Rd West		ONE HOUR	✓	242	100.000
C - A12 South		ONE HOUR	✓	877	100.000
D - Newbourn Rd East		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	0	40	802	32
	B - Foxhall Rd West	135	0	82	24
	C - A12 South	808	37	0	32
	D - Newbourn Rd East	16	21	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	0	0	6	8
	B - Foxhall Rd West	1	0	10	9
	C - A12 South	11	5	0	5
	D - Newbourn Rd East	0	15	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.47	3.27	0.9	A	802	1203
B - Foxhall Rd West	0.29	5.55	0.4	A	222	333
C - A12 South	0.46	3.18	0.8	A	805	1207
D - Newbourn Rd East	0.13	6.36	0.1	A	67	101

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	658	165	104	2093	0.314	656	720	0.0	0.5	2.502	A
B - Foxhall Rd West	182	46	643	1072	0.170	181	74	0.0	0.2	4.039	A
C - A12 South	660	165	58	2114	0.312	658	691	0.0	0.5	2.470	A
D - Newbourn Rd East	55	14	694	789	0.070	55	66	0.0	0.1	4.899	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	786	196	124	2080	0.378	785	862	0.5	0.6	2.778	A
B - Foxhall Rd West	217	54	769	1006	0.216	217	89	0.2	0.3	4.564	A

C - A12 South	788	197	70	2107	0.374	788	827	0.5	0.6	2.726	A
D - Newbourne Rd East	66	17	830	729	0.091	66	79	0.1	0.1	5.427	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	962	241	152	2063	0.466	961	1055	0.6	0.9	3.264	A
B - Foxhall Rd West	266	67	941	916	0.291	266	109	0.3	0.4	5.534	A
C - A12 South	965	241	86	2099	0.460	964	1012	0.6	0.8	3.171	A
D - Newbourne Rd East	81	20	1017	647	0.125	81	97	0.1	0.1	6.353	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	962	241	152	2063	0.467	962	1056	0.9	0.9	3.270	A
B - Foxhall Rd West	266	67	942	915	0.291	266	109	0.4	0.4	5.547	A
C - A12 South	965	241	86	2098	0.460	965	1013	0.8	0.8	3.176	A
D - Newbourne Rd East	81	20	1018	647	0.125	81	97	0.1	0.1	6.361	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	786	196	125	2080	0.378	787	864	0.9	0.6	2.787	A
B - Foxhall Rd West	217	54	770	1005	0.216	218	89	0.4	0.3	4.578	A
C - A12 South	788	197	70	2107	0.374	789	829	0.8	0.6	2.732	A
D - Newbourne Rd East	66	17	832	728	0.091	66	79	0.1	0.1	5.439	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	658	165	104	2093	0.314	659	723	0.6	0.5	2.511	A
B - Foxhall Rd West	182	46	645	1070	0.170	182	74	0.3	0.2	4.056	A
C - A12 South	660	165	59	2114	0.312	661	694	0.6	0.5	2.480	A
D - Newbourne Rd East	55	14	697	788	0.070	55	66	0.1	0.1	4.914	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	106.28	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1590	100.000
B - Foxhall Rd West		ONE HOUR	✓	537	100.000
C - A12 South		ONE HOUR	✓	1754	100.000
D - Newbourne Rd East		ONE HOUR	✓	205	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	163	1369	59
	B - Foxhall Rd West	311	0	165	61
	C - A12 South	1613	93	0	49
	D - Newbourne Rd East	111	29	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	11
	B - Foxhall Rd West	1	0	8	9
	C - A12 South	11	5	0	12
	D - Newbourne Rd East	13	20	17	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	14.14	6.6	B	1459	2189
B - Foxhall Rd West	1.48	601.14	96.8	F	492	739
C - A12 South	0.99	51.11	27.1	F	1610	2415
D - Newbourne Rd East	0.77	50.51	3.0	F	188	282

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1197	299	204	2012	0.595	1192	1521	0.0	1.5	4.359	A
B - Foxhall Rd West	404	101	1326	715	0.565	399	213	0.0	1.3	11.235	B
C - A12 South	1321	330	226	2007	0.658	1313	1196	0.0	1.9	5.132	A
D - Newbourne Rd East	154	39	1270	529	0.291	152	126	0.0	0.4	9.517	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1430	357	241	1989	0.719	1426	1815	1.5	2.5	6.344	A
B - Foxhall Rd West	482	121	1586	577	0.836	471	255	1.3	4.2	30.993	D

C - A12 South	1577	394	271	1982	0.796	1570	1429	1.9	3.7	8.585	A
D - Newbourne Rd East	184	46	1517	420	0.438	183	150	0.4	0.8	15.059	C

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1751	438	225	1998	0.876	1736	2075	2.5	6.4	12.999	B
B - Foxhall Rd West	591	148	1887	417	1.417	413	307	4.2	48.6	251.620	F
C - A12 South	1931	483	326	1950	0.991	1868	1689	3.7	19.7	31.173	D
D - Newbourne Rd East	225	56	1798	297	0.759	218	163	0.8	2.6	42.243	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1751	438	220	2002	0.875	1750	2101	6.4	6.6	14.136	B
B - Foxhall Rd West	591	148	1923	398	1.484	398	311	48.6	96.8	601.140	F
C - A12 South	1931	483	332	1946	0.992	1902	1699	19.7	27.1	51.110	F
D - Newbourne Rd East	225	56	1807	293	0.770	224	163	2.6	3.0	50.514	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1430	357	264	1975	0.724	1446	1940	6.6	2.7	6.995	A
B - Foxhall Rd West	482	121	1685	524	0.920	519	263	96.8	87.7	584.003	F
C - A12 South	1577	394	279	1976	0.798	1669	1464	27.1	4.2	14.981	B
D - Newbourne Rd East	184	46	1551	405	0.454	192	159	3.0	0.9	17.532	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1197	299	330	1935	0.619	1202	1711	2.7	1.6	4.937	A
B - Foxhall Rd West	404	101	1344	705	0.573	697	215	87.7	14.3	268.866	F
C - A12 South	1321	330	229	2005	0.659	1330	1297	4.2	2.0	5.396	A
D - Newbourne Rd East	154	39	1371	484	0.318	156	161	0.9	0.5	11.011	B

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	41.96	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	152	1563	125
	B - Foxhall Rd West	326	0	194	70
	C - A12 South	1943	166	1	107
	D - Newbourne Rd East	168	36	125	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	10	8	0	7
	D - Newbourne Rd East	9	7	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.75	6.2	B	1122	1683
B - Foxhall Rd West	1.07	177.36	24.5	F	234	351
C - A12 South	0.97	35.93	18.2	E	1136	1704
D - Newbourne Rd East	0.95	81.50	7.3	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	280	1946	0.861	1652	1990	0.0	5.6	11.500	B
B - Foxhall Rd West	487	122	1844	454	1.072	426	305	0.0	15.2	83.834	F
C - A12 South	1893	473	311	1973	0.959	1838	1651	0.0	13.6	21.571	C
D - Newbourne Rd East	297	74	1681	358	0.829	282	251	0.0	3.7	41.689	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	278	1946	0.869	1689	2039	5.6	6.2	13.749	B
B - Foxhall Rd West	455	114	1899	424	1.072	418	315	15.2	24.5	177.357	F
C - A12 South	1900	475	332	1961	0.969	1882	1691	13.6	18.2	35.933	E
D - Newbourne Rd East	325	81	1713	343	0.948	310	255	3.7	7.3	81.495	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	184	2002	0.667	1351	1302	6.2	2.0	5.670	A
B - Foxhall Rd West	192	48	1198	798	0.240	288	228	24.5	0.3	8.619	A
C - A12 South	1072	268	285	1987	0.540	1140	1349	18.2	1.2	4.605	A
D - Newbourne Rd East	255	64	1355	509	0.500	280	181	7.3	1.0	17.352	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	72	2067	0.402	836	704	2.0	0.7	2.940	A
B - Foxhall Rd West	90	23	685	1070	0.084	91	136	0.3	0.1	3.681	A
C - A12 South	650	162	168	2054	0.316	653	801	1.2	0.5	2.575	A
D - Newbourne Rd East	157	39	810	763	0.205	160	99	1.0	0.3	6.000	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	72	2067	0.290	601	677	0.7	0.4	2.458	A
B - Foxhall Rd West	90	23	659	1084	0.083	90	111	0.1	0.1	3.623	A
C - A12 South	650	162	119	2082	0.312	650	583	0.5	0.5	2.515	A
D - Newbourne Rd East	112	28	590	865	0.129	112	83	0.3	0.1	4.785	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	72	2067	0.290	600	677	0.4	0.4	2.453	A
B - Foxhall Rd West	90	23	658	1084	0.083	90	111	0.1	0.1	3.619	A
C - A12 South	650	162	119	2082	0.312	650	582	0.5	0.5	2.515	A
D - Newbourne Rd East	112	28	589	866	0.129	112	83	0.1	0.1	4.775	A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourn Road	Standard Roundabout		A, D, C, B	40.87	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1717	100.000
B - Foxhall Rd West		FLAT	✓	471	100.000
C - A12 South		FLAT	✓	1917	100.000
D - Newbourn Rd East		FLAT	✓	287	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	2	227	1370	118
	B - Foxhall Rd West	281	0	148	42
	C - A12 South	1643	224	1	49
	D - Newbourn Rd East	99	86	101	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	0	1	9	6
	B - Foxhall Rd West	3	0	6	4
	C - A12 South	8	5	0	0
	D - Newbourn Rd East	4	6	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.48	6.3	B	1717	2575
B - Foxhall Rd West	0.94	92.48	11.4	F	471	706
C - A12 South	0.97	50.49	25.8	F	1917	2875
D - Newbourn Rd East	0.83	58.95	4.5	F	287	430

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1717	429	229	1989	0.863	1694	1956	0.0	5.7	11.452	B
B - Foxhall Rd West	471	118	1737	529	0.889	448	523	0.0	5.6	37.864	E
C - A12 South	1917	479	404	1979	0.968	1856	1590	0.0	15.1	23.071	C
D - Newbourn Rd East	287	72	1720	360	0.798	274	204	0.0	3.2	37.863	E

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1717	429	236	1985	0.865	1716	2004	5.7	6.1	13.221	B
B - Foxhall Rd West	471	118	1779	508	0.927	461	534	5.6	7.9	63.691	F

C - A12 South	1917	479	413	1974	0.971	1900	1615	15.1	19.3	37.951	E
D - Newbourne Rd East	287	72	1744	348	0.825	284	208	3.2	3.9	52.845	F

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1717	429	237	1984	0.865	1716	2013	6.1	6.2	13.365	B
B - Foxhall Rd West	471	118	1785	504	0.933	465	535	7.9	9.2	75.599	F
C - A12 South	1917	479	414	1973	0.971	1907	1617	19.3	21.8	43.158	E
D - Newbourne Rd East	287	72	1746	347	0.827	286	208	3.9	4.2	56.249	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1717	429	238	1983	0.866	1717	2017	6.2	6.3	13.424	B
B - Foxhall Rd West	471	118	1788	503	0.936	467	536	9.2	10.2	83.059	F
C - A12 South	1917	479	415	1973	0.971	1910	1618	21.8	23.5	46.427	E
D - Newbourne Rd East	287	72	1746	347	0.828	286	208	4.2	4.4	57.664	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1717	429	239	1983	0.866	1717	2019	6.3	6.3	13.455	B
B - Foxhall Rd West	471	118	1790	502	0.937	468	536	10.2	10.9	88.401	F
C - A12 South	1917	479	415	1973	0.972	1912	1619	23.5	24.8	48.741	E
D - Newbourne Rd East	287	72	1747	346	0.828	287	209	4.4	4.4	58.448	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1717	429	239	1983	0.866	1717	2021	6.3	6.3	13.477	B
B - Foxhall Rd West	471	118	1791	501	0.938	468	536	10.9	11.4	92.476	F
C - A12 South	1917	479	415	1973	0.972	1913	1619	24.8	25.8	50.488	F
D - Newbourne Rd East	287	72	1747	346	0.829	287	209	4.4	4.5	58.948	F

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	142.33	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1792	100.000
B - Foxhall Rd West		FLAT	✓	358	100.000
C - A12 South		FLAT	✓	2152	100.000
D - Newbourne Rd East		FLAT	✓	279	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	205	1465	121
	B - Foxhall Rd West	166	0	137	54
	C - A12 South	1763	357	1	31
	D - Newbourne Rd East	63	126	90	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	3	5	3
	B - Foxhall Rd West	1	0	0	4
	C - A12 South	4	1	0	5
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	14.48	7.1	B	1792	2687
B - Foxhall Rd West	0.64	18.27	1.8	C	358	536
C - A12 South	1.05	281.44	170.8	F	2152	3228
D - Newbourne Rd East	0.80	52.09	3.9	F	279	419

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1792	448	218	2041	0.878	1766	1864	0.0	6.4	12.130	B
B - Foxhall Rd West	358	89	1731	575	0.621	351	655	0.0	1.6	15.664	C
C - A12 South	2152	538	384	2056	1.047	2002	1667	0.0	37.5	41.792	E
D - Newbourne Rd East	279	70	1783	360	0.776	267	201	0.0	2.9	35.568	E

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1792	448	222	2039	0.879	1790	1901	6.4	6.8	14.238	B
B - Foxhall Rd West	358	89	1766	558	0.641	357	668	1.6	1.7	17.848	C

C - A12 South	2152	538	393	2050	1.050	2041	1691	37.5	65.3	98.080	F
D - Newbourne Rd East	279	70	1808	348	0.803	277	204	2.9	3.5	48.215	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1792	448	222	2039	0.879	1791	1905	6.8	6.9	14.384	B
B - Foxhall Rd West	358	89	1769	556	0.643	357	670	1.7	1.8	18.107	C
C - A12 South	2152	538	394	2050	1.050	2045	1693	65.3	92.2	144.533	F
D - Newbourne Rd East	279	70	1809	347	0.804	278	204	3.5	3.7	50.568	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1792	448	222	2039	0.879	1791	1906	6.9	7.0	14.438	B
B - Foxhall Rd West	358	89	1771	555	0.644	357	670	1.8	1.8	18.196	C
C - A12 South	2152	538	394	2049	1.050	2047	1693	92.2	118.6	190.361	F
D - Newbourne Rd East	279	70	1809	347	0.804	279	204	3.7	3.8	51.408	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1792	448	222	2039	0.879	1791	1907	7.0	7.1	14.464	B
B - Foxhall Rd West	358	89	1771	555	0.645	357	670	1.8	1.8	18.240	C
C - A12 South	2152	538	394	2049	1.050	2047	1693	118.6	144.8	235.960	F
D - Newbourne Rd East	279	70	1809	347	0.804	279	204	3.8	3.9	51.836	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1792	448	222	2039	0.879	1792	1907	7.1	7.1	14.482	B
B - Foxhall Rd West	358	89	1772	554	0.645	358	671	1.8	1.8	18.266	C
C - A12 South	2152	538	395	2049	1.050	2048	1694	144.8	170.8	281.445	F
D - Newbourne Rd East	279	70	1809	347	0.804	279	204	3.9	3.9	52.095	F

2034 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	908	100.000
B - Foxhall Rd West		ONE HOUR	✓	250	100.000
C - A12 South		ONE HOUR	✓	779	100.000
D - Newbourne Rd East		ONE HOUR	✓	76	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	835	33
	B - Foxhall Rd West	139	0	83	27
	C - A12 South	706	38	0	35
	D - Newbourne Rd East	15	23	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	9	5	0	4
	D - Newbourne Rd East	0	14	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.49	3.40	0.9	A	833	1250
B - Foxhall Rd West	0.28	5.14	0.4	A	229	344
C - A12 South	0.40	2.85	0.7	A	715	1072
D - Newbourne Rd East	0.13	6.55	0.2	A	70	105

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	684	171	109	2089	0.327	682	646	0.0	0.5	2.554	A
B - Foxhall Rd West	188	47	568	1111	0.169	187	76	0.0	0.2	3.893	A
C - A12 South	586	147	59	2138	0.274	585	718	0.0	0.4	2.315	A
D - Newbourne Rd East	58	14	720	782	0.074	57	71	0.0	0.1	4.964	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	816	204	131	2076	0.393	816	773	0.5	0.6	2.855	A
B - Foxhall Rd West	225	56	679	1054	0.213	224	91	0.2	0.3	4.339	A

C - A12 South	700	175	71	2131	0.329	700	859	0.4	0.5	2.514	A
D - Newbourne Rd East	69	17	861	719	0.096	69	85	0.1	0.1	5.532	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1000	250	160	2058	0.486	999	946	0.6	0.9	3.396	A
B - Foxhall Rd West	275	69	831	975	0.282	275	112	0.3	0.4	5.134	A
C - A12 South	858	214	87	2122	0.404	857	1052	0.5	0.7	2.843	A
D - Newbourne Rd East	84	21	1054	634	0.133	84	104	0.1	0.2	6.545	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1000	250	160	2058	0.486	1000	947	0.9	0.9	3.402	A
B - Foxhall Rd West	275	69	832	975	0.282	275	112	0.4	0.4	5.143	A
C - A12 South	858	214	87	2122	0.404	858	1053	0.7	0.7	2.845	A
D - Newbourne Rd East	84	21	1055	633	0.133	84	104	0.2	0.2	6.555	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	816	204	131	2076	0.393	818	774	0.9	0.7	2.863	A
B - Foxhall Rd West	225	56	680	1053	0.213	225	92	0.4	0.3	4.351	A
C - A12 South	700	175	71	2131	0.329	701	861	0.7	0.5	2.517	A
D - Newbourne Rd East	69	17	863	719	0.096	69	85	0.2	0.1	5.543	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	684	171	110	2089	0.327	684	648	0.7	0.5	2.565	A
B - Foxhall Rd West	188	47	569	1110	0.169	188	77	0.3	0.2	3.906	A
C - A12 South	586	147	59	2138	0.274	587	721	0.5	0.4	2.321	A
D - Newbourne Rd East	58	14	722	781	0.074	58	71	0.1	0.1	4.979	A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	111.47	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1679	100.000
B - Foxhall Rd West		ONE HOUR	✓	592	100.000
C - A12 South		ONE HOUR	✓	1734	100.000
D - Newbourne Rd East		ONE HOUR	✓	213	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	194	1425	61
	B - Foxhall Rd West	356	0	166	70
	C - A12 South	1588	94	0	53
	D - Newbourne Rd East	111	33	69	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	11
	B - Foxhall Rd West	1	0	8	9
	C - A12 South	7	5	0	11
	D - Newbourne Rd East	13	18	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	20.16	9.8	C	1541	2312
B - Foxhall Rd West	1.50	619.93	109.9	F	543	814
C - A12 South	0.96	32.50	16.3	D	1591	2387
D - Newbourne Rd East	0.90	93.67	5.6	F	195	293

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1264	316	214	2028	0.623	1258	1536	0.0	1.6	4.636	A
B - Foxhall Rd West	445	111	1311	746	0.597	440	240	0.0	1.4	11.558	B
C - A12 South	1306	326	252	2060	0.634	1299	1241	0.0	1.7	4.692	A
D - Newbourne Rd East	160	40	1335	507	0.316	158	137	0.0	0.5	10.276	B

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1510	377	253	2004	0.753	1504	1832	1.6	3.0	7.130	A
B - Foxhall Rd West	532	133	1568	614	0.867	517	287	1.4	5.1	33.407	D

C - A12 South	1559	390	302	2030	0.768	1553	1482	1.7	3.2	7.449	A
D - Newbourne Rd East	191	48	1595	394	0.486	189	163	0.5	0.9	17.463	C

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1849	462	235	2015	0.918	1825	2096	3.0	9.0	17.098	C
B - Foxhall Rd West	651	163	1883	452	1.442	449	346	5.1	55.8	264.142	F
C - A12 South	1909	477	360	1996	0.956	1869	1745	3.2	13.4	23.100	C
D - Newbourne Rd East	234	59	1884	268	0.874	221	176	0.9	4.3	63.721	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1849	462	231	2018	0.916	1846	2119	9.0	9.8	20.160	C
B - Foxhall Rd West	651	163	1915	435	1.497	435	351	55.8	109.9	619.927	F
C - A12 South	1909	477	368	1991	0.959	1898	1762	13.4	16.3	32.504	D
D - Newbourne Rd East	234	59	1901	261	0.898	229	176	4.3	5.6	93.675	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1510	377	278	1989	0.759	1536	1930	9.8	3.3	8.379	A
B - Foxhall Rd West	532	133	1632	580	0.916	575	296	109.9	99.1	605.392	F
C - A12 South	1559	390	319	2020	0.772	1610	1532	16.3	3.5	9.817	A
D - Newbourne Rd East	191	48	1641	373	0.512	209	173	5.6	1.1	24.139	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1264	316	331	1956	0.646	1270	1726	3.3	1.9	5.289	A
B - Foxhall Rd West	445	111	1327	738	0.604	730	242	99.1	27.8	316.837	F
C - A12 South	1306	326	256	2057	0.635	1313	1334	3.5	1.8	4.882	A
D - Newbourne Rd East	160	40	1428	465	0.344	162	172	1.1	0.5	11.965	B

2034 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	32.15	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	183	1711	130
	B - Foxhall Rd West	365	0	196	86
	C - A12 South	1935	167	1	115
	D - Newbourne Rd East	172	41	143	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	7	8	0	7
	D - Newbourne Rd East	9	6	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	12.40	5.6	B	1122	1683
B - Foxhall Rd West	1.02	124.67	16.0	F	234	351
C - A12 South	0.95	26.60	13.2	D	1136	1704
D - Newbourne Rd East	0.91	67.07	5.8	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	288	1976	0.847	1654	2000	0.0	5.1	10.576	B
B - Foxhall Rd West	487	122	1847	479	1.016	441	322	0.0	11.5	66.110	F
C - A12 South	1893	473	320	2023	0.936	1850	1646	0.0	10.7	17.796	C
D - Newbourne Rd East	297	74	1682	373	0.795	284	260	0.0	3.2	36.401	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	289	1976	0.856	1689	2047	5.1	5.6	12.402	B
B - Foxhall Rd West	455	114	1899	452	1.006	437	332	11.5	16.0	124.666	F
C - A12 South	1900	475	341	2010	0.945	1890	1687	10.7	13.2	26.602	D
D - Newbourne Rd East	325	81	1714	359	0.906	314	264	3.2	5.8	67.075	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	169	2047	0.652	1349	1254	5.6	1.9	5.265	A
B - Foxhall Rd West	192	48	1169	831	0.231	255	238	16.0	0.3	6.979	A
C - A12 South	1072	268	286	2042	0.525	1121	1328	13.2	1.1	4.118	A
D - Newbourne Rd East	255	64	1340	531	0.480	274	178	5.8	1.0	15.088	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	74	2104	0.395	836	698	1.9	0.7	2.848	A
B - Foxhall Rd West	90	22	680	1084	0.083	91	143	0.3	0.1	3.629	A
C - A12 South	650	163	171	2109	0.308	653	798	1.1	0.4	2.477	A
D - Newbourne Rd East	157	39	810	775	0.202	159	99	1.0	0.3	5.875	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	73	2105	0.285	601	672	0.7	0.4	2.397	A
B - Foxhall Rd West	90	22	655	1097	0.082	90	116	0.1	0.1	3.576	A
C - A12 South	650	163	122	2138	0.304	650	581	0.4	0.4	2.419	A
D - Newbourne Rd East	112	28	590	876	0.128	112	84	0.3	0.1	4.714	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	73	2105	0.285	600	672	0.4	0.4	2.392	A
B - Foxhall Rd West	90	22	655	1097	0.082	90	116	0.1	0.1	3.575	A
C - A12 South	650	163	121	2138	0.304	650	580	0.4	0.4	2.418	A
D - Newbourne Rd East	112	28	589	877	0.128	112	84	0.1	0.1	4.706	A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	225.24	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1901	100.000
B - Foxhall Rd West		FLAT	✓	569	100.000
C - A12 South		FLAT	✓	2064	100.000
D - Newbourne Rd East		FLAT	✓	320	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	289	1479	131
	B - Foxhall Rd West	369	0	148	52
	C - A12 South	1779	227	1	57
	D - Newbourne Rd East	109	74	136	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	5	5
	B - Foxhall Rd West	3	0	6	5
	C - A12 South	4	5	0	0
	D - Newbourne Rd East	3	8	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.93	24.60	12.6	C	1901	2851
B - Foxhall Rd West	1.17	845.60	123.0	F	569	853
C - A12 South	1.03	198.53	115.7	F	2064	3096
D - Newbourne Rd East	1.08	495.16	42.2	F	320	480

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1901	475	226	2043	0.930	1860	2092	0.0	10.2	17.001	C
B - Foxhall Rd West	569	142	1830	512	1.112	487	562	0.0	20.3	92.205	F
C - A12 South	2064	516	448	2010	1.027	1945	1696	0.0	29.8	36.127	E
D - Newbourne Rd East	320	80	1860	314	1.018	283	226	0.0	9.1	82.477	F

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1901	475	228	2043	0.931	1896	2132	10.2	11.4	22.972	C
B - Foxhall Rd West	569	142	1871	491	1.158	488	574	20.3	40.4	240.948	F

C - A12 South	2064	516	457	2004	1.030	1988	1727	29.8	48.7	78.803	F
D - Newbourne Rd East	320	80	1893	298	1.072	290	230	9.1	16.5	184.356	F

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1901	475	227	2043	0.931	1899	2137	11.4	11.9	23.850	C
B - Foxhall Rd West	569	142	1877	488	1.165	487	576	40.4	60.8	388.086	F
C - A12 South	2064	516	459	2003	1.030	1994	1730	48.7	66.2	110.237	F
D - Newbourne Rd East	320	80	1896	297	1.076	293	230	16.5	23.3	267.147	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1901	475	227	2043	0.930	1900	2139	11.9	12.2	24.240	C
B - Foxhall Rd West	569	142	1880	487	1.168	486	576	60.8	81.4	538.908	F
C - A12 South	2064	516	460	2003	1.030	1996	1731	66.2	83.0	140.236	F
D - Newbourne Rd East	320	80	1896	297	1.077	294	230	23.3	29.7	345.061	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1901	475	227	2043	0.930	1900	2140	12.2	12.4	24.462	C
B - Foxhall Rd West	569	142	1881	486	1.170	486	577	81.4	102.1	691.778	F
C - A12 South	2064	516	460	2003	1.031	1998	1731	83.0	99.5	169.571	F
D - Newbourne Rd East	320	80	1897	297	1.078	295	230	29.7	36.0	420.763	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1901	475	227	2043	0.930	1900	2141	12.4	12.6	24.605	C
B - Foxhall Rd West	569	142	1882	485	1.171	485	577	102.1	123.0	845.600	F
C - A12 South	2064	516	461	2002	1.031	1999	1731	99.5	115.7	198.526	F
D - Newbourne Rd East	320	80	1897	297	1.078	295	230	36.0	42.2	495.156	F

2034 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	348.12	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1987	100.000
B - Foxhall Rd West		FLAT	✓	454	100.000
C - A12 South		FLAT	✓	2326	100.000
D - Newbourne Rd East		FLAT	✓	312	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	232	1627	127
	B - Foxhall Rd West	231	0	138	84
	C - A12 South	1880	363	1	82
	D - Newbourne Rd East	66	131	115	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	3	2	2
	B - Foxhall Rd West	0	0	0	3
	C - A12 South	3	1	0	2
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	45.89	24.3	E	1987	2980
B - Foxhall Rd West	0.82	36.11	4.4	E	454	680
C - A12 South	1.12	631.94	393.6	F	2326	3489
D - Newbourne Rd East	1.11	602.16	49.4	F	312	468

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	289	2056	0.966	1927	1935	0.0	14.9	22.144	C
B - Foxhall Rd West	454	113	1784	563	0.806	439	660	0.0	3.6	26.764	D
C - A12 South	2326	582	400	2073	1.122	2044	1815	0.0	70.5	68.166	F
D - Newbourne Rd East	312	78	1939	308	1.013	277	276	0.0	8.8	82.179	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	295	2052	0.968	1971	1961	14.9	18.7	35.713	E
B - Foxhall Rd West	454	113	1805	552	0.821	451	670	3.6	4.1	34.431	D

C - A12 South	2326	582	407	2069	1.124	2067	1856	70.5	135.2	184.626	F
D - Newbourne Rd East	312	78	1984	286	1.090	279	282	8.8	17.1	193.499	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	296	2052	0.968	1978	1962	18.7	20.9	40.083	E
B - Foxhall Rd West	454	113	1805	552	0.821	453	671	4.1	4.3	35.475	E
C - A12 South	2326	582	408	2068	1.125	2068	1862	135.2	199.8	295.844	F
D - Newbourne Rd East	312	78	1991	283	1.102	280	283	17.1	25.1	295.260	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	296	2051	0.968	1981	1962	20.9	22.4	42.725	E
B - Foxhall Rd West	454	113	1805	552	0.821	453	671	4.3	4.3	35.827	E
C - A12 South	2326	582	409	2068	1.125	2068	1865	199.8	264.4	407.673	F
D - Newbourne Rd East	312	78	1994	282	1.107	280	283	25.1	33.2	396.878	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	296	2051	0.968	1982	1962	22.4	23.4	44.545	E
B - Foxhall Rd West	454	113	1805	552	0.822	453	672	4.3	4.4	36.003	E
C - A12 South	2326	582	409	2068	1.125	2068	1866	264.4	329.0	519.749	F
D - Newbourne Rd East	312	78	1995	281	1.110	280	283	33.2	41.3	499.285	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1987	497	296	2051	0.968	1983	1962	23.4	24.3	45.893	E
B - Foxhall Rd West	454	113	1805	552	0.822	453	672	4.4	4.4	36.109	E
C - A12 South	2326	582	409	2068	1.125	2068	1867	329.0	393.6	631.937	F
D - Newbourne Rd East	312	78	1996	281	1.112	280	284	41.3	49.4	602.156	F

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	909	100.000
B - Foxhall Rd West		ONE HOUR	✓	250	100.000
C - A12 South		ONE HOUR	✓	780	100.000
D - Newbourne Rd East		ONE HOUR	✓	76	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	835	34
	B - Foxhall Rd West	139	0	83	27
	C - A12 South	707	38	0	35
	D - Newbourne Rd East	15	23	38	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	9	5	0	4
	D - Newbourne Rd East	0	14	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.49	3.40	0.9	A	834	1251
B - Foxhall Rd West	0.28	5.15	0.4	A	229	344
C - A12 South	0.40	2.85	0.7	A	716	1073
D - Newbourne Rd East	0.13	6.55	0.2	A	70	105

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	684	171	109	2089	0.328	682	647	0.0	0.5	2.555	A
B - Foxhall Rd West	188	47	568	1111	0.169	187	76	0.0	0.2	3.895	A
C - A12 South	587	147	59	2138	0.275	586	718	0.0	0.4	2.316	A
D - Newbourne Rd East	58	14	720	782	0.074	57	72	0.0	0.1	4.964	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	817	204	131	2076	0.394	817	774	0.5	0.6	2.856	A
B - Foxhall Rd West	225	56	680	1053	0.213	224	91	0.2	0.3	4.341	A

C - A12 South	701	175	71	2132	0.329	701	859	0.4	0.5	2.515	A
D - Newbourne Rd East	69	17	861	719	0.096	69	86	0.1	0.1	5.532	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1001	250	160	2058	0.486	1000	947	0.6	0.9	3.399	A
B - Foxhall Rd West	275	69	833	975	0.282	275	112	0.3	0.4	5.138	A
C - A12 South	859	215	87	2123	0.405	858	1052	0.5	0.7	2.845	A
D - Newbourne Rd East	84	21	1054	634	0.133	84	105	0.1	0.2	6.545	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1001	250	160	2058	0.486	1001	948	0.9	0.9	3.405	A
B - Foxhall Rd West	275	69	833	974	0.282	275	112	0.4	0.4	5.147	A
C - A12 South	859	215	87	2123	0.405	859	1053	0.7	0.7	2.847	A
D - Newbourne Rd East	84	21	1055	633	0.133	84	106	0.2	0.2	6.555	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	817	204	131	2076	0.394	818	775	0.9	0.7	2.864	A
B - Foxhall Rd West	225	56	681	1053	0.213	225	92	0.4	0.3	4.353	A
C - A12 South	701	175	71	2132	0.329	702	861	0.7	0.5	2.520	A
D - Newbourne Rd East	69	17	863	719	0.096	69	86	0.2	0.1	5.545	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	684	171	110	2089	0.328	685	649	0.7	0.5	2.564	A
B - Foxhall Rd West	188	47	570	1110	0.169	188	77	0.3	0.2	3.909	A
C - A12 South	587	147	59	2138	0.275	588	721	0.5	0.4	2.322	A
D - Newbourne Rd East	58	14	722	781	0.074	58	72	0.1	0.1	4.979	A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	107.10	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1674	100.000
B - Foxhall Rd West		ONE HOUR	✓	581	100.000
C - A12 South		ONE HOUR	✓	1737	100.000
D - Newbourne Rd East		ONE HOUR	✓	213	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	189	1425	61
	B - Foxhall Rd West	345	0	166	70
	C - A12 South	1591	94	0	53
	D - Newbourne Rd East	111	33	69	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	11
	B - Foxhall Rd West	1	0	8	9
	C - A12 South	7	5	0	11
	D - Newbourne Rd East	13	18	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	19.78	9.6	C	1537	2305
B - Foxhall Rd West	1.48	597.43	104.9	F	533	799
C - A12 South	0.96	32.97	16.5	D	1594	2391
D - Newbourne Rd East	0.89	91.18	5.5	F	195	293

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1261	315	214	2028	0.622	1254	1531	0.0	1.6	4.615	A
B - Foxhall Rd West	437	109	1314	743	0.588	432	236	0.0	1.4	11.351	B
C - A12 South	1308	327	248	2060	0.635	1301	1241	0.0	1.7	4.704	A
D - Newbourne Rd East	160	40	1332	508	0.315	158	137	0.0	0.5	10.233	B

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1505	376	253	2003	0.751	1500	1826	1.6	2.9	7.076	A
B - Foxhall Rd West	522	130	1571	611	0.854	509	282	1.4	4.7	31.788	D

C - A12 South	1562	390	297	2031	0.769	1556	1483	1.7	3.2	7.480	A
D - Newbourne Rd East	191	48	1591	395	0.483	189	163	0.5	0.9	17.322	C

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	237	2013	0.916	1820	2094	2.9	8.9	16.861	C
B - Foxhall Rd West	639	160	1886	449	1.424	446	340	4.7	53.1	253.620	F
C - A12 South	1913	478	355	1997	0.958	1871	1747	3.2	13.6	23.321	C
D - Newbourne Rd East	234	59	1881	269	0.869	221	177	0.9	4.2	62.645	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	233	2016	0.915	1841	2117	8.9	9.6	19.781	C
B - Foxhall Rd West	639	160	1918	432	1.479	432	345	53.1	104.9	597.426	F
C - A12 South	1913	478	363	1992	0.960	1901	1764	13.6	16.5	32.973	D
D - Newbourne Rd East	234	59	1897	262	0.893	229	177	4.2	5.5	91.179	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1505	376	281	1986	0.758	1531	1927	9.6	3.2	8.312	A
B - Foxhall Rd West	522	130	1636	577	0.904	572	292	104.9	92.4	577.241	F
C - A12 South	1562	390	314	2021	0.773	1614	1533	16.5	3.5	9.911	A
D - Newbourne Rd East	191	48	1638	374	0.510	209	174	5.5	1.1	23.790	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1261	315	335	1953	0.645	1266	1721	3.2	1.8	5.280	A
B - Foxhall Rd West	437	109	1329	736	0.594	728	239	92.4	19.7	282.084	F
C - A12 South	1308	327	253	2057	0.636	1315	1337	3.5	1.8	4.895	A
D - Newbourne Rd East	160	40	1428	466	0.344	162	174	1.1	0.5	11.957	B

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	32.36	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	174	1741	130
	B - Foxhall Rd West	360	0	196	86
	C - A12 South	1935	167	1	115
	D - Newbourne Rd East	172	47	138	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	7	8	0	7
	D - Newbourne Rd East	9	5	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	12.42	5.6	B	1122	1683
B - Foxhall Rd West	1.02	126.53	16.3	F	234	351
C - A12 South	0.95	26.61	13.2	D	1136	1704
D - Newbourne Rd East	0.91	67.71	5.9	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	290	1976	0.847	1654	1997	0.0	5.1	10.589	B
B - Foxhall Rd West	487	122	1847	478	1.018	440	318	0.0	11.6	66.783	F
C - A12 South	1893	473	315	2023	0.936	1850	1653	0.0	10.7	17.793	C
D - Newbourne Rd East	297	74	1684	373	0.796	284	260	0.0	3.2	36.618	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	290	1976	0.856	1689	2045	5.1	5.6	12.418	B
B - Foxhall Rd West	455	114	1899	451	1.009	436	328	11.6	16.3	126.531	F
C - A12 South	1900	475	337	2010	0.945	1890	1694	10.7	13.2	26.606	D
D - Newbourne Rd East	325	81	1716	358	0.908	314	263	3.2	5.9	67.707	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	171	2047	0.652	1349	1253	5.6	1.9	5.267	A
B - Foxhall Rd West	192	48	1168	830	0.231	256	236	16.3	0.3	7.022	A
C - A12 South	1072	268	283	2041	0.525	1121	1333	13.2	1.1	4.121	A
D - Newbourne Rd East	255	64	1342	530	0.481	275	178	5.9	1.0	15.132	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	74	2104	0.395	836	697	1.9	0.7	2.850	A
B - Foxhall Rd West	90	22	680	1083	0.083	91	141	0.3	0.1	3.629	A
C - A12 South	650	163	169	2108	0.308	653	801	1.1	0.4	2.480	A
D - Newbourne Rd East	157	39	811	775	0.202	159	99	1.0	0.3	5.877	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	73	2105	0.285	601	672	0.7	0.4	2.397	A
B - Foxhall Rd West	90	22	655	1097	0.082	90	115	0.1	0.1	3.578	A
C - A12 South	650	163	120	2136	0.304	650	583	0.4	0.4	2.422	A
D - Newbourne Rd East	112	28	591	876	0.128	112	84	0.3	0.1	4.716	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	73	2105	0.285	600	672	0.4	0.4	2.394	A
B - Foxhall Rd West	90	22	655	1097	0.082	90	115	0.1	0.1	3.575	A
C - A12 South	650	163	120	2136	0.304	650	582	0.4	0.4	2.421	A
D - Newbourne Rd East	112	28	590	877	0.128	112	84	0.1	0.1	4.707	A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourn Road	Standard Roundabout		A, D, C, B	217.45	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1892	100.000
B - Foxhall Rd West		FLAT	✓	563	100.000
C - A12 South		FLAT	✓	2066	100.000
D - Newbourn Rd East		FLAT	✓	320	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	2	280	1479	131
	B - Foxhall Rd West	363	0	148	52
	C - A12 South	1781	227	1	57
	D - Newbourn Rd East	109	81	129	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourn Rd East
From	A - A12 North	0	1	5	5
	B - Foxhall Rd West	3	0	6	5
	C - A12 South	4	5	0	0
	D - Newbourn Rd East	3	8	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.93	23.57	12.0	C	1892	2838
B - Foxhall Rd West	1.16	800.52	116.0	F	563	844
C - A12 South	1.03	201.01	117.3	F	2066	3099
D - Newbourn Rd East	1.07	452.71	38.7	F	320	480

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1892	473	227	2041	0.927	1853	2090	0.0	9.8	16.599	C
B - Foxhall Rd West	563	141	1832	510	1.102	485	560	0.0	19.3	89.201	F
C - A12 South	2066	516	446	2011	1.027	1946	1692	0.0	29.9	36.250	E
D - Newbourn Rd East	320	80	1853	317	1.009	285	227	0.0	8.8	79.882	F

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1892	473	229	2040	0.927	1887	2131	9.8	11.0	22.153	C
B - Foxhall Rd West	563	141	1873	490	1.148	487	572	19.3	38.3	230.558	F

C - A12 South	2066	516	456	2005	1.030	1989	1722	29.9	49.1	79.267	F
D - Newbourne Rd East	320	80	1886	301	1.061	292	230	8.8	15.7	175.363	F

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1892	473	229	2041	0.927	1890	2136	11.0	11.4	22.927	C
B - Foxhall Rd West	563	141	1879	487	1.155	486	574	38.3	57.5	369.327	F
C - A12 South	2066	516	458	2004	1.031	1995	1725	49.1	66.9	111.131	F
D - Newbourne Rd East	320	80	1888	300	1.065	295	231	15.7	21.8	250.599	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1892	473	228	2041	0.927	1891	2138	11.4	11.7	23.263	C
B - Foxhall Rd West	563	141	1882	486	1.158	485	574	57.5	76.9	511.465	F
C - A12 South	2066	516	459	2003	1.031	1997	1726	66.9	84.0	141.622	F
D - Newbourne Rd East	320	80	1889	300	1.066	297	231	21.8	27.6	320.258	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1892	473	228	2041	0.927	1891	2139	11.7	11.9	23.450	C
B - Foxhall Rd West	563	141	1883	485	1.160	485	575	76.9	96.4	655.530	F
C - A12 South	2066	516	459	2003	1.031	1999	1727	84.0	100.8	171.492	F
D - Newbourne Rd East	320	80	1889	300	1.066	298	231	27.6	33.2	387.279	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1892	473	228	2041	0.927	1891	2140	11.9	12.0	23.571	C
B - Foxhall Rd West	563	141	1884	484	1.161	484	575	96.4	116.0	800.523	F
C - A12 South	2066	516	460	2003	1.031	1999	1727	100.8	117.3	201.012	F
D - Newbourne Rd East	320	80	1889	300	1.067	298	231	33.2	38.7	452.706	F

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	337.37	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1991	100.000
B - Foxhall Rd West		FLAT	✓	458	100.000
C - A12 South		FLAT	✓	2318	100.000
D - Newbourne Rd East		FLAT	✓	312	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	211	1652	127
	B - Foxhall Rd West	233	0	138	86
	C - A12 South	1873	363	1	81
	D - Newbourne Rd East	66	150	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	3	2	2
	B - Foxhall Rd West	0	0	0	3
	C - A12 South	3	1	0	2
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	47.85	25.3	E	1991	2986
B - Foxhall Rd West	0.83	37.82	4.7	E	458	686
C - A12 South	1.12	605.65	377.6	F	2318	3477
D - Newbourne Rd East	1.12	622.77	50.9	F	312	468

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1991	498	290	2056	0.968	1930	1937	0.0	15.3	22.478	C
B - Foxhall Rd West	458	114	1784	562	0.813	443	658	0.0	3.7	27.429	D
C - A12 South	2318	580	396	2076	1.117	2046	1821	0.0	68.2	66.153	F
D - Newbourne Rd East	312	78	1942	307	1.016	276	278	0.0	8.9	83.108	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1991	498	297	2052	0.970	1974	1964	15.3	19.3	36.631	E
B - Foxhall Rd West	458	114	1806	552	0.829	455	667	3.7	4.3	35.802	E

C - A12 South	2318	580	403	2072	1.119	2070	1863	68.2	130.2	178.055	F
D - Newbourne Rd East	312	78	1987	285	1.094	278	284	8.9	17.4	197.044	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1991	498	297	2051	0.970	1981	1965	19.3	21.7	41.363	E
B - Foxhall Rd West	458	114	1806	552	0.830	457	668	4.3	4.5	37.037	E
C - A12 South	2318	580	404	2071	1.119	2071	1869	130.2	192.1	284.402	F
D - Newbourne Rd East	312	78	1994	282	1.107	279	284	17.4	25.7	302.365	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1991	498	298	2051	0.970	1984	1966	21.7	23.3	44.282	E
B - Foxhall Rd West	458	114	1806	551	0.830	457	668	4.5	4.6	37.470	E
C - A12 South	2318	580	404	2071	1.119	2071	1872	192.1	254.0	391.307	F
D - Newbourne Rd East	312	78	1997	281	1.112	279	285	25.7	34.1	408.162	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1991	498	298	2051	0.970	1986	1966	23.3	24.4	46.318	E
B - Foxhall Rd West	458	114	1806	551	0.830	457	669	4.6	4.6	37.689	E
C - A12 South	2318	580	404	2071	1.119	2071	1873	254.0	315.8	498.426	F
D - Newbourne Rd East	312	78	1999	280	1.116	279	285	34.1	42.5	515.130	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1991	498	298	2051	0.970	1987	1966	24.4	25.3	47.846	E
B - Foxhall Rd West	458	114	1806	551	0.830	457	669	4.6	4.7	37.823	E
C - A12 South	2318	580	404	2071	1.119	2071	1874	315.8	377.6	605.648	F
D - Newbourne Rd East	312	78	2000	279	1.118	278	285	42.5	50.9	622.774	F

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: 2019.10.23_J22_Model_CV_v12 fixed.j9
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 Report generation date: 16/03/2020 13:52:49

- »2019 Base Year, 6-7 AM
- »2019 Base Year, 7-8 AM
- »2019 Base Year, 8-9 AM
- »2019 Base Year, 3-4 PM
- »2019 Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
- »2023 Reference Case, 8-9 AM
- »2023 Reference Case, 3-4 PM
- »2023 Reference Case, 5-6 PM
- »2023 Early Years, 6-7 AM
- »2023 Early Years, 7-8 AM
- »2023 Early Years, 8-9 AM
- »2023 Early Years, 3-4 PM
- »2023 Early Years, 5-6 PM
- »2028 Reference Case, 6-7 AM
- »2028 Reference Case, 7-8 AM
- »2028 Reference Case, 8-9 AM
- »2028 Reference Case, 3-4 PM
- »2028 Reference Case, 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case, 6-7 AM
- »2034 Reference Case, 7-8 AM
- »2034 Reference Case, 8-9 AM
- »2034 Reference Case, 3-4 PM
- »2034 Reference Case, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North	D1	0.8	3.11	0.44	A	D2	4.7	10.57	0.83	B	D3	6.1	13.59	0.87	B	D4	6.3	13.27	0.87	B	D5	7.3	14.53	0.88	B
B - Foxhall Rd West		0.2	4.39	0.20	A		5.9	48.34	0.88	E		18.6	141.44	1.03	F		2.3	19.01	0.70	C		1.4	13.00	0.58	B
C - A12 South		0.6	2.68	0.36	A		4.8	10.62	0.83	B		18.4	36.34	0.97	E		6.0	13.03	0.86	B		12.4	24.88	0.93	C
D - Newbourne Rd East		0.1	6.04	0.11	A		2.2	37.62	0.71	E		7.9	86.49	0.96	F		4.5	58.03	0.83	F		3.0	42.46	0.76	E
2023 Reference Case																									
A - A12 North	D6	0.9	3.26	0.46	A	D7	6.8	14.77	0.88	B	D8	6.0	13.42	0.87	B	D9	13.0	25.98	0.93	D	D10	12.3	23.72	0.93	C
B - Foxhall Rd West		0.3	4.71	0.24	A		18.9	129.34	1.03	F		17.9	136.84	1.03	F		2.4	20.74	0.71	C		1.6	14.01	0.61	B
C - A12 South		0.6	2.70	0.37	A		7.3	15.88	0.89	C		19.0	37.31	0.97	E		9.4	19.87	0.91	C		11.2	23.26	0.92	C
D - Newbourne Rd East		0.1	6.29	0.12	A		5.3	81.66	0.88	F		6.8	77.14	0.93	F		41.4	476.44	1.07	F		11.0	143.17	0.94	F
2023 Early Years																									
A - A12 North	D11	0.9	3.38	0.48	A	D12	11.9	24.57	0.94	C	D13	6.2	13.80	0.87	B	D14	23.6	46.72	0.97	E	D15	15.8	30.68	0.95	D
B - Foxhall Rd West		0.4	5.16	0.27	A		108.8	651.60	1.52	F		24.5	177.98	1.07	F		8.0	56.97	0.90	F		2.1	16.85	0.68	C
C - A12 South		0.7	3.01	0.42	A		22.1	44.19	0.98	E		28.5	53.18	1.00	F		9.2	19.82	0.91	C		10.8	22.42	0.92	C
D - Newbourne Rd East		0.1	6.50	0.13	A		13.0	177.69	1.04	F		7.1	80.74	0.94	F		181.8	2199.12	1.46	F		28.2	346.74	1.04	F
2028 Reference Case																									
A - A12 North	D16	0.8	3.21	0.46	A	D17	5.8	12.83	0.86	B	D18	6.3	13.93	0.87	B	D19	4.3	9.69	0.81	A	D20	4.7	9.86	0.83	A
B - Foxhall Rd West		0.3	4.79	0.25	A		51.4	288.91	1.20	F		19.1	144.35	1.04	F		10.6	79.97	0.93	F		2.8	24.95	0.74	C
C - A12 South		0.6	2.72	0.38	A		7.1	14.94	0.88	B		14.7	29.50	0.95	D		11.1	21.91	0.92	C		98.9	167.19	1.02	F
D - Newbourne Rd East		0.1	6.20	0.12	A		2.4	42.33	0.73	E		7.6	83.99	0.95	F		3.3	39.61	0.77	E		2.1	28.46	0.68	D
2028 Peak Construction																									
A - A12 North	D21	0.8	3.23	0.46	A	D22	5.5	12.00	0.85	B	D23	6.4	14.29	0.87	B	D24	4.5	10.07	0.82	B	D25	4.1	9.09	0.81	A
B - Foxhall Rd West		0.4	5.44	0.28	A		85.2	518.31	1.41	F		24.5	177.81	1.07	F		11.8	93.22	0.94	F		2.9	25.13	0.75	D
C - A12 South		0.8	3.15	0.45	A		18.6	37.25	0.97	E		20.2	39.47	0.98	E		16.4	32.87	0.95	D		92.9	158.57	1.02	F
D - Newbourne Rd East		0.1	6.22	0.12	A		2.2	38.47	0.71	E		8.0	87.88	0.96	F		3.4	41.25	0.78	E		1.9	24.93	0.65	C
2034 Reference Case																									
A - A12 North	D26	0.9	3.30	0.47	A	D27	6.8	14.45	0.88	B	D28	6.0	13.40	0.87	B	D29	4.7	10.21	0.83	B	D30	6.0	12.46	0.86	B
B - Foxhall Rd West		0.4	4.96	0.27	A		92.9	501.47	1.39	F		17.1	131.50	1.02	F		156.2	1061.39	1.22	F		6.5	49.84	0.88	E
C - A12 South		0.6	2.79	0.39	A		10.1	21.09	0.92	C		13.1	26.42	0.94	D		31.8	60.03	0.98	F		210.1	340.72	1.06	F
D - Newbourne Rd East		0.1	6.37	0.12	A		3.1	52.86	0.78	F		7.1	80.18	0.94	F		5.3	59.15	0.85	F		3.5	43.70	0.79	E
2034 Operational Led																									

A - A12 North		0.9	3.31	0.47	A		7.6	15.92	0.89	C		5.9	13.05	0.86	B		4.6	10.06	0.82	B		6.0	12.44	0.86	B
B - Foxhall Rd West	D31	0.4	4.96	0.27	A	D32	86.2	470.47	1.36	F	D33	17.6	134.63	1.03	F	D34	157.0	1067.52	1.22	F	D35	4.1	33.63	0.81	D
C - A12 South		0.6	2.79	0.39	A		10.5	21.95	0.92	C		12.7	25.60	0.94	D		32.2	60.67	0.98	F		212.2	344.01	1.06	F
D - Newbourne Rd East		0.1	6.38	0.12	A		3.5	60.95	0.81	F		6.7	76.22	0.93	F		5.1	56.41	0.85	F		3.5	43.80	0.79	E

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / Foxhall Road / Newbourne Road
Location	52° 2'52.64"N, 1°16'28.90"E
Site number	22
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D3	2019 Base Year	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D4	2019 Base Year	3-4 PM	FLAT	14:45	16:15	90	15	✓
D5	2019 Base Year	5-6 PM	FLAT	16:45	18:15	90	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D8	2023 Reference Case	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D9	2023 Reference Case	3-4 PM	FLAT	14:45	16:15	90	15	✓
D10	2023 Reference Case	5-6 PM	FLAT	16:45	18:15	90	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D13	2023 Early Years	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D14	2023 Early Years	3-4 PM	FLAT	14:45	16:15	90	15	✓
D15	2023 Early Years	5-6 PM	FLAT	16:45	18:15	90	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D18	2028 Reference Case	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D19	2028 Reference Case	3-4 PM	FLAT	14:45	16:15	90	15	✓
D20	2028 Reference Case	5-6 PM	FLAT	16:45	18:15	90	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D23	2028 Peak Construction	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D24	2028 Peak Construction	3-4 PM	FLAT	14:45	16:15	90	15	✓
D25	2028 Peak Construction	5-6 PM	FLAT	16:45	18:15	90	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D28	2034 Reference Case	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D29	2034 Reference Case	3-4 PM	FLAT	14:45	16:15	90	15	✓
D30	2034 Reference Case	5-6 PM	FLAT	16:45	18:15	90	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D33	2034 Operational Led	8-9 AM	LEVELS	07:45	09:15	90	15	✓
D34	2034 Operational Led	3-4 PM	FLAT	14:45	16:15	90	15	✓
D35	2034 Operational Led	5-6 PM	FLAT	16:45	18:15	90	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.18	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Foxhall Rd West	
C	A12 South	
D	Newbourne Rd East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	5.60	7.30	17.1	28.8	73.5	8.0	
B - Foxhall Rd West	3.10	7.50	15.8	26.5	73.5	25.0	
C - A12 South	7.10	7.10	0.0	23.9	73.5	14.0	
D - Newbourne Rd East	2.80	7.20	13.8	27.0	73.5	25.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	None		
B - Foxhall Rd West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-215
C - A12 South	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	80
D - Newbourne Rd East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-300

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.601	2278
B - Foxhall Rd West	0.497	1478
C - A12 South	0.596	2368
D - Newbourne Rd East	0.476	1254

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	813	100.000
B - Foxhall Rd West		ONE HOUR	✓	182	100.000
C - A12 South		ONE HOUR	✓	687	100.000
D - Newbourne Rd East		ONE HOUR	✓	66	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	744	29
	B - Foxhall Rd West	82	0	81	19
	C - A12 South	621	37	0	29
	D - Newbourne Rd East	14	19	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To

		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	7	7
	B - Foxhall Rd West	1	0	10	5
	C - A12 South	11	5	0	10
	D - Newbourne Rd East	0	16	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.44	3.11	0.8	A	746	1119
B - Foxhall Rd West	0.20	4.39	0.2	A	167	251
C - A12 South	0.36	2.68	0.6	A	630	946
D - Newbourne Rd East	0.11	6.04	0.1	A	61	91

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	612	153	97	2081	0.294	610	538	0.0	0.4	2.446	A
B - Foxhall Rd West	137	34	499	1141	0.120	136	72	0.0	0.1	3.581	A
C - A12 South	517	129	55	2115	0.245	516	644	0.0	0.3	2.248	A
D - Newbourne Rd East	50	12	649	802	0.062	49	58	0.0	0.1	4.781	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	731	183	116	2069	0.353	730	644	0.4	0.5	2.688	A
B - Foxhall Rd West	164	41	597	1090	0.150	163	86	0.1	0.2	3.884	A
C - A12 South	618	154	66	2109	0.293	617	771	0.3	0.4	2.413	A
D - Newbourne Rd East	59	15	777	746	0.080	59	69	0.1	0.1	5.243	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	895	224	142	2053	0.436	894	789	0.5	0.8	3.106	A
B - Foxhall Rd West	200	50	730	1021	0.196	200	106	0.2	0.2	4.387	A
C - A12 South	756	189	80	2101	0.360	756	944	0.4	0.6	2.674	A
D - Newbourne Rd East	73	18	951	669	0.109	73	85	0.1	0.1	6.034	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	895	224	142	2053	0.436	895	789	0.8	0.8	3.107	A
B - Foxhall Rd West	200	50	731	1020	0.196	200	106	0.2	0.2	4.390	A
C - A12 South	756	189	80	2101	0.360	756	945	0.6	0.6	2.677	A
D - Newbourne Rd East	73	18	952	668	0.109	73	85	0.1	0.1	6.041	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	731	183	116	2069	0.353	732	645	0.8	0.5	2.694	A
B - Foxhall Rd West	164	41	598	1090	0.150	164	86	0.2	0.2	3.890	A
C - A12 South	618	154	66	2109	0.293	618	772	0.6	0.4	2.416	A
D - Newbourne Rd East	59	15	779	745	0.080	59	69	0.1	0.1	5.252	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	612	153	97	2081	0.294	613	540	0.5	0.4	2.452	A
B - Foxhall Rd West	137	34	500	1140	0.120	137	72	0.2	0.1	3.591	A
C - A12 South	517	129	55	2115	0.245	518	647	0.4	0.3	2.255	A
D - Newbourne Rd East	50	12	652	801	0.062	50	58	0.1	0.1	4.791	A

2019 Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	16.61	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1487	100.000
B - Foxhall Rd West		ONE HOUR	✓	430	100.000
C - A12 South		ONE HOUR	✓	1509	100.000
D - Newbourne Rd East		ONE HOUR	✓	206	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	144	1285	58
	B - Foxhall Rd West	219	0	163	48
	C - A12 South	1375	92	0	42
	D - Newbourne Rd East	117	28	61	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	12
	B - Foxhall Rd West	2	0	8	8
	C - A12 South	8	5	0	19
	D - Newbourne Rd East	12	21	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	10.57	4.7	B	1365	2047
B - Foxhall Rd West	0.88	48.34	5.9	E	395	592
C - A12 South	0.83	10.62	4.8	B	1385	2077
D - Newbourne Rd East	0.71	37.62	2.2	E	189	284

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1119	280	189	2030	0.551	1115	1282	0.0	1.2	3.912	A
B - Foxhall Rd West	324	81	1149	816	0.397	321	198	0.0	0.6	7.238	A
C - A12 South	1136	284	216	2058	0.552	1131	1130	0.0	1.2	3.865	A
D - Newbourne Rd East	155	39	1193	564	0.275	154	111	0.0	0.4	8.744	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1337	334	226	2007	0.666	1334	1534	1.2	2.0	5.324	A

B - Foxhall Rd West	387	97	1376	699	0.553	384	237	0.6	1.2	11.351	B
C - A12 South	1357	339	259	2033	0.667	1354	1353	1.2	2.0	5.277	A
D - Newbourne Rd East	185	46	1427	461	0.401	184	133	0.4	0.7	12.930	B

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1637	409	271	1979	0.827	1627	1863	2.0	4.5	9.943	A
B - Foxhall Rd West	473	118	1676	544	0.870	458	288	1.2	5.0	36.789	E
C - A12 South	1661	415	313	2001	0.830	1651	1645	2.0	4.6	10.003	B
D - Newbourne Rd East	227	57	1737	326	0.696	221	161	0.7	2.0	32.805	D

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1637	409	277	1976	0.829	1637	1881	4.5	4.7	10.567	B
B - Foxhall Rd West	473	118	1688	538	0.880	470	290	5.0	5.9	48.337	E
C - A12 South	1661	415	318	1998	0.832	1661	1659	4.6	4.8	10.621	B
D - Newbourne Rd East	227	57	1751	320	0.709	226	163	2.0	2.2	37.621	E

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1337	334	237	2001	0.668	1347	1561	4.7	2.0	5.598	A
B - Foxhall Rd West	387	97	1393	690	0.560	405	240	5.9	1.3	13.381	B
C - A12 South	1357	339	265	2029	0.669	1367	1374	4.8	2.1	5.530	A
D - Newbourne Rd East	185	46	1448	452	0.410	191	136	2.2	0.7	14.103	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1119	280	192	2028	0.552	1123	1293	2.0	1.2	3.989	A
B - Foxhall Rd West	324	81	1159	811	0.399	326	199	1.3	0.7	7.461	A
C - A12 South	1136	284	219	2056	0.552	1139	1140	2.1	1.2	3.939	A
D - Newbourne Rd East	155	39	1203	560	0.277	156	112	0.7	0.4	8.957	A

2019 Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	39.66	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	174	1446	122
	B - Foxhall Rd West	262	0	193	52
	C - A12 South	1778	166	1	96
	D - Newbourne Rd East	187	72	76	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	3	0	5	2
	C - A12 South	8	8	0	10
	D - Newbourne Rd East	9	3	21	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.59	6.1	B	1122	1683
B - Foxhall Rd West	1.03	141.44	18.6	F	234	351
C - A12 South	0.97	36.34	18.4	E	1136	1704
D - Newbourne Rd East	0.96	86.49	7.9	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	298	1949	0.859	1652	1984	0.0	5.6	11.384	B
B - Foxhall Rd West	487	122	1845	471	1.033	436	375	0.0	12.6	71.408	F
C - A12 South	1893	473	382	1973	0.959	1838	1602	0.0	13.6	21.574	C

D - Newbourne Rd East	297	74	1703	353	0.839	281	247	0.0	3.9	43.447	E
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08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	298	1950	0.867	1689	2034	5.6	6.1	13.587	B
B - Foxhall Rd West	455	114	1900	442	1.029	431	388	12.6	18.6	141.445	F
C - A12 South	1900	475	408	1958	0.970	1881	1637	13.6	18.4	36.339	E
D - Newbourne Rd East	325	81	1736	339	0.960	309	251	3.9	7.9	86.494	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	182	2018	0.661	1351	1289	6.1	2.0	5.525	A
B - Foxhall Rd West	192	48	1206	803	0.239	265	288	18.6	0.3	7.698	A
C - A12 South	1072	268	353	1989	0.539	1141	1287	18.4	1.2	4.604	A
D - Newbourne Rd East	255	64	1358	512	0.497	282	175	7.9	1.0	17.439	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	75	2082	0.399	836	705	2.0	0.7	2.902	A
B - Foxhall Rd West	90	23	689	1072	0.084	91	171	0.3	0.1	3.676	A
C - A12 South	650	163	207	2074	0.313	653	765	1.2	0.5	2.538	A
D - Newbourne Rd East	157	39	813	763	0.205	160	99	1.0	0.3	5.991	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	74	2082	0.288	601	676	0.7	0.4	2.432	A
B - Foxhall Rd West	90	23	660	1087	0.083	90	137	0.1	0.1	3.613	A
C - A12 South	650	163	147	2108	0.308	650	559	0.5	0.4	2.470	A
D - Newbourne Rd East	112	28	594	864	0.130	112	82	0.3	0.1	4.791	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	74	2082	0.288	600	675	0.4	0.4	2.430	A
B - Foxhall Rd West	90	23	660	1087	0.083	90	137	0.1	0.1	3.613	A
C - A12 South	650	163	147	2108	0.308	650	558	0.4	0.4	2.468	A
D - Newbourne Rd East	112	28	593	865	0.129	112	82	0.1	0.1	4.782	A

2019 Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	16.93	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1748	100.000
B - Foxhall Rd West		FLAT	✓	437	100.000
C - A12 South		FLAT	✓	1676	100.000
D - Newbourne Rd East		FLAT	✓	291	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	294	1317	135
	B - Foxhall Rd West	246	0	146	45
	C - A12 South	1407	216	1	52
	D - Newbourne Rd East	109	104	77	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	5
	B - Foxhall Rd West	4	0	6	2
	C - A12 South	5	5	0	8
	D - Newbourne Rd East	4	6	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.27	6.3	B	1748	2622
B - Foxhall Rd West	0.70	19.01	2.3	C	437	655
C - A12 South	0.86	13.03	6.0	B	1676	2514
D - Newbourne Rd East	0.83	58.03	4.5	F	291	436

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	241	2021	0.865	1725	1736	0.0	5.8	11.391	B
B - Foxhall Rd West	437	109	1548	638	0.685	429	603	0.0	2.0	16.624	C
C - A12 South	1676	419	496	1959	0.855	1654	1517	0.0	5.4	11.120	B
D - Newbourne Rd East	291	73	1736	363	0.802	278	230	0.0	3.3	38.082	E

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	245	2019	0.866	1747	1762	5.8	6.1	13.104	B

B - Foxhall Rd West	437	109	1570	627	0.697	436	613	2.0	2.2	18.761	C
C - A12 South	1676	419	508	1953	0.858	1675	1539	5.4	5.7	12.817	B
D - Newbourne Rd East	291	73	1759	352	0.827	288	233	3.3	4.0	52.841	F

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	245	2018	0.866	1748	1763	6.1	6.2	13.207	B
B - Foxhall Rd West	437	109	1571	626	0.698	437	613	2.2	2.2	18.929	C
C - A12 South	1676	419	509	1952	0.859	1676	1540	5.7	5.9	12.947	B
D - Newbourne Rd East	291	73	1760	352	0.828	290	233	4.0	4.2	55.856	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	245	2018	0.866	1748	1764	6.2	6.3	13.242	B
B - Foxhall Rd West	437	109	1572	626	0.698	437	614	2.2	2.3	18.976	C
C - A12 South	1676	419	510	1952	0.859	1676	1541	5.9	5.9	12.991	B
D - Newbourne Rd East	291	73	1760	351	0.828	290	233	4.2	4.4	57.022	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	245	2018	0.866	1748	1764	6.3	6.3	13.261	B
B - Foxhall Rd West	437	109	1572	626	0.698	437	614	2.3	2.3	18.995	C
C - A12 South	1676	419	510	1952	0.859	1676	1541	5.9	6.0	13.014	B
D - Newbourne Rd East	291	73	1760	351	0.828	291	233	4.4	4.5	57.642	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1748	437	245	2018	0.866	1748	1764	6.3	6.3	13.272	B
B - Foxhall Rd West	437	109	1572	626	0.698	437	614	2.3	2.3	19.007	C
C - A12 South	1676	419	510	1951	0.859	1676	1541	6.0	6.0	13.026	B
D - Newbourne Rd East	291	73	1760	351	0.828	291	233	4.5	4.5	58.027	F

2019 Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	20.51	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1844	100.000
B - Foxhall Rd West		FLAT	✓	380	100.000
C - A12 South		FLAT	✓	1850	100.000
D - Newbourne Rd East		FLAT	✓	263	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	336	1379	128
	B - Foxhall Rd West	188	0	137	55
	C - A12 South	1488	331	1	30
	D - Newbourne Rd East	70	121	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	3	2
	B - Foxhall Rd West	1	0	0	4
	C - A12 South	3	2	0	7
	D - Newbourne Rd East	1	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	14.53	7.3	B	1844	2766
B - Foxhall Rd West	0.58	13.00	1.4	B	380	570
C - A12 South	0.93	24.88	12.4	C	1850	2775
D - Newbourne Rd East	0.76	42.46	3.0	E	263	394

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	220	2092	0.881	1818	1711	0.0	6.6	12.130	B
B - Foxhall Rd West	380	95	1555	674	0.564	375	772	0.0	1.3	11.850	B
C - A12 South	1850	462	516	1997	0.926	1811	1565	0.0	9.7	16.830	C
D - Newbourne Rd East	263	66	1828	360	0.731	253	210	0.0	2.4	31.591	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	223	2091	0.882	1842	1742	6.6	7.0	14.283	B

B - Foxhall Rd West	380	95	1585	659	0.577	380	786	1.3	1.3	12.869	B
C - A12 South	1850	462	527	1991	0.929	1845	1587	9.7	11.1	22.952	C
D - Newbourne Rd East	263	66	1852	348	0.756	261	213	2.4	2.8	40.480	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	223	2091	0.882	1843	1745	7.0	7.2	14.432	B
B - Foxhall Rd West	380	95	1588	658	0.578	380	787	1.3	1.3	12.957	B
C - A12 South	1850	462	528	1991	0.929	1848	1588	11.1	11.7	23.995	C
D - Newbourne Rd East	263	66	1853	347	0.757	263	213	2.8	2.9	41.750	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	223	2090	0.882	1844	1746	7.2	7.2	14.487	B
B - Foxhall Rd West	380	95	1589	657	0.578	380	788	1.3	1.4	12.984	B
C - A12 South	1850	462	528	1990	0.929	1849	1589	11.7	12.0	24.457	C
D - Newbourne Rd East	263	66	1854	347	0.758	263	213	2.9	3.0	42.151	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	223	2090	0.882	1844	1746	7.2	7.3	14.516	B
B - Foxhall Rd West	380	95	1589	657	0.579	380	788	1.4	1.4	12.997	B
C - A12 South	1850	462	528	1990	0.929	1849	1589	12.0	12.2	24.716	C
D - Newbourne Rd East	263	66	1854	347	0.758	263	213	3.0	3.0	42.344	E

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1844	461	223	2090	0.882	1844	1746	7.3	7.3	14.534	B
B - Foxhall Rd West	380	95	1589	657	0.579	380	788	1.4	1.4	13.005	B
C - A12 South	1850	462	528	1990	0.929	1849	1589	12.2	12.4	24.884	C
D - Newbourne Rd East	263	66	1854	347	0.758	263	213	3.0	3.0	42.457	E

2023 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	870	100.000
B - Foxhall Rd West		ONE HOUR	✓	224	100.000
C - A12 South		ONE HOUR	✓	709	100.000
D - Newbourne Rd East		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	800	30
	B - Foxhall Rd West	120	0	81	22
	C - A12 South	643	38	0	29
	D - Newbourne Rd East	17	20	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	10	5	0	5
	D - Newbourne Rd East	0	15	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.46	3.26	0.9	A	798	1197
B - Foxhall Rd West	0.24	4.71	0.3	A	205	308
C - A12 South	0.37	2.70	0.6	A	651	976
D - Newbourne Rd East	0.12	6.29	0.1	A	65	98

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	655	164	99	2090	0.313	653	585	0.0	0.5	2.502	A
B - Foxhall Rd West	168	42	517	1134	0.148	168	73	0.0	0.2	3.722	A
C - A12 South	534	133	57	2126	0.251	532	687	0.0	0.3	2.256	A
D - Newbourne Rd East	54	13	691	794	0.067	53	61	0.0	0.1	4.858	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	782	196	119	2078	0.376	781	700	0.5	0.6	2.776	A

B - Foxhall Rd West	201	50	618	1082	0.186	201	88	0.2	0.2	4.084	A
C - A12 South	637	159	69	2120	0.301	637	822	0.3	0.4	2.427	A
D - Newbourne Rd East	64	16	827	734	0.087	64	73	0.1	0.1	5.373	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	958	239	145	2061	0.465	957	858	0.6	0.9	3.257	A
B - Foxhall Rd West	246	62	757	1010	0.244	246	107	0.2	0.3	4.708	A
C - A12 South	781	195	84	2111	0.370	780	1007	0.4	0.6	2.703	A
D - Newbourne Rd East	78	20	1013	651	0.120	78	89	0.1	0.1	6.278	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	958	239	145	2061	0.465	958	858	0.9	0.9	3.262	A
B - Foxhall Rd West	246	62	758	1010	0.244	246	107	0.3	0.3	4.713	A
C - A12 South	781	195	84	2111	0.370	781	1008	0.6	0.6	2.705	A
D - Newbourne Rd East	78	20	1014	651	0.120	78	89	0.1	0.1	6.286	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	782	196	119	2077	0.376	783	702	0.9	0.6	2.785	A
B - Foxhall Rd West	201	50	619	1081	0.186	201	88	0.3	0.2	4.093	A
C - A12 South	637	159	69	2120	0.301	638	824	0.6	0.4	2.432	A
D - Newbourne Rd East	64	16	829	733	0.087	64	73	0.1	0.1	5.384	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	655	164	100	2089	0.313	656	587	0.6	0.5	2.511	A
B - Foxhall Rd West	168	42	518	1134	0.148	169	74	0.2	0.2	3.730	A
C - A12 South	534	133	58	2126	0.251	534	690	0.4	0.3	2.263	A
D - Newbourne Rd East	54	13	694	793	0.068	54	61	0.1	0.1	4.868	A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	32.90	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1572	100.000
B - Foxhall Rd West		ONE HOUR	✓	463	100.000
C - A12 South		ONE HOUR	✓	1579	100.000
D - Newbourne Rd East		ONE HOUR	✓	229	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	190	1322	60
	B - Foxhall Rd West	248	0	164	51
	C - A12 South	1438	93	0	48
	D - Newbourne Rd East	128	34	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	12
	B - Foxhall Rd West	2	0	8	11
	C - A12 South	9	5	0	12
	D - Newbourne Rd East	11	16	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	14.77	6.8	B	1442	2163
B - Foxhall Rd West	1.03	129.34	18.9	F	425	637
C - A12 South	0.89	15.88	7.3	C	1449	2174
D - Newbourne Rd East	0.88	81.66	5.3	F	210	315

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1183	296	196	2018	0.586	1178	1358	0.0	1.4	4.257	A
B - Foxhall Rd West	348	87	1209	784	0.444	345	238	0.0	0.8	8.142	A
C - A12 South	1189	297	263	2029	0.586	1183	1163	0.0	1.4	4.228	A
D - Newbourne Rd East	172	43	1255	542	0.317	170	118	0.0	0.5	9.626	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1413	353	235	1994	0.708	1409	1624	1.4	2.4	6.109	A

B - Foxhall Rd West	416	104	1446	662	0.629	413	284	0.8	1.6	14.256	B
C - A12 South	1420	355	315	1999	0.710	1416	1391	1.4	2.4	6.127	A
D - Newbourne Rd East	205	51	1502	433	0.475	204	142	0.5	0.9	15.615	C

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1730	433	270	1972	0.877	1714	1952	2.4	6.4	13.199	B
B - Foxhall Rd West	510	127	1753	504	1.012	469	344	1.6	11.7	70.116	F
C - A12 South	1739	435	377	1963	0.886	1721	1678	2.4	6.8	13.937	B
D - Newbourne Rd East	252	63	1816	293	0.859	239	169	0.9	4.1	56.839	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1730	433	276	1969	0.879	1729	1978	6.4	6.8	14.772	B
B - Foxhall Rd West	510	127	1773	494	1.032	481	348	11.7	18.9	129.337	F
C - A12 South	1739	435	384	1959	0.888	1737	1697	6.8	7.3	15.882	C
D - Newbourne Rd East	252	63	1834	285	0.883	247	171	4.1	5.3	81.660	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1413	353	268	1973	0.716	1430	1694	6.8	2.6	6.816	A
B - Foxhall Rd West	416	104	1478	645	0.645	484	291	18.9	1.9	31.384	D
C - A12 South	1420	355	331	1990	0.714	1439	1439	7.3	2.6	6.751	A
D - Newbourne Rd East	205	51	1547	412	0.498	222	151	5.3	1.0	20.511	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1183	296	200	2016	0.587	1188	1373	2.6	1.4	4.374	A
B - Foxhall Rd West	348	87	1221	778	0.448	353	240	1.9	0.8	8.545	A
C - A12 South	1189	297	267	2027	0.587	1193	1175	2.6	1.4	4.342	A
D - Newbourne Rd East	172	43	1268	537	0.321	174	120	1.0	0.5	9.986	A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	38.80	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	209	1473	123
	B - Foxhall Rd West	318	0	194	56
	C - A12 South	1841	167	1	107
	D - Newbourne Rd East	211	74	92	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	8	11
	B - Foxhall Rd West	2	0	5	4
	C - A12 South	8	8	0	7
	D - Newbourne Rd East	7	3	16	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.42	6.0	B	1122	1683
B - Foxhall Rd West	1.03	136.84	17.9	F	234	351
C - A12 South	0.97	37.31	19.0	E	1136	1704
D - Newbourne Rd East	0.93	77.14	6.8	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	286	1953	0.857	1652	2002	0.0	5.5	11.266	B
B - Foxhall Rd West	487	122	1851	473	1.028	438	391	0.0	12.2	69.706	F
C - A12 South	1893	473	405	1969	0.961	1837	1568	0.0	13.9	21.905	C

D - Newbourne Rd East	297	74	1690	363	0.817	283	249	0.0	3.5	39.728	E
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08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	286	1953	0.866	1689	2053	5.5	6.0	13.422	B
B - Foxhall Rd West	455	114	1906	445	1.024	432	405	12.2	17.9	136.836	F
C - A12 South	1900	475	431	1954	0.973	1880	1603	13.9	19.0	37.312	E
D - Newbourne Rd East	325	81	1722	348	0.934	312	253	3.5	6.8	77.138	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	174	2019	0.661	1351	1298	6.0	2.0	5.510	A
B - Foxhall Rd West	192	48	1209	806	0.238	262	301	17.9	0.3	7.561	A
C - A12 South	1072	268	367	1991	0.539	1143	1260	19.0	1.2	4.623	A
D - Newbourne Rd East	255	64	1349	523	0.487	278	176	6.8	1.0	16.035	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	73	2078	0.400	836	708	2.0	0.7	2.911	A
B - Foxhall Rd West	90	23	691	1074	0.084	91	179	0.3	0.1	3.666	A
C - A12 South	650	162	217	2076	0.313	653	753	1.2	0.5	2.535	A
D - Newbourne Rd East	157	39	811	775	0.202	159	99	1.0	0.3	5.874	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	73	2079	0.289	601	679	0.7	0.4	2.439	A
B - Foxhall Rd West	90	23	662	1089	0.083	90	143	0.1	0.1	3.605	A
C - A12 South	650	162	155	2112	0.308	650	549	0.5	0.4	2.463	A
D - Newbourne Rd East	112	28	591	878	0.128	112	83	0.3	0.1	4.703	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	73	2079	0.289	600	679	0.4	0.4	2.434	A
B - Foxhall Rd West	90	23	662	1089	0.083	90	143	0.1	0.1	3.605	A
C - A12 South	650	162	154	2113	0.308	650	548	0.4	0.4	2.460	A
D - Newbourne Rd East	112	28	590	879	0.127	112	83	0.1	0.1	4.695	A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	56.46	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1871	100.000
B - Foxhall Rd West		FLAT	✓	416	100.000
C - A12 South		FLAT	✓	1743	100.000
D - Newbourne Rd East		FLAT	✓	325	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	350	1367	151
	B - Foxhall Rd West	216	0	146	54
	C - A12 South	1461	217	1	63
	D - Newbourne Rd East	120	109	96	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	4
	B - Foxhall Rd West	5	0	6	5
	C - A12 South	6	5	0	0
	D - Newbourne Rd East	3	6	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.93	25.98	13.0	D	1871	2806
B - Foxhall Rd West	0.71	20.74	2.4	C	416	625
C - A12 South	0.91	19.87	9.4	C	1743	2614
D - Newbourne Rd East	1.07	476.44	41.4	F	325	488

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1871	468	260	2008	0.932	1830	1756	0.0	10.3	17.416	C
B - Foxhall Rd West	416	104	1608	605	0.688	408	653	0.0	2.1	17.604	C
C - A12 South	1743	436	549	1930	0.903	1711	1567	0.0	7.8	14.801	B
D - Newbourne Rd East	325	81	1826	322	1.010	290	264	0.0	8.9	79.618	F

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1871	468	265	2005	0.933	1865	1786	10.3	11.7	23.913	C

B - Foxhall Rd West	416	104	1635	592	0.704	416	665	2.1	2.3	20.287	C
C - A12 South	1743	436	560	1924	0.906	1739	1597	7.8	8.6	18.839	C
D - Newbourne Rd East	325	81	1861	305	1.067	296	269	8.9	16.2	177.292	F

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1871	468	265	2005	0.933	1868	1788	11.7	12.3	24.998	C
B - Foxhall Rd West	416	104	1637	591	0.705	416	667	2.3	2.3	20.573	C
C - A12 South	1743	436	563	1922	0.907	1741	1601	8.6	9.0	19.400	C
D - Newbourne Rd East	325	81	1864	304	1.072	299	269	16.2	22.8	256.824	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1871	468	265	2005	0.933	1869	1789	12.3	12.6	25.498	D
B - Foxhall Rd West	416	104	1638	590	0.706	416	667	2.3	2.3	20.671	C
C - A12 South	1743	436	564	1922	0.907	1742	1602	9.0	9.2	19.644	C
D - Newbourne Rd East	325	81	1865	303	1.073	300	269	22.8	29.1	331.781	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1871	468	265	2005	0.933	1870	1790	12.6	12.9	25.785	D
B - Foxhall Rd West	416	104	1639	590	0.706	416	668	2.3	2.4	20.716	C
C - A12 South	1743	436	564	1921	0.907	1742	1602	9.2	9.3	19.779	C
D - Newbourne Rd East	325	81	1866	303	1.074	301	269	29.1	35.3	404.712	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1871	468	265	2005	0.933	1870	1790	12.9	13.0	25.976	D
B - Foxhall Rd West	416	104	1639	590	0.706	416	668	2.4	2.4	20.743	C
C - A12 South	1743	436	565	1921	0.907	1742	1603	9.3	9.4	19.866	C
D - Newbourne Rd East	325	81	1866	303	1.075	301	269	35.3	41.4	476.437	F

2023 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	30.41	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1927	100.000
B - Foxhall Rd West		FLAT	✓	406	100.000
C - A12 South		FLAT	✓	1797	100.000
D - Newbourne Rd East		FLAT	✓	292	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	365	1422	140
	B - Foxhall Rd West	207	0	137	62
	C - A12 South	1447	312	1	38
	D - Newbourne Rd East	80	133	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	3	2
	B - Foxhall Rd West	0	0	0	3
	C - A12 South	4	2	0	3
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.93	23.72	12.3	C	1927	2891
B - Foxhall Rd West	0.61	14.01	1.6	B	406	609
C - A12 South	0.92	23.26	11.2	C	1797	2696
D - Newbourne Rd East	0.94	143.17	11.0	F	292	438

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1927	482	234	2077	0.928	1887	1698	0.0	10.0	16.510	C
B - Foxhall Rd West	406	102	1532	680	0.597	400	787	0.0	1.4	12.624	B
C - A12 South	1797	449	557	1960	0.917	1762	1602	0.0	8.9	16.046	C
D - Newbourne Rd East	292	73	1886	328	0.890	273	235	0.0	4.9	53.515	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1927	482	238	2075	0.929	1922	1728	10.0	11.2	22.160	C

B - Foxhall Rd West	406	102	1560	666	0.610	406	804	1.4	1.5	13.816	B
C - A12 South	1797	449	571	1951	0.921	1792	1633	8.9	10.1	21.423	C
D - Newbourne Rd East	292	73	1921	312	0.937	283	239	4.9	7.2	94.614	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1927	482	238	2075	0.929	1925	1731	11.2	11.7	22.995	C
B - Foxhall Rd West	406	102	1563	664	0.612	406	806	1.5	1.5	13.935	B
C - A12 South	1797	449	574	1950	0.922	1795	1636	10.1	10.6	22.383	C
D - Newbourne Rd East	292	73	1923	311	0.941	287	239	7.2	8.6	114.466	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1927	482	238	2075	0.929	1926	1733	11.7	12.0	23.371	C
B - Foxhall Rd West	406	102	1564	664	0.612	406	807	1.5	1.6	13.976	B
C - A12 South	1797	449	576	1949	0.922	1796	1637	10.6	10.9	22.828	C
D - Newbourne Rd East	292	73	1924	310	0.942	288	240	8.6	9.6	127.039	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1927	482	238	2075	0.929	1926	1733	12.0	12.2	23.582	C
B - Foxhall Rd West	406	102	1565	663	0.612	406	808	1.6	1.6	13.996	B
C - A12 South	1797	449	576	1948	0.922	1796	1637	10.9	11.1	23.087	C
D - Newbourne Rd East	292	73	1925	310	0.943	289	240	9.6	10.4	136.145	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1927	482	238	2075	0.929	1927	1734	12.2	12.3	23.721	C
B - Foxhall Rd West	406	102	1565	663	0.613	406	808	1.6	1.6	14.008	B
C - A12 South	1797	449	577	1948	0.923	1797	1638	11.1	11.2	23.257	C
D - Newbourne Rd East	292	73	1925	310	0.943	290	240	10.4	11.0	143.173	F

2023 Early Years, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	904	100.000
B - Foxhall Rd West		ONE HOUR	✓	231	100.000
C - A12 South		ONE HOUR	✓	798	100.000
D - Newbourne Rd East		ONE HOUR	✓	74	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	833	31
	B - Foxhall Rd West	126	0	81	23
	C - A12 South	731	38	0	30
	D - Newbourne Rd East	18	21	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	6
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	12	5	0	6
	D - Newbourne Rd East	0	15	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.48	3.38	0.9	A	829	1244
B - Foxhall Rd West	0.27	5.16	0.4	A	212	317
C - A12 South	0.42	3.01	0.7	A	732	1098
D - Newbourne Rd East	0.13	6.50	0.1	A	68	102

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	681	170	101	2090	0.326	679	656	0.0	0.5	2.547	A
B - Foxhall Rd West	174	43	584	1095	0.159	173	74	0.0	0.2	3.901	A
C - A12 South	601	150	59	2088	0.288	599	713	0.0	0.4	2.416	A
D - Newbourne Rd East	56	14	716	784	0.071	56	63	0.0	0.1	4.939	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	813	203	120	2078	0.391	812	786	0.5	0.6	2.842	A

B - Foxhall Rd West	207	52	699	1034	0.200	207	89	0.2	0.2	4.351	A
C - A12 South	717	179	71	2082	0.345	717	853	0.4	0.5	2.638	A
D - Newbourne Rd East	67	17	857	721	0.092	67	76	0.1	0.1	5.497	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	995	249	147	2061	0.483	994	962	0.6	0.9	3.371	A
B - Foxhall Rd West	254	63	856	951	0.267	253	108	0.2	0.4	5.153	A
C - A12 South	879	220	86	2073	0.424	878	1044	0.5	0.7	3.011	A
D - Newbourne Rd East	82	20	1049	636	0.128	81	92	0.1	0.1	6.489	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	995	249	148	2061	0.483	995	963	0.9	0.9	3.377	A
B - Foxhall Rd West	254	63	857	951	0.267	254	108	0.4	0.4	5.163	A
C - A12 South	879	220	87	2073	0.424	879	1045	0.7	0.7	3.013	A
D - Newbourne Rd East	82	20	1050	636	0.128	82	93	0.1	0.1	6.498	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	813	203	121	2078	0.391	814	787	0.9	0.6	2.850	A
B - Foxhall Rd West	207	52	700	1033	0.201	208	89	0.4	0.3	4.363	A
C - A12 South	717	179	71	2082	0.345	718	855	0.7	0.5	2.643	A
D - Newbourne Rd East	67	17	859	721	0.092	67	76	0.1	0.1	5.507	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	681	170	101	2090	0.326	681	659	0.6	0.5	2.556	A
B - Foxhall Rd West	174	43	586	1094	0.159	174	74	0.3	0.2	3.916	A
C - A12 South	601	150	59	2088	0.288	601	716	0.5	0.4	2.423	A
D - Newbourne Rd East	56	14	719	783	0.071	56	63	0.1	0.1	4.955	A

2023 Early Years, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	123.75	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1686	100.000
B - Foxhall Rd West		ONE HOUR	✓	573	100.000
C - A12 South		ONE HOUR	✓	1693	100.000
D - Newbourne Rd East		ONE HOUR	✓	235	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	199	1425	62
	B - Foxhall Rd West	339	0	170	64
	C - A12 South	1551	93	0	49
	D - Newbourne Rd East	130	35	70	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	1	0	8	11
	C - A12 South	12	5	0	12
	D - Newbourne Rd East	11	16	17	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.94	24.57	11.9	C	1547	2320
B - Foxhall Rd West	1.52	651.60	108.8	F	526	788
C - A12 South	0.98	44.19	22.1	E	1554	2331
D - Newbourne Rd East	1.04	177.69	13.0	F	215	323

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1269	317	210	1996	0.636	1262	1510	0.0	1.7	4.865	A
B - Foxhall Rd West	431	108	1294	725	0.595	426	245	0.0	1.4	11.803	B
C - A12 South	1275	319	272	1966	0.649	1268	1245	0.0	1.8	5.105	A
D - Newbourne Rd East	177	44	1342	501	0.353	174	130	0.0	0.5	10.967	B

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1515	379	248	1973	0.768	1509	1799	1.7	3.2	7.674	A

B - Foxhall Rd West	515	129	1547	590	0.873	500	293	1.4	5.2	35.266	E
C - A12 South	1522	381	325	1936	0.786	1515	1486	1.8	3.5	8.424	A
D - Newbourne Rd East	211	53	1603	384	0.549	208	155	0.5	1.2	20.237	C

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1856	464	228	1984	0.935	1826	2042	3.2	10.7	19.782	C
B - Foxhall Rd West	631	158	1839	434	1.453	431	350	5.2	55.0	272.608	F
C - A12 South	1864	466	378	1906	0.978	1811	1740	3.5	16.8	28.491	D
D - Newbourne Rd East	258	65	1887	256	1.008	231	167	1.2	8.0	98.607	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1856	464	223	1988	0.934	1851	2066	10.7	11.9	24.565	C
B - Foxhall Rd West	631	158	1874	416	1.516	416	356	55.0	108.8	648.143	F
C - A12 South	1864	466	386	1902	0.980	1843	1759	16.8	22.1	44.193	E
D - Newbourne Rd East	258	65	1907	247	1.044	238	167	8.0	13.0	177.689	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1515	379	263	1963	0.772	1549	1917	11.9	3.5	9.338	A
B - Foxhall Rd West	515	129	1649	536	0.961	531	309	108.8	104.7	651.596	F
C - A12 South	1522	381	364	1913	0.796	1594	1543	22.1	4.1	13.652	B
D - Newbourne Rd East	211	53	1650	363	0.582	257	162	13.0	1.5	46.701	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1269	317	326	1925	0.659	1275	1695	3.5	2.0	5.593	A
B - Foxhall Rd West	431	108	1313	715	0.603	709	248	104.7	35.4	359.535	F
C - A12 South	1275	319	277	1963	0.650	1284	1342	4.1	1.9	5.370	A
D - Newbourne Rd East	177	44	1439	457	0.386	180	162	1.5	0.6	13.154	B

2023 Early Years, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	49.31	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	204	1483	123
	B - Foxhall Rd West	322	0	196	60
	C - A12 South	1888	167	1	104
	D - Newbourne Rd East	214	72	102	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	9	11
	B - Foxhall Rd West	2	0	5	4
	C - A12 South	11	8	0	7
	D - Newbourne Rd East	7	3	15	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.80	6.2	B	1122	1683
B - Foxhall Rd West	1.07	177.98	24.5	F	234	351
C - A12 South	1.00	53.18	28.5	F	1136	1704
D - Newbourne Rd East	0.94	80.74	7.1	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	278	1945	0.861	1652	1980	0.0	5.6	11.537	B
B - Foxhall Rd West	487	122	1832	454	1.072	426	380	0.0	15.2	83.745	F
C - A12 South	1893	473	394	1915	0.988	1818	1573	0.0	18.7	27.439	D

D - Newbourne Rd East	297	74	1665	360	0.824	282	245	0.0	3.6	40.944	E
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08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	276	1945	0.869	1689	2029	5.6	6.2	13.805	B
B - Foxhall Rd West	455	114	1888	424	1.073	418	393	15.2	24.5	177.979	F
C - A12 South	1900	475	420	1901	1.000	1861	1608	18.7	28.5	53.177	F
D - Newbourne Rd East	325	81	1717	345	0.943	311	249	3.6	7.1	80.740	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	186	1999	0.668	1351	1346	6.2	2.0	5.700	A
B - Foxhall Rd West	192	48	1243	770	0.249	288	296	24.5	0.3	9.238	A
C - A12 South	1072	268	358	1935	0.554	1181	1279	28.5	1.3	5.537	A
D - Newbourne Rd East	255	64	1358	514	0.496	279	179	7.1	1.0	16.879	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	72	2065	0.402	836	709	2.0	0.7	2.945	A
B - Foxhall Rd West	90	22	690	1065	0.085	91	175	0.3	0.1	3.699	A
C - A12 South	650	162	212	2016	0.322	653	758	1.3	0.5	2.646	A
D - Newbourne Rd East	157	39	811	772	0.203	160	98	1.0	0.3	5.912	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	72	2065	0.291	601	680	0.7	0.4	2.460	A
B - Foxhall Rd West	90	22	662	1080	0.083	90	139	0.1	0.1	3.636	A
C - A12 South	650	162	151	2050	0.317	650	553	0.5	0.5	2.572	A
D - Newbourne Rd East	112	28	591	875	0.128	112	82	0.3	0.1	4.722	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	72	2065	0.291	600	679	0.4	0.4	2.458	A
B - Foxhall Rd West	90	22	661	1080	0.083	90	139	0.1	0.1	3.638	A
C - A12 South	650	162	150	2051	0.317	650	552	0.5	0.5	2.571	A
D - Newbourne Rd East	112	28	590	876	0.128	112	82	0.1	0.1	4.713	A

2023 Early Years, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	224.08	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1897	100.000
B - Foxhall Rd West		FLAT	✓	530	100.000
C - A12 South		FLAT	✓	1720	100.000
D - Newbourne Rd East		FLAT	✓	399	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	344	1401	149
	B - Foxhall Rd West	305	0	149	76
	C - A12 South	1447	209	1	62
	D - Newbourne Rd East	145	136	118	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	4
	B - Foxhall Rd West	3	0	6	6
	C - A12 South	8	5	0	0
	D - Newbourne Rd East	3	7	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	46.72	23.6	E	1897	2845
B - Foxhall Rd West	0.90	56.97	8.0	F	530	796
C - A12 South	0.91	19.82	9.2	C	1720	2580
D - Newbourne Rd East	1.46	2199.12	181.8	F	399	599

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1897	474	279	1966	0.965	1839	1820	0.0	14.4	22.501	C
B - Foxhall Rd West	530	133	1590	602	0.882	509	638	0.0	5.5	33.423	D
C - A12 South	1720	430	541	1898	0.906	1688	1588	0.0	8.0	15.325	C
D - Newbourne Rd East	399	100	1838	301	1.326	290	279	0.0	27.2	190.971	F

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1897	474	287	1961	0.967	1882	1851	14.4	18.1	36.238	E

B - Foxhall Rd West	530	133	1612	590	0.899	525	645	5.5	6.8	49.429	E
C - A12 South	1720	430	540	1898	0.906	1717	1621	8.0	8.7	19.216	C
D - Newbourne Rd East	399	100	1883	280	1.428	279	286	27.2	57.3	568.734	F

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1897	474	288	1961	0.967	1888	1853	18.1	20.3	40.723	E
B - Foxhall Rd West	530	133	1613	590	0.899	528	646	6.8	7.4	53.453	F
C - A12 South	1720	430	540	1899	0.906	1719	1626	8.7	9.0	19.564	C
D - Newbourne Rd East	399	100	1889	276	1.444	276	287	57.3	88.0	967.573	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1897	474	289	1960	0.967	1891	1853	20.3	21.7	43.447	E
B - Foxhall Rd West	530	133	1613	590	0.899	529	646	7.4	7.7	55.259	F
C - A12 South	1720	430	539	1899	0.906	1719	1628	9.0	9.1	19.699	C
D - Newbourne Rd East	399	100	1892	275	1.452	275	287	88.0	119.1	1372.757	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1897	474	289	1960	0.968	1892	1853	21.7	22.8	45.330	E
B - Foxhall Rd West	530	133	1612	590	0.899	530	646	7.7	7.9	56.296	F
C - A12 South	1720	430	539	1899	0.906	1719	1629	9.1	9.2	19.772	C
D - Newbourne Rd East	399	100	1894	274	1.456	274	288	119.1	150.4	1786.331	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1897	474	289	1960	0.968	1893	1853	22.8	23.6	46.723	E
B - Foxhall Rd West	530	133	1612	590	0.899	530	646	7.9	8.0	56.966	F
C - A12 South	1720	430	539	1899	0.905	1719	1630	9.2	9.2	19.818	C
D - Newbourne Rd East	399	100	1895	274	1.458	274	288	150.4	181.8	2199.122	F

2023 Early Years, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	46.90	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1927	100.000
B - Foxhall Rd West		FLAT	✓	452	100.000
C - A12 South		FLAT	✓	1785	100.000
D - Newbourne Rd East		FLAT	✓	303	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	360	1430	137
	B - Foxhall Rd West	248	0	137	67
	C - A12 South	1437	312	1	36
	D - Newbourne Rd East	82	139	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	2	5	2
	B - Foxhall Rd West	0	0	0	3
	C - A12 South	5	2	0	4
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	30.68	15.8	D	1927	2891
B - Foxhall Rd West	0.68	16.85	2.1	C	452	678
C - A12 South	0.92	22.42	10.8	C	1785	2678
D - Newbourne Rd East	1.04	346.74	28.2	F	303	455

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1927	482	237	2040	0.945	1880	1728	0.0	11.7	18.882	C
B - Foxhall Rd West	452	113	1520	682	0.663	445	783	0.0	1.9	14.744	B
C - A12 South	1785	446	553	1953	0.914	1751	1605	0.0	8.7	15.783	C
D - Newbourne Rd East	303	76	1882	315	0.964	275	235	0.0	7.0	69.463	F

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1927	482	241	2038	0.946	1919	1758	11.7	13.7	27.229	D

B - Foxhall Rd West	452	113	1547	668	0.677	452	799	1.9	2.0	16.554	C
C - A12 South	1785	446	565	1945	0.918	1781	1638	8.7	9.7	20.809	C
D - Newbourne Rd East	303	76	1921	296	1.026	282	239	7.0	12.2	146.739	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1927	482	241	2038	0.946	1923	1761	13.7	14.6	28.946	D
B - Foxhall Rd West	452	113	1550	667	0.678	452	801	2.0	2.1	16.736	C
C - A12 South	1785	446	568	1944	0.918	1783	1642	9.7	10.2	21.653	C
D - Newbourne Rd East	303	76	1925	294	1.033	286	239	12.2	16.7	204.065	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1927	482	241	2038	0.946	1925	1762	14.6	15.2	29.805	D
B - Foxhall Rd West	452	113	1551	666	0.679	452	803	2.1	2.1	16.799	C
C - A12 South	1785	446	570	1943	0.919	1784	1644	10.2	10.5	22.044	C
D - Newbourne Rd East	303	76	1926	293	1.035	287	239	16.7	20.7	254.610	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1927	482	241	2038	0.946	1926	1763	15.2	15.5	30.325	D
B - Foxhall Rd West	452	113	1552	666	0.679	452	803	2.1	2.1	16.830	C
C - A12 South	1785	446	570	1942	0.919	1784	1645	10.5	10.6	22.274	C
D - Newbourne Rd East	303	76	1927	293	1.036	288	240	20.7	24.5	301.765	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1927	482	241	2038	0.946	1926	1763	15.5	15.8	30.678	D
B - Foxhall Rd West	452	113	1552	666	0.679	452	804	2.1	2.1	16.849	C
C - A12 South	1785	446	571	1942	0.919	1785	1645	10.6	10.8	22.424	C
D - Newbourne Rd East	303	76	1927	292	1.037	289	240	24.5	28.2	346.737	F

2028 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	851	100.000
B - Foxhall Rd West		ONE HOUR	✓	230	100.000
C - A12 South		ONE HOUR	✓	725	100.000
D - Newbourne Rd East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	37	784	30
	B - Foxhall Rd West	125	0	81	23
	C - A12 South	657	38	0	31
	D - Newbourne Rd East	14	21	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	10	5	0	5
	D - Newbourne Rd East	0	14	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.46	3.21	0.8	A	781	1171
B - Foxhall Rd West	0.25	4.79	0.3	A	211	316
C - A12 South	0.38	2.72	0.6	A	665	998
D - Newbourne Rd East	0.12	6.20	0.1	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	641	160	101	2086	0.307	639	597	0.0	0.4	2.483	A
B - Foxhall Rd West	173	43	526	1131	0.153	172	72	0.0	0.2	3.753	A
C - A12 South	546	136	54	2133	0.256	544	675	0.0	0.3	2.263	A
D - Newbourne Rd East	52	13	677	796	0.065	52	63	0.0	0.1	4.833	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	765	191	121	2074	0.369	764	715	0.4	0.6	2.747	A

B - Foxhall Rd West	206	52	630	1077	0.192	206	86	0.2	0.2	4.131	A
C - A12 South	652	163	64	2127	0.306	651	808	0.3	0.4	2.439	A
D - Newbourne Rd East	62	16	810	738	0.084	62	76	0.1	0.1	5.329	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	937	234	149	2057	0.455	936	875	0.6	0.8	3.207	A
B - Foxhall Rd West	253	63	771	1004	0.252	252	105	0.2	0.3	4.785	A
C - A12 South	798	200	79	2119	0.377	798	989	0.4	0.6	2.722	A
D - Newbourne Rd East	76	19	992	657	0.116	76	92	0.1	0.1	6.192	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	937	234	149	2057	0.455	937	876	0.8	0.8	3.213	A
B - Foxhall Rd West	253	63	772	1004	0.252	253	105	0.3	0.3	4.791	A
C - A12 South	798	200	79	2119	0.377	798	990	0.6	0.6	2.725	A
D - Newbourne Rd East	76	19	993	657	0.116	76	93	0.1	0.1	6.200	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	765	191	122	2074	0.369	766	716	0.8	0.6	2.756	A
B - Foxhall Rd West	206	52	631	1077	0.192	207	86	0.3	0.2	4.140	A
C - A12 South	652	163	64	2127	0.306	652	810	0.6	0.4	2.443	A
D - Newbourne Rd East	62	16	812	737	0.084	62	76	0.1	0.1	5.337	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	641	160	102	2086	0.307	641	599	0.6	0.4	2.494	A
B - Foxhall Rd West	173	43	528	1130	0.153	173	72	0.2	0.2	3.765	A
C - A12 South	546	136	54	2133	0.256	546	678	0.4	0.3	2.270	A
D - Newbourne Rd East	52	13	680	795	0.065	52	63	0.1	0.1	4.845	A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	51.85	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1545	100.000
B - Foxhall Rd West		ONE HOUR	✓	530	100.000
C - A12 South		ONE HOUR	✓	1624	100.000
D - Newbourne Rd East		ONE HOUR	✓	198	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	134	1353	58
	B - Foxhall Rd West	310	0	164	56
	C - A12 South	1482	93	0	49
	D - Newbourne Rd East	108	28	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	12
	B - Foxhall Rd West	1	0	8	11
	C - A12 South	8	5	0	12
	D - Newbourne Rd East	13	20	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	12.83	5.8	B	1417	2126
B - Foxhall Rd West	1.20	288.91	51.4	F	486	729
C - A12 South	0.88	14.94	7.1	B	1490	2236
D - Newbourne Rd East	0.73	42.33	2.4	E	181	272

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1163	291	200	2012	0.578	1157	1422	0.0	1.4	4.188	A
B - Foxhall Rd West	399	100	1228	784	0.509	395	191	0.0	1.0	9.163	A
C - A12 South	1223	306	202	2080	0.588	1217	1182	0.0	1.4	4.146	A
D - Newbourne Rd East	149	37	1237	541	0.275	147	121	0.0	0.4	9.104	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1389	347	239	1988	0.698	1385	1701	1.4	2.3	5.931	A

B - Foxhall Rd West	476	119	1469	660	0.722	471	229	1.0	2.4	18.530	C
C - A12 South	1460	365	242	2056	0.710	1456	1414	1.4	2.4	5.959	A
D - Newbourne Rd East	178	44	1479	435	0.409	176	145	0.4	0.7	13.870	B

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1701	425	254	1979	0.860	1687	2015	2.3	5.6	11.847	B
B - Foxhall Rd West	583	146	1785	497	1.174	484	278	2.4	27.2	128.992	F
C - A12 South	1788	447	292	2026	0.883	1771	1694	2.4	6.7	13.295	B
D - Newbourne Rd East	218	54	1774	305	0.713	212	167	0.7	2.2	36.371	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1701	425	256	1978	0.860	1700	2033	5.6	5.8	12.825	B
B - Foxhall Rd West	583	146	1802	488	1.196	486	281	27.2	51.4	288.908	F
C - A12 South	1788	447	297	2024	0.884	1787	1707	6.7	7.1	14.936	B
D - Newbourne Rd East	218	54	1787	300	0.726	217	168	2.2	2.4	42.328	E

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1389	347	308	1946	0.714	1402	1821	5.8	2.6	6.767	A
B - Foxhall Rd West	476	119	1494	647	0.737	634	233	51.4	12.0	186.116	F
C - A12 South	1460	365	248	2052	0.712	1478	1482	7.1	2.5	6.465	A
D - Newbourne Rd East	178	44	1546	405	0.438	184	163	2.4	0.8	16.722	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1163	291	220	2000	0.582	1167	1461	2.6	1.4	4.350	A
B - Foxhall Rd West	399	100	1239	778	0.513	442	193	12.0	1.1	12.141	B
C - A12 South	1223	306	205	2078	0.588	1227	1206	2.5	1.4	4.252	A
D - Newbourne Rd East	149	37	1261	530	0.280	150	127	0.8	0.4	9.513	A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	36.89	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	142	1525	123
	B - Foxhall Rd West	295	0	195	70
	C - A12 South	1909	167	1	105
	D - Newbourne Rd East	165	54	101	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	8	11
	B - Foxhall Rd West	2	0	5	4
	C - A12 South	8	8	0	7
	D - Newbourne Rd East	9	4	15	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.93	6.3	B	1122	1683
B - Foxhall Rd West	1.04	144.35	19.1	F	234	351
C - A12 South	0.95	29.50	14.7	D	1136	1704
D - Newbourne Rd East	0.95	83.99	7.6	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	295	1943	0.862	1652	1990	0.0	5.7	11.596	B
B - Foxhall Rd West	487	122	1851	469	1.038	435	319	0.0	12.9	72.837	F
C - A12 South	1893	473	324	2005	0.944	1846	1648	0.0	11.6	19.000	C

D - Newbourne Rd East	297	74	1690	356	0.834	282	257	0.0	3.8	42.448	E
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08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	295	1943	0.870	1689	2038	5.7	6.3	13.928	B
B - Foxhall Rd West	455	114	1903	441	1.032	430	330	12.9	19.1	144.348	F
C - A12 South	1900	475	346	1992	0.954	1888	1687	11.6	14.7	29.503	D
D - Newbourne Rd East	325	81	1723	341	0.954	310	261	3.8	7.6	83.987	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	181	2010	0.664	1352	1272	6.3	2.0	5.601	A
B - Foxhall Rd West	192	48	1186	815	0.235	267	241	19.1	0.3	7.564	A
C - A12 South	1072	268	300	2019	0.531	1127	1333	14.7	1.1	4.287	A
D - Newbourne Rd East	255	64	1352	512	0.497	281	180	7.6	1.0	17.279	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	75	2073	0.401	836	701	2.0	0.7	2.924	A
B - Foxhall Rd West	90	22	685	1075	0.084	91	143	0.3	0.1	3.661	A
C - A12 South	650	163	176	2091	0.311	653	795	1.1	0.5	2.507	A
D - Newbourne Rd East	157	39	811	763	0.205	160	100	1.0	0.3	5.996	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	74	2073	0.289	601	674	0.7	0.4	2.449	A
B - Foxhall Rd West	90	22	658	1089	0.083	90	116	0.1	0.1	3.601	A
C - A12 South	650	163	125	2121	0.307	650	579	0.5	0.4	2.447	A
D - Newbourne Rd East	112	28	591	865	0.130	112	84	0.3	0.1	4.789	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	74	2073	0.289	600	674	0.4	0.4	2.445	A
B - Foxhall Rd West	90	22	658	1090	0.083	90	116	0.1	0.1	3.600	A
C - A12 South	650	163	124	2121	0.307	650	578	0.4	0.4	2.449	A
D - Newbourne Rd East	112	28	590	865	0.129	112	84	0.1	0.1	4.781	A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	25.24	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1631	100.000
B - Foxhall Rd West		FLAT	✓	502	100.000
C - A12 South		FLAT	✓	1871	100.000
D - Newbourne Rd East		FLAT	✓	308	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	191	1315	122
	B - Foxhall Rd West	309	0	147	46
	C - A12 South	1592	219	1	58
	D - Newbourne Rd East	105	100	103	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	2	7	5
	B - Foxhall Rd West	3	0	6	6
	C - A12 South	5	5	0	1
	D - Newbourne Rd East	4	6	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	9.69	4.3	A	1631	2446
B - Foxhall Rd West	0.93	79.97	10.6	F	502	754
C - A12 South	0.92	21.91	11.1	C	1871	2806
D - Newbourne Rd East	0.77	39.61	3.3	E	308	463

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1631	408	243	2008	0.812	1614	1959	0.0	4.1	8.817	A
B - Foxhall Rd West	502	126	1724	559	0.899	479	500	0.0	6.0	37.788	E
C - A12 South	1871	468	390	2037	0.918	1834	1542	0.0	9.1	15.695	C
D - Newbourne Rd East	308	77	1635	409	0.754	298	223	0.0	2.7	30.051	D

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1631	408	250	2003	0.814	1630	1999	4.1	4.2	9.609	A

B - Foxhall Rd West	502	126	1755	543	0.925	494	509	6.0	8.0	61.188	F
C - A12 South	1871	468	398	2032	0.921	1866	1563	9.1	10.1	20.649	C
D - Newbourne Rd East	308	77	1654	400	0.772	307	226	2.7	3.0	37.755	E

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1631	408	252	2002	0.814	1630	2004	4.2	4.3	9.658	A
B - Foxhall Rd West	502	126	1758	542	0.927	498	510	8.0	9.1	69.885	F
C - A12 South	1871	468	398	2032	0.921	1869	1565	10.1	10.6	21.347	C
D - Newbourne Rd East	308	77	1655	399	0.773	308	227	3.0	3.2	38.868	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1631	408	252	2002	0.815	1630	2006	4.3	4.3	9.676	A
B - Foxhall Rd West	502	126	1758	542	0.928	500	510	9.1	9.8	74.665	F
C - A12 South	1871	468	399	2032	0.921	1870	1565	10.6	10.8	21.643	C
D - Newbourne Rd East	308	77	1656	399	0.774	308	227	3.2	3.2	39.272	E

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1631	408	253	2002	0.815	1631	2007	4.3	4.3	9.685	A
B - Foxhall Rd West	502	126	1759	541	0.928	501	510	9.8	10.2	77.769	F
C - A12 South	1871	468	399	2032	0.921	1870	1566	10.8	10.9	21.806	C
D - Newbourne Rd East	308	77	1656	399	0.774	308	227	3.2	3.3	39.479	E

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1631	408	253	2002	0.815	1631	2007	4.3	4.3	9.692	A
B - Foxhall Rd West	502	126	1759	541	0.928	501	510	10.2	10.6	79.966	F
C - A12 South	1871	468	399	2032	0.921	1870	1566	10.9	11.1	21.909	C
D - Newbourne Rd East	308	77	1656	398	0.774	308	227	3.3	3.3	39.605	E

2028 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	85.98	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1724	100.000
B - Foxhall Rd West		FLAT	✓	419	100.000
C - A12 South		FLAT	✓	2101	100.000
D - Newbourne Rd East		FLAT	✓	271	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	226	1381	117
	B - Foxhall Rd West	231	0	137	51
	C - A12 South	1718	354	1	29
	D - Newbourne Rd East	61	112	98	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	3	3	2
	B - Foxhall Rd West	0	0	0	4
	C - A12 South	4	1	0	5
	D - Newbourne Rd East	2	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	9.86	4.7	A	1724	2586
B - Foxhall Rd West	0.74	24.95	2.8	C	419	629
C - A12 South	1.02	167.19	98.9	F	2101	3152
D - Newbourne Rd East	0.68	28.46	2.1	D	271	407

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1724	431	212	2092	0.824	1706	1912	0.0	4.4	8.969	A
B - Foxhall Rd West	419	105	1714	590	0.711	410	667	0.0	2.3	19.189	C
C - A12 South	2101	525	393	2060	1.020	1989	1597	0.0	28.1	33.994	D
D - Newbourne Rd East	271	68	1726	407	0.667	264	193	0.0	1.8	24.106	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1724	431	216	2089	0.825	1724	1956	4.4	4.6	9.800	A

B - Foxhall Rd West	419	105	1754	569	0.737	418	680	2.3	2.6	23.481	C
C - A12 South	2101	525	399	2056	1.022	2035	1616	28.1	44.6	71.889	F
D - Newbourne Rd East	271	68	1744	398	0.682	271	196	1.8	2.0	27.994	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1724	431	217	2089	0.825	1724	1963	4.6	4.6	9.835	A
B - Foxhall Rd West	419	105	1761	566	0.741	419	682	2.6	2.7	24.285	C
C - A12 South	2101	525	400	2055	1.022	2043	1616	44.6	59.2	97.877	F
D - Newbourne Rd East	271	68	1745	398	0.682	271	196	2.0	2.1	28.307	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1724	431	217	2089	0.825	1724	1966	4.6	4.6	9.847	A
B - Foxhall Rd West	419	105	1764	564	0.743	419	682	2.7	2.8	24.626	C
C - A12 South	2101	525	400	2055	1.022	2046	1617	59.2	72.9	121.866	F
D - Newbourne Rd East	271	68	1745	397	0.682	271	196	2.1	2.1	28.390	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1724	431	217	2089	0.825	1724	1968	4.6	4.7	9.854	A
B - Foxhall Rd West	419	105	1766	563	0.744	419	683	2.8	2.8	24.824	C
C - A12 South	2101	525	400	2055	1.022	2048	1617	72.9	86.0	144.840	F
D - Newbourne Rd East	271	68	1745	397	0.682	271	196	2.1	2.1	28.435	D

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1724	431	217	2089	0.825	1724	1969	4.7	4.7	9.856	A
B - Foxhall Rd West	419	105	1767	563	0.745	419	683	2.8	2.8	24.954	C
C - A12 South	2101	525	400	2055	1.022	2050	1617	86.0	98.9	167.186	F
D - Newbourne Rd East	271	68	1745	397	0.682	271	196	2.1	2.1	28.459	D

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	856	100.000
B - Foxhall Rd West		ONE HOUR	✓	235	100.000
C - A12 South		ONE HOUR	✓	864	100.000
D - Newbourne Rd East		ONE HOUR	✓	71	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	786	30
	B - Foxhall Rd West	130	0	81	23
	C - A12 South	796	38	0	31
	D - Newbourne Rd East	16	21	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	7
	B - Foxhall Rd West	1	0	10	12
	C - A12 South	11	5	0	5
	D - Newbourne Rd East	0	14	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.46	3.23	0.8	A	785	1178
B - Foxhall Rd West	0.28	5.44	0.4	A	215	323
C - A12 South	0.45	3.15	0.8	A	793	1189
D - Newbourne Rd East	0.12	6.22	0.1	A	65	98

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	644	161	101	2087	0.309	643	707	0.0	0.4	2.489	A
B - Foxhall Rd West	177	44	632	1074	0.164	176	74	0.0	0.2	4.005	A
C - A12 South	651	163	57	2110	0.308	649	677	0.0	0.4	2.459	A
D - Newbourne Rd East	54	13	681	798	0.067	53	63	0.0	0.1	4.836	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	769	192	121	2075	0.371	769	846	0.4	0.6	2.755	A

B - Foxhall Rd West	211	53	756	1009	0.209	211	89	0.2	0.3	4.508	A
C - A12 South	777	194	69	2104	0.369	776	810	0.4	0.6	2.709	A
D - Newbourne Rd East	64	16	815	738	0.087	64	76	0.1	0.1	5.337	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	942	236	148	2058	0.458	941	1035	0.6	0.8	3.221	A
B - Foxhall Rd West	258	65	926	920	0.281	258	108	0.3	0.4	5.431	A
C - A12 South	951	238	84	2095	0.454	950	991	0.6	0.8	3.141	A
D - Newbourne Rd East	78	20	997	657	0.119	78	92	0.1	0.1	6.216	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	942	236	149	2058	0.458	942	1037	0.8	0.8	3.227	A
B - Foxhall Rd West	258	65	927	920	0.281	258	108	0.4	0.4	5.441	A
C - A12 South	951	238	84	2095	0.454	951	993	0.8	0.8	3.146	A
D - Newbourne Rd East	78	20	999	657	0.119	78	93	0.1	0.1	6.223	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	769	192	122	2074	0.371	770	848	0.8	0.6	2.762	A
B - Foxhall Rd West	211	53	758	1008	0.209	211	89	0.4	0.3	4.520	A
C - A12 South	777	194	69	2104	0.369	778	812	0.8	0.6	2.716	A
D - Newbourne Rd East	64	16	816	738	0.087	64	76	0.1	0.1	5.346	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	644	161	102	2087	0.309	645	710	0.6	0.4	2.499	A
B - Foxhall Rd West	177	44	635	1073	0.165	177	74	0.3	0.2	4.019	A
C - A12 South	651	163	58	2110	0.308	651	679	0.6	0.4	2.467	A
D - Newbourne Rd East	54	13	683	797	0.067	54	63	0.1	0.1	4.847	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	88.50	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1541	100.000
B - Foxhall Rd West		ONE HOUR	✓	525	100.000
C - A12 South		ONE HOUR	✓	1719	100.000
D - Newbourne Rd East		ONE HOUR	✓	200	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	141	1342	58
	B - Foxhall Rd West	305	0	164	56
	C - A12 South	1577	93	0	49
	D - Newbourne Rd East	110	28	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	12
	B - Foxhall Rd West	1	0	8	11
	C - A12 South	11	5	0	12
	D - Newbourne Rd East	12	20	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	12.00	5.5	B	1414	2121
B - Foxhall Rd West	1.41	518.31	85.2	F	482	722
C - A12 South	0.97	37.25	18.6	E	1578	2366
D - Newbourne Rd East	0.71	38.47	2.2	E	183	275

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1160	290	200	2009	0.577	1154	1490	0.0	1.4	4.188	A
B - Foxhall Rd West	395	99	1299	726	0.544	390	196	0.0	1.2	10.593	B
C - A12 South	1294	324	209	2012	0.643	1287	1174	0.0	1.8	4.921	A
D - Newbourne Rd East	150	38	1233	543	0.277	149	121	0.0	0.4	9.100	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1385	346	238	1986	0.697	1381	1779	1.4	2.3	5.920	A

B - Foxhall Rd West	472	118	1554	591	0.799	463	235	1.2	3.5	26.425	D
C - A12 South	1546	386	250	1988	0.777	1539	1403	1.8	3.4	7.907	A
D - Newbourne Rd East	179	45	1474	437	0.411	178	145	0.4	0.7	13.882	B

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1696	424	229	1991	0.852	1684	2056	2.3	5.3	11.297	B
B - Foxhall Rd West	578	144	1865	426	1.357	421	284	3.5	42.7	218.574	F
C - A12 South	1893	473	302	1958	0.967	1847	1665	3.4	15.0	25.517	D
D - Newbourne Rd East	220	55	1753	314	0.699	214	160	0.7	2.1	34.259	D

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1696	424	224	1994	0.851	1696	2081	5.3	5.5	11.996	B
B - Foxhall Rd West	578	144	1897	408	1.415	408	288	42.7	85.2	518.310	F
C - A12 South	1893	473	307	1955	0.968	1878	1672	15.0	18.6	37.248	E
D - Newbourne Rd East	220	55	1760	311	0.706	219	160	2.1	2.2	38.465	E

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1385	346	276	1963	0.706	1397	1894	5.5	2.5	6.499	A
B - Foxhall Rd West	472	118	1620	555	0.849	549	241	85.2	65.9	469.455	F
C - A12 South	1546	386	256	1984	0.779	1605	1446	18.6	3.7	10.910	B
D - Newbourne Rd East	179	45	1517	418	0.429	185	156	2.2	0.8	15.826	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1160	290	311	1941	0.597	1164	1657	2.5	1.5	4.652	A
B - Foxhall Rd West	395	99	1315	718	0.550	653	198	65.9	1.4	148.409	F
C - A12 South	1294	324	211	2010	0.644	1302	1265	3.7	1.8	5.134	A
D - Newbourne Rd East	150	38	1324	502	0.299	152	150	0.8	0.4	10.301	B

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	44.20	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	146	1500	122
	B - Foxhall Rd West	299	0	194	68
	C - A12 South	1940	167	1	102
	D - Newbourne Rd East	166	58	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	9	11
	B - Foxhall Rd West	2	0	5	4
	C - A12 South	11	8	0	7
	D - Newbourne Rd East	9	4	16	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	14.29	6.4	B	1122	1683
B - Foxhall Rd West	1.07	177.81	24.5	F	234	351
C - A12 South	0.98	39.47	20.2	E	1136	1704
D - Newbourne Rd East	0.96	87.88	8.0	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	284	1935	0.865	1651	1983	0.0	5.8	11.853	B
B - Foxhall Rd West	487	122	1841	454	1.073	426	325	0.0	15.2	83.942	F
C - A12 South	1893	473	332	1959	0.966	1834	1634	0.0	14.7	22.830	C

D - Newbourne Rd East	297	74	1685	353	0.842	281	250	0.0	3.9	43.811	E
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08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	283	1936	0.874	1689	2032	5.8	6.4	14.294	B
B - Foxhall Rd West	455	114	1896	424	1.073	418	337	15.2	24.5	177.811	F
C - A12 South	1900	475	355	1946	0.976	1878	1671	14.7	20.2	39.473	E
D - Newbourne Rd East	325	81	1717	337	0.963	309	254	3.9	8.0	87.883	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	188	1991	0.670	1352	1308	6.4	2.1	5.780	A
B - Foxhall Rd West	192	48	1208	791	0.242	289	249	24.5	0.3	8.770	A
C - A12 South	1072	268	309	1972	0.544	1148	1333	20.2	1.2	4.795	A
D - Newbourne Rd East	255	64	1359	504	0.505	283	181	8.0	1.1	18.184	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	73	2058	0.404	837	704	2.1	0.7	2.961	A
B - Foxhall Rd West	90	23	686	1068	0.084	91	147	0.3	0.1	3.686	A
C - A12 South	650	162	181	2045	0.318	653	790	1.2	0.5	2.591	A
D - Newbourne Rd East	157	39	811	760	0.206	160	99	1.1	0.3	6.028	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	72	2059	0.291	601	677	0.7	0.4	2.473	A
B - Foxhall Rd West	90	23	659	1083	0.083	90	119	0.1	0.1	3.629	A
C - A12 South	650	162	128	2074	0.313	650	575	0.5	0.5	2.526	A
D - Newbourne Rd East	112	28	591	863	0.130	112	82	0.3	0.2	4.803	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	72	2059	0.291	600	677	0.4	0.4	2.467	A
B - Foxhall Rd West	90	23	659	1083	0.083	90	119	0.1	0.1	3.625	A
C - A12 South	650	162	128	2075	0.313	650	574	0.5	0.5	2.528	A
D - Newbourne Rd East	112	28	590	863	0.130	112	82	0.2	0.1	4.792	A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	31.46	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1612	100.000
B - Foxhall Rd West		FLAT	✓	482	100.000
C - A12 South		FLAT	✓	1873	100.000
D - Newbourne Rd East		FLAT	✓	307	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	192	1297	120
	B - Foxhall Rd West	289	0	147	46
	C - A12 South	1594	219	1	58
	D - Newbourne Rd East	105	99	103	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	2	9	5
	B - Foxhall Rd West	3	0	6	6
	C - A12 South	8	5	0	1
	D - Newbourne Rd East	4	6	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	10.07	4.5	B	1612	2417
B - Foxhall Rd West	0.94	93.22	11.8	F	482	724
C - A12 South	0.95	32.87	16.4	D	1873	2809
D - Newbourne Rd East	0.78	41.25	3.4	E	307	461

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1612	403	242	1975	0.816	1595	1932	0.0	4.2	9.111	A
B - Foxhall Rd West	482	121	1716	536	0.900	459	499	0.0	5.9	39.103	E
C - A12 South	1873	468	389	1980	0.946	1825	1524	0.0	11.8	19.450	C
D - Newbourne Rd East	307	77	1617	404	0.760	296	220	0.0	2.7	30.822	D

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1612	403	249	1971	0.818	1611	1977	4.2	4.3	9.968	A

B - Foxhall Rd West	482	121	1753	517	0.933	473	508	5.9	8.3	65.897	F
C - A12 South	1873	468	398	1975	0.948	1864	1544	11.8	14.0	28.594	D
D - Newbourne Rd East	307	77	1636	395	0.778	306	224	2.7	3.1	39.098	E

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1612	403	251	1970	0.818	1611	1983	4.3	4.4	10.025	B
B - Foxhall Rd West	482	121	1757	515	0.937	477	509	8.3	9.7	77.632	F
C - A12 South	1873	468	398	1975	0.948	1868	1546	14.0	15.0	30.694	D
D - Newbourne Rd East	307	77	1638	394	0.780	307	225	3.1	3.3	40.367	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1612	403	252	1969	0.818	1611	1986	4.4	4.4	10.047	B
B - Foxhall Rd West	482	121	1759	514	0.939	479	510	9.7	10.6	84.697	F
C - A12 South	1873	468	399	1975	0.948	1870	1547	15.0	15.7	31.762	D
D - Newbourne Rd East	307	77	1638	394	0.780	307	225	3.3	3.4	40.842	E

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1612	403	252	1969	0.819	1612	1987	4.4	4.4	10.058	B
B - Foxhall Rd West	482	121	1760	514	0.940	480	510	10.6	11.3	89.590	F
C - A12 South	1873	468	399	1975	0.948	1871	1547	15.7	16.1	32.420	D
D - Newbourne Rd East	307	77	1639	394	0.781	307	225	3.4	3.4	41.094	E

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1612	403	253	1969	0.819	1612	1988	4.4	4.5	10.067	B
B - Foxhall Rd West	482	121	1760	513	0.940	480	510	11.3	11.8	93.223	F
C - A12 South	1873	468	399	1975	0.948	1871	1548	16.1	16.4	32.867	D
D - Newbourne Rd East	307	77	1639	394	0.781	307	225	3.4	3.4	41.251	E

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	82.06	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1643	100.000
B - Foxhall Rd West		FLAT	✓	419	100.000
C - A12 South		FLAT	✓	2086	100.000
D - Newbourne Rd East		FLAT	✓	272	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	199	1329	115
	B - Foxhall Rd West	231	0	137	51
	C - A12 South	1703	354	1	29
	D - Newbourne Rd East	62	135	75	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	3	6	2
	B - Foxhall Rd West	0	0	0	4
	C - A12 South	4	1	0	5
	D - Newbourne Rd East	2	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	9.09	4.1	A	1643	2465
B - Foxhall Rd West	0.75	25.13	2.9	D	419	629
C - A12 South	1.02	158.57	92.9	F	2086	3129
D - Newbourne Rd East	0.65	24.93	1.9	C	272	408

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1643	411	212	2041	0.805	1627	1901	0.0	3.9	8.402	A
B - Foxhall Rd West	419	105	1703	589	0.711	410	664	0.0	2.3	19.234	C
C - A12 South	2086	522	390	2050	1.018	1977	1524	0.0	27.3	33.444	D
D - Newbourne Rd East	272	68	1649	425	0.640	266	191	0.0	1.7	21.768	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1643	411	216	2039	0.806	1643	1945	3.9	4.0	9.056	A

B - Foxhall Rd West	419	105	1744	568	0.738	418	677	2.3	2.6	23.583	C
C - A12 South	2086	522	396	2046	1.020	2024	1541	27.3	42.8	69.958	F
D - Newbourne Rd East	272	68	1665	417	0.653	272	194	1.7	1.8	24.648	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1643	411	217	2039	0.806	1643	1952	4.0	4.1	9.080	A
B - Foxhall Rd West	419	105	1750	565	0.742	419	678	2.6	2.7	24.414	C
C - A12 South	2086	522	397	2046	1.020	2032	1541	42.8	56.4	94.421	F
D - Newbourne Rd East	272	68	1666	417	0.654	272	194	1.8	1.8	24.841	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1643	411	217	2039	0.806	1643	1955	4.1	4.1	9.090	A
B - Foxhall Rd West	419	105	1753	563	0.744	419	679	2.7	2.8	24.776	C
C - A12 South	2086	522	397	2046	1.020	2036	1542	56.4	69.1	116.764	F
D - Newbourne Rd East	272	68	1666	416	0.654	272	194	1.8	1.8	24.894	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1643	411	217	2039	0.806	1643	1957	4.1	4.1	9.092	A
B - Foxhall Rd West	419	105	1755	562	0.745	419	679	2.8	2.8	24.986	C
C - A12 South	2086	522	397	2046	1.020	2038	1542	69.1	81.2	138.010	F
D - Newbourne Rd East	272	68	1666	416	0.654	272	194	1.8	1.9	24.919	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1643	411	217	2039	0.806	1643	1958	4.1	4.1	9.095	A
B - Foxhall Rd West	419	105	1756	562	0.746	419	680	2.8	2.9	25.126	D
C - A12 South	2086	522	397	2046	1.020	2039	1542	81.2	92.9	158.570	F
D - Newbourne Rd East	272	68	1666	416	0.654	272	194	1.9	1.9	24.931	C

2034 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	880	100.000
B - Foxhall Rd West		ONE HOUR	✓	240	100.000
C - A12 South		ONE HOUR	✓	753	100.000
D - Newbourne Rd East		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	808	32
	B - Foxhall Rd West	131	0	82	26
	C - A12 South	682	39	0	33
	D - Newbourne Rd East	14	23	37	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	6
	B - Foxhall Rd West	1	0	10	11
	C - A12 South	10	5	0	6
	D - Newbourne Rd East	0	14	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.47	3.30	0.9	A	807	1211
B - Foxhall Rd West	0.27	4.96	0.4	A	220	330
C - A12 South	0.39	2.79	0.6	A	691	1037
D - Newbourne Rd East	0.12	6.37	0.1	A	67	101

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	662	166	106	2089	0.317	661	621	0.0	0.5	2.517	A
B - Foxhall Rd West	180	45	547	1122	0.161	180	76	0.0	0.2	3.817	A
C - A12 South	567	142	57	2134	0.266	566	695	0.0	0.4	2.293	A
D - Newbourne Rd East	55	14	698	790	0.070	55	68	0.0	0.1	4.896	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	791	198	127	2076	0.381	790	743	0.5	0.6	2.799	A

B - Foxhall Rd West	215	54	654	1066	0.202	215	91	0.2	0.3	4.229	A
C - A12 South	677	169	69	2128	0.318	677	832	0.4	0.5	2.481	A
D - Newbourne Rd East	66	16	835	729	0.090	66	82	0.1	0.1	5.427	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	969	242	155	2058	0.471	968	909	0.6	0.9	3.298	A
B - Foxhall Rd West	264	66	801	990	0.266	263	112	0.3	0.4	4.948	A
C - A12 South	829	207	84	2119	0.391	828	1019	0.5	0.6	2.788	A
D - Newbourne Rd East	81	20	1023	646	0.125	80	100	0.1	0.1	6.362	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	969	242	155	2058	0.471	969	910	0.9	0.9	3.304	A
B - Foxhall Rd West	264	66	802	990	0.266	264	112	0.4	0.4	4.956	A
C - A12 South	829	207	84	2119	0.391	829	1020	0.6	0.6	2.790	A
D - Newbourne Rd East	81	20	1024	645	0.125	81	100	0.1	0.1	6.371	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	791	198	127	2076	0.381	792	744	0.9	0.6	2.806	A
B - Foxhall Rd West	215	54	655	1066	0.202	216	91	0.4	0.3	4.237	A
C - A12 South	677	169	69	2128	0.318	678	834	0.6	0.5	2.483	A
D - Newbourne Rd East	66	16	837	728	0.090	66	82	0.1	0.1	5.439	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	662	166	106	2088	0.317	663	623	0.6	0.5	2.526	A
B - Foxhall Rd West	180	45	549	1121	0.161	181	77	0.3	0.2	3.832	A
C - A12 South	567	142	58	2134	0.266	567	698	0.5	0.4	2.298	A
D - Newbourne Rd East	55	14	701	789	0.070	55	69	0.1	0.1	4.911	A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	88.09	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1606	100.000
B - Foxhall Rd West		ONE HOUR	✓	589	100.000
C - A12 South		ONE HOUR	✓	1667	100.000
D - Newbourne Rd East		ONE HOUR	✓	205	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	181	1366	59
	B - Foxhall Rd West	360	0	165	64
	C - A12 South	1522	94	0	51
	D - Newbourne Rd East	109	31	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	12
	B - Foxhall Rd West	1	0	8	10
	C - A12 South	8	5	0	12
	D - Newbourne Rd East	13	19	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	14.45	6.8	B	1473	2210
B - Foxhall Rd West	1.39	501.47	92.9	F	540	810
C - A12 South	0.92	21.09	10.1	C	1530	2295
D - Newbourne Rd East	0.78	52.86	3.1	F	188	282

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1209	302	208	2031	0.595	1203	1489	0.0	1.5	4.320	A
B - Foxhall Rd West	443	111	1260	770	0.576	438	229	0.0	1.3	10.676	B
C - A12 South	1255	314	240	2060	0.609	1249	1194	0.0	1.5	4.405	A
D - Newbourne Rd East	154	39	1282	528	0.292	152	129	0.0	0.4	9.542	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1443	361	247	2006	0.719	1439	1778	1.5	2.5	6.301	A

B - Foxhall Rd West	529	132	1507	643	0.824	519	274	1.3	4.0	27.001	D
C - A12 South	1499	375	287	2032	0.737	1494	1427	1.5	2.7	6.628	A
D - Newbourne Rd East	184	46	1532	419	0.439	182	154	0.4	0.8	15.112	C

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1768	442	240	2011	0.879	1752	2058	2.5	6.5	13.152	B
B - Foxhall Rd West	648	162	1824	479	1.353	474	333	4.0	47.5	213.788	F
C - A12 South	1836	459	346	1998	0.919	1810	1692	2.7	9.1	17.255	C
D - Newbourne Rd East	225	56	1821	294	0.766	217	171	0.8	2.7	43.282	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1768	442	237	2012	0.879	1767	2077	6.5	6.8	14.454	B
B - Foxhall Rd West	648	162	1847	467	1.389	467	337	47.5	92.9	501.468	F
C - A12 South	1836	459	352	1994	0.921	1832	1704	9.1	10.1	21.086	C
D - Newbourne Rd East	225	56	1833	289	0.779	224	171	2.7	3.1	52.857	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1443	361	286	1982	0.728	1460	1874	6.8	2.8	7.096	A
B - Foxhall Rd West	529	132	1544	623	0.849	617	280	92.9	71.0	459.349	F
C - A12 South	1499	375	297	2027	0.740	1528	1476	10.1	2.9	7.608	A
D - Newbourne Rd East	184	46	1579	399	0.461	193	167	3.1	0.9	18.177	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1209	302	319	1962	0.616	1213	1675	2.8	1.6	4.835	A
B - Foxhall Rd West	443	111	1272	764	0.580	721	232	71.0	1.6	163.756	F
C - A12 South	1255	314	243	2058	0.610	1261	1283	2.9	1.6	4.542	A
D - Newbourne Rd East	154	39	1371	488	0.315	156	161	0.9	0.5	10.869	B

2034 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	34.07	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	142	1577	122
	B - Foxhall Rd West	297	0	195	79
	C - A12 South	1900	167	1	107
	D - Newbourne Rd East	169	49	124	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	7	8	0	7
	D - Newbourne Rd East	9	5	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.40	6.0	B	1122	1683
B - Foxhall Rd West	1.02	131.50	17.1	F	234	351
C - A12 South	0.94	26.42	13.1	D	1136	1704
D - Newbourne Rd East	0.94	80.18	7.1	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	302	1954	0.857	1652	1984	0.0	5.5	11.246	B
B - Foxhall Rd West	487	122	1848	475	1.024	439	309	0.0	12.0	68.596	F
C - A12 South	1893	473	307	2024	0.935	1850	1668	0.0	10.6	17.722	C

D - Newbourne Rd East	297	74	1693	360	0.823	282	261	0.0	3.6	40.746	E
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08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	302	1954	0.866	1689	2032	5.5	6.0	13.402	B
B - Foxhall Rd West	455	114	1899	448	1.015	435	320	12.0	17.1	131.499	F
C - A12 South	1900	475	329	2011	0.945	1890	1709	10.6	13.1	26.421	D
D - Newbourne Rd East	325	81	1726	345	0.941	311	265	3.6	7.1	80.179	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	180	2026	0.659	1351	1252	6.0	2.0	5.456	A
B - Foxhall Rd West	192	48	1173	825	0.232	259	230	17.1	0.3	7.170	A
C - A12 South	1072	268	282	2038	0.526	1120	1347	13.1	1.1	4.130	A
D - Newbourne Rd East	255	64	1350	518	0.492	279	180	7.1	1.0	16.531	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	76	2087	0.398	836	696	2.0	0.7	2.890	A
B - Foxhall Rd West	90	22	682	1080	0.083	91	137	0.3	0.1	3.643	A
C - A12 South	650	162	166	2106	0.309	653	805	1.1	0.4	2.480	A
D - Newbourne Rd East	157	39	812	766	0.204	159	100	1.0	0.3	5.968	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	75	2088	0.287	601	670	0.7	0.4	2.424	A
B - Foxhall Rd West	90	22	656	1094	0.082	90	112	0.1	0.1	3.585	A
C - A12 South	650	162	118	2134	0.305	650	587	0.4	0.4	2.425	A
D - Newbourne Rd East	112	28	592	867	0.129	112	84	0.3	0.1	4.774	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	75	2088	0.287	600	670	0.4	0.4	2.421	A
B - Foxhall Rd West	90	22	656	1094	0.082	90	112	0.1	0.1	3.587	A
C - A12 South	650	162	118	2134	0.305	650	586	0.4	0.4	2.424	A
D - Newbourne Rd East	112	28	591	868	0.129	112	84	0.1	0.1	4.764	A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	170.56	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1686	100.000
B - Foxhall Rd West		FLAT	✓	596	100.000
C - A12 South		FLAT	✓	1982	100.000
D - Newbourne Rd East		FLAT	✓	336	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	217	1341	125
	B - Foxhall Rd West	398	0	147	51
	C - A12 South	1694	222	1	64
	D - Newbourne Rd East	114	83	139	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	5	5
	B - Foxhall Rd West	3	0	6	5
	C - A12 South	5	5	0	1
	D - Newbourne Rd East	3	8	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	10.21	4.7	B	1686	2528
B - Foxhall Rd West	1.22	1061.39	156.2	F	596	895
C - A12 South	0.98	60.03	31.8	F	1982	2973
D - Newbourne Rd East	0.85	59.15	5.3	F	336	505

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1686	421	230	2037	0.827	1668	2080	0.0	4.5	9.329	A
B - Foxhall Rd West	596	149	1811	519	1.150	498	508	0.0	24.5	104.977	F
C - A12 South	1982	495	405	2028	0.977	1914	1583	0.0	16.8	24.292	C
D - Newbourne Rd East	336	84	1668	402	0.837	321	229	0.0	3.9	38.909	E

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1686	421	230	2037	0.827	1685	2121	4.5	4.6	10.182	B

B - Foxhall Rd West	596	149	1856	496	1.202	495	519	24.5	50.0	287.757	F
C - A12 South	1982	495	415	2023	0.980	1960	1601	16.8	22.2	41.757	E
D - Newbourne Rd East	336	84	1683	395	0.852	333	232	3.9	4.7	54.131	F

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1686	421	229	2038	0.827	1685	2126	4.6	4.7	10.201	B
B - Foxhall Rd West	596	149	1864	493	1.211	492	520	50.0	76.1	475.082	F
C - A12 South	1982	495	416	2022	0.980	1968	1602	22.2	25.7	48.796	E
D - Newbourne Rd East	336	84	1683	395	0.852	335	232	4.7	5.0	57.023	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1686	421	229	2038	0.827	1686	2129	4.7	4.7	10.204	B
B - Foxhall Rd West	596	149	1867	491	1.215	491	521	76.1	102.6	668.093	F
C - A12 South	1982	495	416	2022	0.980	1972	1602	25.7	28.2	53.578	F
D - Newbourne Rd East	336	84	1682	395	0.851	336	232	5.0	5.2	58.166	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1686	421	229	2038	0.827	1686	2130	4.7	4.7	10.204	B
B - Foxhall Rd West	596	149	1869	490	1.218	490	521	102.6	129.3	864.127	F
C - A12 South	1982	495	417	2022	0.980	1974	1602	28.2	30.2	57.177	F
D - Newbourne Rd East	336	84	1682	395	0.851	336	232	5.2	5.3	58.776	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1686	421	229	2038	0.827	1686	2131	4.7	4.7	10.205	B
B - Foxhall Rd West	596	149	1871	489	1.220	489	521	129.3	156.2	1061.388	F
C - A12 South	1982	495	417	2022	0.980	1975	1602	30.2	31.8	60.033	F
D - Newbourne Rd East	336	84	1682	395	0.851	336	232	5.3	5.3	59.154	F

2034 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	170.48	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1762	100.000
B - Foxhall Rd West		FLAT	✓	488	100.000
C - A12 South		FLAT	✓	2200	100.000
D - Newbourne Rd East		FLAT	✓	299	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	229	1415	118
	B - Foxhall Rd West	272	0	138	78
	C - A12 South	1767	358	1	75
	D - Newbourne Rd East	64	118	117	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	3	2	2
	B - Foxhall Rd West	0	0	0	3
	C - A12 South	3	1	0	2
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	12.46	6.0	B	1762	2643
B - Foxhall Rd West	0.88	49.84	6.5	E	488	732
C - A12 South	1.06	340.72	210.1	F	2200	3300
D - Newbourne Rd East	0.79	43.70	3.5	E	299	449

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1762	441	278	2056	0.857	1740	1953	0.0	5.5	10.754	B
B - Foxhall Rd West	488	122	1761	576	0.847	470	669	0.0	4.5	30.330	D
C - A12 South	2200	550	402	2075	1.061	2028	1644	0.0	43.1	45.965	E
D - Newbourne Rd East	299	75	1758	393	0.762	288	260	0.0	2.8	31.758	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1762	441	285	2051	0.859	1761	1991	5.5	5.8	12.279	B

B - Foxhall Rd West	488	122	1792	560	0.872	484	681	4.5	5.5	43.641	E
C - A12 South	2200	550	411	2070	1.063	2063	1668	43.1	77.4	112.118	F
D - Newbourne Rd East	299	75	1781	382	0.784	297	265	2.8	3.2	41.228	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1762	441	286	2051	0.859	1762	1995	5.8	5.9	12.385	B
B - Foxhall Rd West	488	122	1795	559	0.874	486	682	5.5	6.0	47.029	E
C - A12 South	2200	550	411	2069	1.063	2066	1670	77.4	110.8	169.447	F
D - Newbourne Rd East	299	75	1782	381	0.785	299	266	3.2	3.4	42.750	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1762	441	287	2050	0.859	1762	1996	5.9	6.0	12.424	B
B - Foxhall Rd West	488	122	1796	558	0.875	487	683	6.0	6.2	48.495	E
C - A12 South	2200	550	412	2069	1.063	2067	1670	110.8	144.0	226.565	F
D - Newbourne Rd East	299	75	1783	381	0.786	299	266	3.4	3.4	43.277	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1762	441	287	2050	0.859	1762	1997	6.0	6.0	12.443	B
B - Foxhall Rd West	488	122	1797	558	0.875	488	683	6.2	6.4	49.315	E
C - A12 South	2200	550	412	2069	1.063	2068	1670	144.0	177.1	283.646	F
D - Newbourne Rd East	299	75	1783	381	0.786	299	266	3.4	3.5	43.540	E

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1762	441	287	2050	0.859	1762	1997	6.0	6.0	12.456	B
B - Foxhall Rd West	488	122	1797	558	0.875	488	683	6.4	6.5	49.836	E
C - A12 South	2200	550	412	2069	1.063	2068	1670	177.1	210.1	340.716	F
D - Newbourne Rd East	299	75	1783	381	0.786	299	266	3.5	3.5	43.697	E

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	3.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	881	100.000
B - Foxhall Rd West		ONE HOUR	✓	240	100.000
C - A12 South		ONE HOUR	✓	754	100.000
D - Newbourne Rd East		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	40	809	32
	B - Foxhall Rd West	131	0	82	26
	C - A12 South	683	39	0	33
	D - Newbourne Rd East	14	23	37	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	0	6	6
	B - Foxhall Rd West	1	0	10	11
	C - A12 South	10	5	0	6
	D - Newbourne Rd East	0	14	20	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.47	3.31	0.9	A	808	1213
B - Foxhall Rd West	0.27	4.96	0.4	A	220	330
C - A12 South	0.39	2.79	0.6	A	692	1038
D - Newbourne Rd East	0.12	6.38	0.1	A	67	101

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	663	166	106	2089	0.317	661	621	0.0	0.5	2.518	A
B - Foxhall Rd West	180	45	547	1121	0.161	180	76	0.0	0.2	3.818	A
C - A12 South	568	142	57	2134	0.266	566	696	0.0	0.4	2.293	A
D - Newbourne Rd East	55	14	699	789	0.070	55	68	0.0	0.1	4.897	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	792	198	127	2076	0.381	791	743	0.5	0.6	2.800	A

B - Foxhall Rd West	215	54	655	1066	0.202	215	91	0.2	0.3	4.231	A
C - A12 South	678	169	69	2128	0.319	677	833	0.4	0.5	2.482	A
D - Newbourne Rd East	66	16	836	729	0.090	66	82	0.1	0.1	5.430	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	970	242	155	2058	0.471	969	910	0.6	0.9	3.301	A
B - Foxhall Rd West	264	66	802	990	0.266	263	112	0.3	0.4	4.951	A
C - A12 South	830	208	84	2119	0.392	830	1020	0.5	0.6	2.790	A
D - Newbourne Rd East	81	20	1024	646	0.125	80	100	0.1	0.1	6.367	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	970	242	155	2058	0.471	970	911	0.9	0.9	3.306	A
B - Foxhall Rd West	264	66	803	989	0.267	264	112	0.4	0.4	4.959	A
C - A12 South	830	208	84	2119	0.392	830	1021	0.6	0.6	2.792	A
D - Newbourne Rd East	81	20	1025	645	0.125	81	100	0.1	0.1	6.375	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	792	198	127	2076	0.382	793	745	0.9	0.6	2.807	A
B - Foxhall Rd West	215	54	656	1065	0.202	216	91	0.4	0.3	4.239	A
C - A12 South	678	169	69	2128	0.319	679	835	0.6	0.5	2.486	A
D - Newbourne Rd East	66	16	838	728	0.090	66	82	0.1	0.1	5.439	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	663	166	106	2089	0.318	664	624	0.6	0.5	2.529	A
B - Foxhall Rd West	180	45	549	1120	0.161	181	77	0.3	0.2	3.830	A
C - A12 South	568	142	58	2134	0.266	568	699	0.5	0.4	2.298	A
D - Newbourne Rd East	55	14	702	788	0.070	55	69	0.1	0.1	4.912	A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	83.53	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1627	100.000
B - Foxhall Rd West		ONE HOUR	✓	576	100.000
C - A12 South		ONE HOUR	✓	1668	100.000
D - Newbourne Rd East		ONE HOUR	✓	205	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	189	1378	60
	B - Foxhall Rd West	347	0	165	64
	C - A12 South	1524	94	0	50
	D - Newbourne Rd East	109	31	65	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	6	12
	B - Foxhall Rd West	1	0	8	10
	C - A12 South	8	5	0	12
	D - Newbourne Rd East	13	19	19	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	15.92	7.6	C	1493	2239
B - Foxhall Rd West	1.36	470.47	86.2	F	528	793
C - A12 South	0.92	21.95	10.5	C	1531	2296
D - Newbourne Rd East	0.81	60.95	3.5	F	188	282

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1225	306	208	2031	0.603	1219	1481	0.0	1.5	4.397	A
B - Foxhall Rd West	434	108	1260	769	0.564	428	235	0.0	1.3	10.431	B
C - A12 South	1256	314	246	2055	0.611	1250	1203	0.0	1.6	4.439	A
D - Newbourne Rd East	154	39	1297	522	0.295	152	129	0.0	0.4	9.705	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1462	366	247	2007	0.729	1458	1769	1.5	2.6	6.501	A

B - Foxhall Rd West	518	129	1508	641	0.807	508	282	1.3	3.7	25.426	D
C - A12 South	1500	375	294	2026	0.740	1495	1438	1.6	2.8	6.713	A
D - Newbourne Rd East	184	46	1550	412	0.447	182	154	0.4	0.8	15.602	C

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1791	448	242	2010	0.891	1773	2054	2.6	7.2	14.211	B
B - Foxhall Rd West	634	159	1823	478	1.326	473	341	3.7	44.0	200.138	F
C - A12 South	1837	459	354	1991	0.922	1810	1706	2.8	9.4	17.751	C
D - Newbourne Rd East	225	56	1843	285	0.792	216	171	0.8	3.0	47.823	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1791	448	240	2011	0.890	1789	2073	7.2	7.6	15.917	C
B - Foxhall Rd West	634	159	1848	465	1.362	465	345	44.0	86.2	470.466	F
C - A12 South	1837	459	361	1987	0.924	1832	1720	9.4	10.5	21.954	C
D - Newbourne Rd East	225	56	1857	279	0.808	223	172	3.0	3.5	60.946	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1462	366	290	1981	0.738	1481	1871	7.6	2.9	7.461	A
B - Foxhall Rd West	518	129	1547	621	0.834	614	288	86.2	62.3	420.912	F
C - A12 South	1500	375	305	2020	0.743	1530	1492	10.5	3.0	7.783	A
D - Newbourne Rd East	184	46	1603	389	0.473	194	168	3.5	0.9	19.445	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1225	306	307	1970	0.622	1230	1643	2.9	1.7	4.894	A
B - Foxhall Rd West	434	108	1273	762	0.569	677	238	62.3	1.4	122.173	F
C - A12 South	1256	314	250	2053	0.612	1261	1285	3.0	1.6	4.581	A
D - Newbourne Rd East	154	39	1379	485	0.317	156	158	0.9	0.5	10.982	B

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	33.53	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	LEVELS	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Scaling Factor (%)
A - A12 North		LEVELS	100.000
B - Foxhall Rd West		LEVELS	100.000
C - A12 South		LEVELS	100.000
D - Newbourne Rd East		LEVELS	100.000

LEVELS Data (Traffic)

Arm	Time rising	Flow rising (Veh/hr)	Time peak	Flow peak (Veh/hr)	Time falling	Flow falling (Veh/hr)
A - A12 North	07:45	1487	08:00	1742	08:45	600
B - Foxhall Rd West	07:45	430	08:00	507	08:30	90
C - A12 South	07:45	1509	08:00	2041	08:30	650
D - Newbourne Rd East	07:45	206	08:00	335	08:45	112

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	147	1586	124
	B - Foxhall Rd West	318	0	195	79
	C - A12 South	1936	167	1	107
	D - Newbourne Rd East	169	33	140	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	7	11
	B - Foxhall Rd West	2	0	5	3
	C - A12 South	7	8	0	7
	D - Newbourne Rd East	9	7	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	13.05	5.9	B	1122	1683
B - Foxhall Rd West	1.03	134.63	17.6	F	234	351
C - A12 South	0.94	25.60	12.7	D	1136	1704
D - Newbourne Rd East	0.93	76.22	6.7	F	209	314

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1674	419	293	1961	0.854	1653	1996	0.0	5.4	11.017	B
B - Foxhall Rd West	487	122	1851	473	1.028	438	298	0.0	12.2	69.702	F
C - A12 South	1893	473	298	2029	0.933	1851	1672	0.0	10.4	17.390	C

D - Newbourne Rd East	297	74	1687	364	0.815	283	258	0.0	3.5	39.483	E
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08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1691	423	293	1961	0.862	1689	2043	5.4	5.9	13.051	B
B - Foxhall Rd West	455	114	1903	447	1.019	434	306	12.2	17.6	134.625	F
C - A12 South	1900	475	318	2017	0.942	1891	1714	10.4	12.7	25.600	D
D - Newbourne Rd East	325	81	1720	349	0.931	312	262	3.5	6.7	76.219	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1335	334	175	2031	0.657	1350	1257	5.9	1.9	5.407	A
B - Foxhall Rd West	192	48	1172	826	0.232	261	218	17.6	0.3	7.216	A
C - A12 South	1072	268	271	2044	0.525	1119	1353	12.7	1.1	4.087	A
D - Newbourne Rd East	255	64	1346	521	0.489	278	179	6.7	1.0	16.155	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	831	208	74	2091	0.397	836	699	1.9	0.7	2.882	A
B - Foxhall Rd West	90	22	682	1080	0.083	91	131	0.3	0.1	3.643	A
C - A12 South	650	163	160	2109	0.308	653	810	1.1	0.4	2.477	A
D - Newbourne Rd East	157	39	810	767	0.204	159	100	1.0	0.3	5.956	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	73	2091	0.287	601	673	0.7	0.4	2.417	A
B - Foxhall Rd West	90	22	657	1094	0.082	90	107	0.1	0.1	3.588	A
C - A12 South	650	163	114	2136	0.304	650	589	0.4	0.4	2.423	A
D - Newbourne Rd East	112	28	591	868	0.129	112	84	0.3	0.1	4.766	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	600	150	73	2091	0.287	600	673	0.4	0.4	2.415	A
B - Foxhall Rd West	90	22	656	1094	0.082	90	107	0.1	0.1	3.588	A
C - A12 South	650	163	114	2137	0.304	650	588	0.4	0.4	2.421	A
D - Newbourne Rd East	112	28	590	868	0.129	112	84	0.1	0.1	4.760	A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	171.57	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	FLAT	14:45	16:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1679	100.000
B - Foxhall Rd West		FLAT	✓	596	100.000
C - A12 South		FLAT	✓	1983	100.000
D - Newbourne Rd East		FLAT	✓	336	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	2	214	1336	126
	B - Foxhall Rd West	398	0	147	51
	C - A12 South	1695	222	1	64
	D - Newbourne Rd East	114	86	136	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	0	1	5	5
	B - Foxhall Rd West	3	0	6	5
	C - A12 South	5	5	0	1
	D - Newbourne Rd East	3	8	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	10.06	4.6	B	1679	2518
B - Foxhall Rd West	1.22	1067.52	157.0	F	596	895
C - A12 South	0.98	60.67	32.2	F	1983	2974
D - Newbourne Rd East	0.85	56.41	5.1	F	336	505

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1679	420	230	2036	0.825	1661	2081	0.0	4.4	9.217	A
B - Foxhall Rd West	596	149	1812	518	1.151	498	508	0.0	24.6	105.405	F
C - A12 South	1983	496	405	2028	0.977	1915	1576	0.0	16.9	24.385	C
D - Newbourne Rd East	336	84	1660	405	0.830	321	230	0.0	3.8	37.939	E

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1679	420	230	2035	0.825	1678	2121	4.4	4.6	10.035	B

B - Foxhall Rd West	596	149	1857	496	1.203	494	519	24.6	50.2	289.207	F
C - A12 South	1983	496	415	2023	0.980	1961	1593	16.9	22.4	42.025	E
D - Newbourne Rd East	336	84	1675	398	0.845	334	233	3.8	4.5	52.094	F

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1679	420	229	2036	0.825	1678	2127	4.6	4.6	10.052	B
B - Foxhall Rd West	596	149	1864	492	1.212	491	520	50.2	76.5	477.660	F
C - A12 South	1983	496	416	2022	0.981	1969	1594	22.4	25.9	49.179	E
D - Newbourne Rd East	336	84	1675	398	0.845	335	233	4.5	4.8	54.620	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1679	420	229	2036	0.824	1679	2129	4.6	4.6	10.054	B
B - Foxhall Rd West	596	149	1868	490	1.217	490	521	76.5	103.1	671.838	F
C - A12 South	1983	496	416	2022	0.981	1972	1594	25.9	28.5	54.058	F
D - Newbourne Rd East	336	84	1674	398	0.845	336	233	4.8	4.9	55.589	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1679	420	229	2036	0.824	1679	2131	4.6	4.6	10.056	B
B - Foxhall Rd West	596	149	1870	489	1.219	489	521	103.1	130.0	869.061	F
C - A12 South	1983	496	417	2022	0.981	1975	1594	28.5	30.5	57.743	F
D - Newbourne Rd East	336	84	1674	398	0.844	336	233	4.9	5.0	56.099	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1679	420	228	2036	0.824	1679	2132	4.6	4.6	10.055	B
B - Foxhall Rd West	596	149	1872	489	1.221	488	521	130.0	157.0	1067.520	F
C - A12 South	1983	496	417	2022	0.981	1976	1593	30.5	32.2	60.674	F
D - Newbourne Rd East	336	84	1674	398	0.844	336	233	5.0	5.1	56.409	F

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J22	A12 / Foxhall Road / Newbourne Road	Standard Roundabout		A, D, C, B	171.51	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	FLAT	16:45	18:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1762	100.000
B - Foxhall Rd West		FLAT	✓	451	100.000
C - A12 South		FLAT	✓	2202	100.000
D - Newbourne Rd East		FLAT	✓	299	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	1	223	1421	118
	B - Foxhall Rd West	234	0	138	79
	C - A12 South	1770	358	1	74
	D - Newbourne Rd East	64	123	112	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Foxhall Rd West	C - A12 South	D - Newbourne Rd East
From	A - A12 North	100	3	2	2
	B - Foxhall Rd West	0	0	0	3
	C - A12 South	3	1	0	2
	D - Newbourne Rd East	1	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	12.44	6.0	B	1762	2643
B - Foxhall Rd West	0.81	33.63	4.1	D	451	677
C - A12 South	1.06	344.01	212.2	F	2202	3303
D - Newbourne Rd East	0.79	43.80	3.5	E	299	449

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1762	441	280	2055	0.857	1740	1920	0.0	5.5	10.771	B
B - Foxhall Rd West	451	113	1762	575	0.784	438	668	0.0	3.2	24.422	C
C - A12 South	2202	551	401	2075	1.061	2028	1646	0.0	43.4	46.186	E
D - Newbourne Rd East	299	75	1759	392	0.763	288	261	0.0	2.8	31.922	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1762	441	286	2051	0.859	1761	1956	5.5	5.8	12.281	B

B - Foxhall Rd West	451	113	1793	559	0.807	449	680	3.2	3.7	31.612	D
C - A12 South	2202	551	409	2070	1.064	2064	1669	43.4	78.0	112.878	F
D - Newbourne Rd East	299	75	1782	381	0.785	297	266	2.8	3.2	41.428	E

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1762	441	287	2051	0.859	1762	1959	5.8	5.9	12.376	B
B - Foxhall Rd West	451	113	1796	558	0.809	450	681	3.7	3.9	32.840	D
C - A12 South	2202	551	410	2070	1.064	2067	1671	78.0	111.9	170.819	F
D - Newbourne Rd East	299	75	1783	381	0.786	299	266	3.2	3.4	42.907	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1762	441	287	2051	0.859	1762	1961	5.9	6.0	12.411	B
B - Foxhall Rd West	451	113	1797	557	0.809	451	682	3.9	4.0	33.278	D
C - A12 South	2202	551	411	2070	1.064	2068	1671	111.9	145.4	228.570	F
D - Newbourne Rd East	299	75	1783	381	0.786	299	266	3.4	3.5	43.409	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1762	441	287	2051	0.859	1762	1961	6.0	6.0	12.425	B
B - Foxhall Rd West	451	113	1797	557	0.810	451	682	4.0	4.1	33.499	D
C - A12 South	2202	551	411	2070	1.064	2068	1671	145.4	178.9	286.292	F
D - Newbourne Rd East	299	75	1783	380	0.786	299	266	3.5	3.5	43.675	E

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1762	441	287	2051	0.859	1762	1961	6.0	6.0	12.436	B
B - Foxhall Rd West	451	113	1798	557	0.810	451	682	4.1	4.1	33.629	D
C - A12 South	2202	551	411	2069	1.064	2069	1672	178.9	212.2	344.009	F
D - Newbourne Rd East	299	75	1783	380	0.787	299	266	3.5	3.5	43.804	E

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	2019.10.23 J22_Model_v11 fixed.lsg3x
Author:	
Company:	
Address:	

Basic Results Summary

Scenario 2: '28RC 07:00-08:00' (FG2: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	67.4%	
A12 / Foxhall Road / Newbourne Road	-	-	-	67.4%	
1/1	A12 (North) Left Ahead	7.7	7.9	62.1%	
1/2	A12 (North) Ahead	8.6	7.9	63.6%	
1/3	A12 (North) Ahead	0.0	0.0	0.0%	
2/1	Newbourne Road Left	0.5	7.0	19.6%	
2/2	Newbourne Road Ahead	1.3	9.4	38.6%	
3/1	A12 (South) Left	0.6	4.4	7.8%	
3/2	A12 (South) Ahead	9.3	8.9	66.3%	
3/3	A12 (South) Ahead	8.3	8.9	64.8%	
4/1	Foxhall Road Left	4.3	19.0	67.4%	
4/2	Foxhall Road Left Ahead	4.3	18.9	67.1%	
9/1	Ahead Right	2.7	34.0	52.5%	
9/2	Right	3.0	32.4	56.4%	
11/1	Ahead	4.0	37.2	66.3%	
11/2	Right	2.2	30.6	42.5%	
C1 Stream: 1 PRC for Signalled Lanes (%):		41.6	Total Delay for Signalled Lanes (pcuHr):	6.60	Cycle Time (s): 60
C1 Stream: 2 PRC for Signalled Lanes (%):		35.7	Total Delay for Signalled Lanes (pcuHr):	7.51	Cycle Time (s): 60
PRC Over All Lanes (%):		33.6	Total Delay Over All Lanes(pcuHr):	17.69	

Basic Results Summary

Scenario 3: '28RC 08:00-09:00' (FG3: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	102.4%		
A12 / Foxhall Road / Newbourne Road	-	-	-	102.4%		
1/1	A12 (North) Left Ahead	10.8	10.0	72.8%		
1/2	A12 (North) Ahead	11.9	10.0	73.9%		
1/3	A12 (North) Ahead	0.0	0.0	0.0%		
2/1	Newbourne Road Left	1.7	13.7	43.0%		
2/2	Newbourne Road Ahead	3.5	20.9	63.5%		
3/1	A12 (South) Left	1.3	6.3	15.7%		
3/2	A12 (South) Ahead	23.1	28.8	93.3%		
3/3	A12 (South) Ahead	21.5	28.7	92.8%		
4/1	Foxhall Road Left	21.8	144.2	102.4%		
4/2	Foxhall Road Left Ahead	21.5	140.8	102.1%		
9/1	Ahead Right	4.1	46.5	70.9%		
9/2	Right	4.0	28.7	70.0%		
11/1	Ahead	3.0	26.1	46.4%		
11/2	Right	3.4	37.2	45.4%		
C1 Stream: 1 PRC for Signalled Lanes (%):		21.7	Total Delay for Signalled Lanes (pcuHr):	9.67	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		-3.7	Total Delay for Signalled Lanes (pcuHr):	21.45	Cycle Time (s):	60
PRC Over All Lanes (%):		-13.8	Total Delay Over All Lanes(pcuHr):	57.97		

Basic Results Summary

Scenario 4: '28RC 15:00-16:00' (FG4: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																		
Network	-	-	-	81.9%																		
A12 / Foxhall Road / Newbourne Road	-	-	-	81.9%																		
1/1	A12 (North) Left Ahead	7.8	7.5	63.0%																		
1/2	A12 (North) Ahead	8.7	7.5	64.5%																		
1/3	A12 (North) Ahead	0.0	3.6	0.1%																		
2/1	Newbourne Road Left	0.8	7.9	28.2%																		
2/2	Newbourne Road Ahead	1.6	10.2	43.5%																		
3/1	A12 (South) Left	1.7	6.1	20.2%																		
3/2	A12 (South) Ahead	11.8	12.4	73.6%																		
3/3	A12 (South) Ahead	10.6	12.4	72.4%																		
4/1	Foxhall Road Left	3.6	18.1	59.7%																		
4/2	Foxhall Road Left Ahead	3.6	18.1	59.7%																		
9/1	Ahead Right	2.2	34.4	48.2%																		
9/2	Right	2.5	32.2	53.0%																		
11/1	Ahead	7.1	43.2	81.9%																		
11/2	Right	1.6	23.5	27.5%																		
<table style="width:100%; border:none;"> <tr> <td style="width:15%;">C1</td> <td style="width:25%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width:15%;">39.6</td> <td style="width:20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width:10%;">6.08</td> <td style="width:25%;">Cycle Time (s): 60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>9.9</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>11.03</td> <td>Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>9.9</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>20.43</td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	39.6	Total Delay for Signalled Lanes (pcuHr):	6.08	Cycle Time (s): 60	C1	Stream: 2 PRC for Signalled Lanes (%):	9.9	Total Delay for Signalled Lanes (pcuHr):	11.03	Cycle Time (s): 60		PRC Over All Lanes (%):	9.9	Total Delay Over All Lanes(pcuHr):	20.43	
C1	Stream: 1 PRC for Signalled Lanes (%):	39.6	Total Delay for Signalled Lanes (pcuHr):	6.08	Cycle Time (s): 60																	
C1	Stream: 2 PRC for Signalled Lanes (%):	9.9	Total Delay for Signalled Lanes (pcuHr):	11.03	Cycle Time (s): 60																	
	PRC Over All Lanes (%):	9.9	Total Delay Over All Lanes(pcuHr):	20.43																		

Basic Results Summary

Scenario 5: '28RC 17:00-18:00' (FG5: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	82.6%	
A12 / Foxhall Road / Newbourne Road	-	-	-	82.6%	
1/1	A12 (North) Left Ahead	8.4	8.0	65.8%	
1/2	A12 (North) Ahead	9.4	8.0	67.2%	
1/3	A12 (North) Ahead	0.0	3.6	0.1%	
2/1	Newbourne Road Left	0.7	8.0	23.7%	
2/2	Newbourne Road Ahead	1.8	11.4	45.2%	
3/1	A12 (South) Left	3.0	7.3	31.4%	
3/2	A12 (South) Ahead	13.5	14.7	78.6%	
3/3	A12 (South) Ahead	12.4	14.7	77.4%	
4/1	Foxhall Road Left	2.8	16.6	49.7%	
4/2	Foxhall Road Left Ahead	2.8	16.6	49.7%	
9/1	Ahead Right	1.9	31.8	42.7%	
9/2	Right	2.1	30.2	47.6%	
11/1	Ahead	7.5	41.6	82.6%	
11/2	Right	0.8	20.6	15.8%	
C1 Stream: 1 PRC for Signalled Lanes (%):		33.9	Total Delay for Signalled Lanes (pcuHr):	6.08	Cycle Time (s): 60
C1 Stream: 2 PRC for Signalled Lanes (%):		9.0	Total Delay for Signalled Lanes (pcuHr):	12.69	Cycle Time (s): 60
PRC Over All Lanes (%):		9.0	Total Delay Over All Lanes(pcuHr):	21.50	

Basic Results Summary

Scenario 6: '28PC 06:00-07:00' (FG6: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																		
Network	-	-	-	35.9%																		
A12 / Foxhall Road / Newbourne Road	-	-	-	35.9%																		
1/1	A12 (North) Left Ahead	2.7	4.8	32.4%																		
1/2	A12 (North) Ahead	3.2	4.8	34.4%																		
1/3	A12 (North) Ahead	0.0	0.0	0.0%																		
2/1	Newbourne Road Left	0.1	2.9	7.3%																		
2/2	Newbourne Road Ahead	0.1	2.9	6.1%																		
3/1	A12 (South) Left	0.2	3.7	3.0%																		
3/2	A12 (South) Ahead	3.3	4.9	35.9%																		
3/3	A12 (South) Ahead	2.9	4.9	33.6%																		
4/1	Foxhall Road Left	0.3	3.4	18.9%																		
4/2	Foxhall Road Left Ahead	0.3	3.4	18.9%																		
9/1	Ahead Right	1.2	32.8	28.5%																		
9/2	Right	1.5	33.9	32.9%																		
11/1	Ahead	1.1	32.6	27.6%																		
11/2	Right	0.3	31.2	6.8%																		
<table border="0" style="width: 100%;"> <tr> <td style="width: 15%;">C1</td> <td style="width: 35%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 15%;">161.4</td> <td style="width: 15%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 10%;">2.66</td> <td style="width: 10%;">Cycle Time (s): 60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>150.9</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>2.07</td> <td>Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>150.9</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>5.05</td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	161.4	Total Delay for Signalled Lanes (pcuHr):	2.66	Cycle Time (s): 60	C1	Stream: 2 PRC for Signalled Lanes (%):	150.9	Total Delay for Signalled Lanes (pcuHr):	2.07	Cycle Time (s): 60		PRC Over All Lanes (%):	150.9	Total Delay Over All Lanes(pcuHr):	5.05	
C1	Stream: 1 PRC for Signalled Lanes (%):	161.4	Total Delay for Signalled Lanes (pcuHr):	2.66	Cycle Time (s): 60																	
C1	Stream: 2 PRC for Signalled Lanes (%):	150.9	Total Delay for Signalled Lanes (pcuHr):	2.07	Cycle Time (s): 60																	
	PRC Over All Lanes (%):	150.9	Total Delay Over All Lanes(pcuHr):	5.05																		

Basic Results Summary

Scenario 7: '28PC 07:00-08:00' (FG7: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	74.1%		
A12 / Foxhall Road / Newbourne Road	-	-	-	74.1%		
1/1	A12 (North) Left Ahead	7.7	7.9	62.3%		
1/2	A12 (North) Ahead	8.7	7.9	63.8%		
1/3	A12 (North) Ahead	0.0	0.0	0.0%		
2/1	Newbourne Road Left	0.5	7.1	19.7%		
2/2	Newbourne Road Ahead	1.3	9.6	39.2%		
3/1	A12 (South) Left	0.6	4.4	7.8%		
3/2	A12 (South) Ahead	11.2	10.2	72.5%		
3/3	A12 (South) Ahead	10.1	10.2	71.1%		
4/1	Foxhall Road Left	5.2	27.1	74.1%		
4/2	Foxhall Road Left Ahead	5.2	27.1	74.1%		
9/1	Ahead Right	2.7	34.3	52.1%		
9/2	Right	3.0	29.2	56.7%		
11/1	Ahead	4.1	38.2	68.0%		
11/2	Right	2.1	30.9	43.2%		
C1 Stream: 1 PRC for Signalled Lanes (%):		41.0	Total Delay for Signalled Lanes (pcuHr):	6.49	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		24.2	Total Delay for Signalled Lanes (pcuHr):	8.74	Cycle Time (s):	60
PRC Over All Lanes (%):		21.4	Total Delay Over All Lanes(pcuHr):	20.07		

Basic Results Summary

Scenario 9: '28PC 15:00-16:00' (FG9: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																					
Network	-	-	-	83.5%																					
A12 / Foxhall Road / Newbourne Road	-	-	-	83.5%																					
1/1	A12 (North) Left Ahead	8.4	7.9	65.7%																					
1/2	A12 (North) Ahead	9.4	7.9	67.0%																					
1/3	A12 (North) Ahead	0.0	3.6	0.1%																					
2/1	Newbourne Road Left	0.7	8.4	26.8%																					
2/2	Newbourne Road Ahead	2.0	12.3	48.9%																					
3/1	A12 (South) Left	1.7	6.1	20.2%																					
3/2	A12 (South) Ahead	12.6	13.1	76.1%																					
3/3	A12 (South) Ahead	11.4	13.1	74.9%																					
4/1	Foxhall Road Left	3.7	19.5	60.2%																					
4/2	Foxhall Road Left Ahead	3.7	19.5	60.2%																					
9/1	Ahead Right	2.2	34.2	48.2%																					
9/2	Right	2.5	31.5	53.0%																					
11/1	Ahead	7.4	45.0	83.5%																					
11/2	Right	1.4	23.1	27.7%																					
<table border="0" style="width: 100%;"> <tr> <td style="width: 10%;">C1</td> <td style="width: 30%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 10%;">34.3</td> <td style="width: 20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 10%;">6.41</td> <td style="width: 10%;">Cycle Time (s):</td> <td style="width: 10%;">60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>7.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>11.86</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>7.8</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>21.85</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	34.3	Total Delay for Signalled Lanes (pcuHr):	6.41	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%):	7.8	Total Delay for Signalled Lanes (pcuHr):	11.86	Cycle Time (s):	60		PRC Over All Lanes (%):	7.8	Total Delay Over All Lanes(pcuHr):	21.85		
C1	Stream: 1 PRC for Signalled Lanes (%):	34.3	Total Delay for Signalled Lanes (pcuHr):	6.41	Cycle Time (s):	60																			
C1	Stream: 2 PRC for Signalled Lanes (%):	7.8	Total Delay for Signalled Lanes (pcuHr):	11.86	Cycle Time (s):	60																			
	PRC Over All Lanes (%):	7.8	Total Delay Over All Lanes(pcuHr):	21.85																					

Basic Results Summary

Scenario 10: '28PC 17:00-18:00' (FG10: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																		
Network	-	-	-	81.9%																		
A12 / Foxhall Road / Newbourne Road	-	-	-	81.9%																		
1/1	A12 (North) Left Ahead	8.9	8.2	66.9%																		
1/2	A12 (North) Ahead	9.6	8.1	68.1%																		
1/3	A12 (North) Ahead	0.0	3.6	0.1%																		
2/1	Newbourne Road Left	0.6	8.2	23.1%																		
2/2	Newbourne Road Ahead	1.9	12.1	47.0%																		
3/1	A12 (South) Left	3.0	7.3	31.4%																		
3/2	A12 (South) Ahead	14.0	15.1	79.6%																		
3/3	A12 (South) Ahead	12.6	15.1	78.4%																		
4/1	Foxhall Road Left	2.1	14.4	39.4%																		
4/2	Foxhall Road Left Ahead	2.5	15.9	45.6%																		
9/1	Ahead Right	1.8	31.7	42.7%																		
9/2	Right	2.1	30.4	47.6%																		
11/1	Ahead	7.4	40.6	81.9%																		
11/2	Right	0.8	20.3	15.8%																		
<table border="0" style="width: 100%;"> <tr> <td style="width: 10%;">C1</td> <td style="width: 30%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 10%;">32.1</td> <td style="width: 20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 10%;">6.24</td> <td style="width: 20%;">Cycle Time (s): 60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>9.9</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>12.87</td> <td>Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>9.9</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>21.45</td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	32.1	Total Delay for Signalled Lanes (pcuHr):	6.24	Cycle Time (s): 60	C1	Stream: 2 PRC for Signalled Lanes (%):	9.9	Total Delay for Signalled Lanes (pcuHr):	12.87	Cycle Time (s): 60		PRC Over All Lanes (%):	9.9	Total Delay Over All Lanes(pcuHr):	21.45	
C1	Stream: 1 PRC for Signalled Lanes (%):	32.1	Total Delay for Signalled Lanes (pcuHr):	6.24	Cycle Time (s): 60																	
C1	Stream: 2 PRC for Signalled Lanes (%):	9.9	Total Delay for Signalled Lanes (pcuHr):	12.87	Cycle Time (s): 60																	
	PRC Over All Lanes (%):	9.9	Total Delay Over All Lanes(pcuHr):	21.45																		

Basic Results Summary

Scenario 11: '34RC 06:00-07:00' (FG11: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																					
Network	-	-	-	35.7%																					
A12 / Foxhall Road / Newbourne Road	-	-	-	35.7%																					
1/1	A12 (North) Left Ahead	2.9	4.8	33.6%																					
1/2	A12 (North) Ahead	3.3	4.8	35.7%																					
1/3	A12 (North) Ahead	0.0	0.0	0.0%																					
2/1	Newbourne Road Left	0.1	3.0	7.7%																					
2/2	Newbourne Road Ahead	0.1	3.0	6.4%																					
3/1	A12 (South) Left	0.2	3.7	3.1%																					
3/2	A12 (South) Ahead	2.7	4.6	31.5%																					
3/3	A12 (South) Ahead	2.4	4.6	28.9%																					
4/1	Foxhall Road Left	0.2	3.1	18.5%																					
4/2	Foxhall Road Left Ahead	0.2	3.1	18.5%																					
9/1	Ahead Right	1.3	33.2	30.2%																					
9/2	Right	1.6	34.3	34.8%																					
11/1	Ahead	1.1	32.6	28.5%																					
11/2	Right	0.2	31.2	6.4%																					
<table> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%):</td> <td>151.8</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>2.83</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>185.9</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>1.85</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>151.8</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>4.99</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	151.8	Total Delay for Signalled Lanes (pcuHr):	2.83	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%):	185.9	Total Delay for Signalled Lanes (pcuHr):	1.85	Cycle Time (s):	60		PRC Over All Lanes (%):	151.8	Total Delay Over All Lanes(pcuHr):	4.99		
C1	Stream: 1 PRC for Signalled Lanes (%):	151.8	Total Delay for Signalled Lanes (pcuHr):	2.83	Cycle Time (s):	60																			
C1	Stream: 2 PRC for Signalled Lanes (%):	185.9	Total Delay for Signalled Lanes (pcuHr):	1.85	Cycle Time (s):	60																			
	PRC Over All Lanes (%):	151.8	Total Delay Over All Lanes(pcuHr):	4.99																					

Basic Results Summary

Scenario 12: '34RC 07:00-08:00' (FG12: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	75.5%	
A12 / Foxhall Road / Newbourne Road	-	-	-	75.5%	
1/1	A12 (North) Left Ahead	8.4	8.4	65.0%	
1/2	A12 (North) Ahead	9.3	8.4	66.4%	
1/3	A12 (North) Ahead	0.0	0.0	0.0%	
2/1	Newbourne Road Left	0.6	7.9	21.9%	
2/2	Newbourne Road Ahead	1.5	10.8	42.1%	
3/1	A12 (South) Left	0.6	4.8	8.1%	
3/2	A12 (South) Ahead	10.6	10.3	70.2%	
3/3	A12 (South) Ahead	9.4	10.3	68.8%	
4/1	Foxhall Road Left	5.6	26.0	75.5%	
4/2	Foxhall Road Left Ahead	5.6	26.0	75.5%	
9/1	Ahead Right	2.8	35.5	55.1%	
9/2	Right	3.1	31.1	59.1%	
11/1	Ahead	4.9	38.6	72.7%	
11/2	Right	1.9	28.1	39.3%	
C1 Stream: 1 PRC for Signalled Lanes (%):		35.6	Total Delay for Signalled Lanes (pcuHr):	7.13	Cycle Time (s): 60
C1 Stream: 2 PRC for Signalled Lanes (%):		23.9	Total Delay for Signalled Lanes (pcuHr):	8.77	Cycle Time (s): 60
PRC Over All Lanes (%):		19.2	Total Delay Over All Lanes(pcuHr):	21.08	

Basic Results Summary

Scenario 13: '34RC 08:00-09:00' (FG13: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	109.9%	
A12 / Foxhall Road / Newbourne Road	-	-	-	109.9%	
1/1	A12 (North) Left Ahead	13.3	12.0	79.2%	
1/2	A12 (North) Ahead	14.3	11.9	80.1%	
1/3	A12 (North) Ahead	0.0	0.0	0.0%	
2/1	Newbourne Road Left	2.5	20.5	52.7%	
2/2	Newbourne Road Ahead	4.8	33.7	75.4%	
3/1	A12 (South) Left	1.3	6.3	15.8%	
3/2	A12 (South) Ahead	23.8	29.7	93.7%	
3/3	A12 (South) Ahead	21.9	29.9	93.3%	
4/1	Foxhall Road Left	31.2	233.1	109.9%	
4/2	Foxhall Road Left Ahead	31.2	233.1	109.9%	
9/1	Ahead Right	4.9	52.0	77.4%	
9/2	Right	3.8	26.3	66.0%	
11/1	Ahead	3.7	28.7	55.4%	
11/2	Right	3.6	33.0	46.6%	
C1 Stream: 1 PRC for Signalled Lanes (%):		12.4	Total Delay for Signalled Lanes (pcuHr):	11.68	Cycle Time (s): 60
C1 Stream: 2 PRC for Signalled Lanes (%):		-4.1	Total Delay for Signalled Lanes (pcuHr):	22.47	Cycle Time (s): 60
PRC Over All Lanes (%):		-22.1	Total Delay Over All Lanes(pcuHr):	80.68	

Basic Results Summary

Scenario 14: '34RC 15:00-16:00' (FG14: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																		
Network	-	-	-	84.1%																		
A12 / Foxhall Road / Newbourne Road	-	-	-	84.1%																		
1/1	A12 (North) Left Ahead	10.0	8.8	70.4%																		
1/2	A12 (North) Ahead	10.8	8.8	71.6%																		
1/3	A12 (North) Ahead	0.0	3.6	0.1%																		
2/1	Newbourne Road Left	1.4	11.8	38.8%																		
2/2	Newbourne Road Ahead	2.5	15.5	53.3%																		
3/1	A12 (South) Left	1.9	7.1	21.6%																		
3/2	A12 (South) Ahead	15.6	17.8	83.4%																		
3/3	A12 (South) Ahead	14.2	17.9	82.5%																		
4/1	Foxhall Road Left	5.5	29.4	74.7%																		
4/2	Foxhall Road Left Ahead	5.4	29.2	74.5%																		
9/1	Ahead Right	2.4	36.5	52.3%																		
9/2	Right	2.5	31.6	56.8%																		
11/1	Ahead	8.2	42.0	84.1%																		
11/2	Right	1.4	25.1	26.3%																		
<table border="0" style="width: 100%;"> <tr> <td style="width: 10%;">C1</td> <td style="width: 30%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 15%;">25.6</td> <td style="width: 20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 10%;">7.47</td> <td style="width: 25%;">Cycle Time (s): 60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>7.0</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>15.23</td> <td>Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>7.0</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>28.83</td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	25.6	Total Delay for Signalled Lanes (pcuHr):	7.47	Cycle Time (s): 60	C1	Stream: 2 PRC for Signalled Lanes (%):	7.0	Total Delay for Signalled Lanes (pcuHr):	15.23	Cycle Time (s): 60		PRC Over All Lanes (%):	7.0	Total Delay Over All Lanes(pcuHr):	28.83	
C1	Stream: 1 PRC for Signalled Lanes (%):	25.6	Total Delay for Signalled Lanes (pcuHr):	7.47	Cycle Time (s): 60																	
C1	Stream: 2 PRC for Signalled Lanes (%):	7.0	Total Delay for Signalled Lanes (pcuHr):	15.23	Cycle Time (s): 60																	
	PRC Over All Lanes (%):	7.0	Total Delay Over All Lanes(pcuHr):	28.83																		

Basic Results Summary

Scenario 15: '34RC 17:00-18:00' (FG15: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																					
Network	-	-	-	89.9%																					
A12 / Foxhall Road / Newbourne Road	-	-	-	89.9%																					
1/1	A12 (North) Left Ahead	10.2	9.1	71.7%																					
1/2	A12 (North) Ahead	11.3	9.1	72.9%																					
1/3	A12 (North) Ahead	0.0	3.6	0.1%																					
2/1	Newbourne Road Left	1.1	11.0	32.3%																					
2/2	Newbourne Road Ahead	2.7	16.5	54.1%																					
3/1	A12 (South) Left	3.0	7.3	31.9%																					
3/2	A12 (South) Ahead	16.5	18.2	85.1%																					
3/3	A12 (South) Ahead	15.3	18.2	84.2%																					
4/1	Foxhall Road Left	3.5	22.2	58.2%																					
4/2	Foxhall Road Left Ahead	3.5	22.2	58.2%																					
9/1	Ahead Right	3.7	45.5	70.4%																					
9/2	Right	2.3	31.2	53.7%																					
11/1	Ahead	9.7	55.8	89.9%																					
11/2	Right	0.8	24.1	16.5%																					
<table> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%):</td> <td>23.5</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>8.49</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>0.1</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>17.21</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>0.1</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>29.75</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	23.5	Total Delay for Signalled Lanes (pcuHr):	8.49	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%):	0.1	Total Delay for Signalled Lanes (pcuHr):	17.21	Cycle Time (s):	60		PRC Over All Lanes (%):	0.1	Total Delay Over All Lanes(pcuHr):	29.75		
C1	Stream: 1 PRC for Signalled Lanes (%):	23.5	Total Delay for Signalled Lanes (pcuHr):	8.49	Cycle Time (s):	60																			
C1	Stream: 2 PRC for Signalled Lanes (%):	0.1	Total Delay for Signalled Lanes (pcuHr):	17.21	Cycle Time (s):	60																			
	PRC Over All Lanes (%):	0.1	Total Delay Over All Lanes(pcuHr):	29.75																					

Basic Results Summary

Scenario 16: '34OP 06:00-07:00' (FG16: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																					
Network	-	-	-	35.8%																					
A12 / Foxhall Road / Newbourne Road	-	-	-	35.8%																					
1/1	A12 (North) Left Ahead	2.9	4.8	33.6%																					
1/2	A12 (North) Ahead	3.3	4.8	35.8%																					
1/3	A12 (North) Ahead	0.0	0.0	0.0%																					
2/1	Newbourne Road Left	0.1	3.0	7.7%																					
2/2	Newbourne Road Ahead	0.1	3.0	6.4%																					
3/1	A12 (South) Left	0.2	3.7	3.1%																					
3/2	A12 (South) Ahead	2.7	4.6	31.5%																					
3/3	A12 (South) Ahead	2.4	4.6	29.0%																					
4/1	Foxhall Road Left	0.2	3.1	18.5%																					
4/2	Foxhall Road Left Ahead	0.2	3.1	18.5%																					
9/1	Ahead Right	1.3	33.2	30.2%																					
9/2	Right	1.6	34.3	34.8%																					
11/1	Ahead	1.1	32.6	28.5%																					
11/2	Right	0.2	31.2	6.4%																					
<table> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%):</td> <td>151.3</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>2.83</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>185.9</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>1.86</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>151.3</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>5.00</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	151.3	Total Delay for Signalled Lanes (pcuHr):	2.83	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%):	185.9	Total Delay for Signalled Lanes (pcuHr):	1.86	Cycle Time (s):	60		PRC Over All Lanes (%):	151.3	Total Delay Over All Lanes(pcuHr):	5.00		
C1	Stream: 1 PRC for Signalled Lanes (%):	151.3	Total Delay for Signalled Lanes (pcuHr):	2.83	Cycle Time (s):	60																			
C1	Stream: 2 PRC for Signalled Lanes (%):	185.9	Total Delay for Signalled Lanes (pcuHr):	1.86	Cycle Time (s):	60																			
	PRC Over All Lanes (%):	151.3	Total Delay Over All Lanes(pcuHr):	5.00																					

Basic Results Summary

Scenario 17: '34OP 07:00-08:00' (FG17: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	74.5%		
A12 / Foxhall Road / Newbourne Road	-	-	-	74.5%		
1/1	A12 (North) Left Ahead	8.3	8.3	64.8%		
1/2	A12 (North) Ahead	9.3	8.3	66.2%		
1/3	A12 (North) Ahead	0.0	0.0	0.0%		
2/1	Newbourne Road Left	0.6	7.8	21.8%		
2/2	Newbourne Road Ahead	1.5	10.8	42.0%		
3/1	A12 (South) Left	0.6	4.8	8.1%		
3/2	A12 (South) Ahead	10.6	10.3	70.4%		
3/3	A12 (South) Ahead	9.5	10.3	69.0%		
4/1	Foxhall Road Left	5.4	25.4	74.5%		
4/2	Foxhall Road Left Ahead	5.4	25.2	74.3%		
9/1	Ahead Right	2.9	35.6	54.7%		
9/2	Right	3.2	30.9	59.5%		
11/1	Ahead	4.8	37.6	71.1%		
11/2	Right	1.9	28.3	39.3%		
C1 Stream: 1 PRC for Signalled Lanes (%):		36.0	Total Delay for Signalled Lanes (pcuHr):	7.10	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		26.5	Total Delay for Signalled Lanes (pcuHr):	8.70	Cycle Time (s):	60
PRC Over All Lanes (%):		20.7	Total Delay Over All Lanes(pcuHr):	20.77		

Basic Results Summary

Scenario 18: '34OP 08:00-09:00' (FG18: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	109.5%		
A12 / Foxhall Road / Newbourne Road	-	-	-	109.5%		
1/1	A12 (North) Left Ahead	13.5	12.3	80.0%		
1/2	A12 (North) Ahead	14.8	12.3	80.9%		
1/3	A12 (North) Ahead	0.0	0.0	0.0%		
2/1	Newbourne Road Left	2.5	20.8	52.1%		
2/2	Newbourne Road Ahead	5.3	38.2	78.8%		
3/1	A12 (South) Left	1.3	6.3	15.8%		
3/2	A12 (South) Ahead	24.0	30.1	93.9%		
3/3	A12 (South) Ahead	22.1	30.3	93.5%		
4/1	Foxhall Road Left	30.7	228.7	109.5%		
4/2	Foxhall Road Left Ahead	30.3	224.6	109.2%		
9/1	Ahead Right	4.9	52.1	77.6%		
9/2	Right	4.0	26.9	66.4%		
11/1	Ahead	3.7	29.1	54.7%		
11/2	Right	3.6	31.2	46.6%		
C1 Stream: 1 PRC for Signalled Lanes (%):		11.3	Total Delay for Signalled Lanes (pcuHr):	12.01	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		-4.3	Total Delay for Signalled Lanes (pcuHr):	22.67	Cycle Time (s):	60
PRC Over All Lanes (%):		-21.7	Total Delay Over All Lanes(pcuHr):	80.05		

Basic Results Summary

Scenario 19: '34OP 15:00-16:00' (FG19: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																					
Network	-	-	-	83.7%																					
A12 / Foxhall Road / Newbourne Road	-	-	-	83.7%																					
1/1	A12 (North) Left Ahead	9.7	8.8	70.1%																					
1/2	A12 (North) Ahead	10.7	8.8	71.4%																					
1/3	A12 (North) Ahead	0.0	3.6	0.1%																					
2/1	Newbourne Road Left	1.3	11.3	36.7%																					
2/2	Newbourne Road Ahead	2.6	15.9	54.9%																					
3/1	A12 (South) Left	1.9	7.1	21.6%																					
3/2	A12 (South) Ahead	15.6	17.9	83.5%																					
3/3	A12 (South) Ahead	14.2	17.9	82.6%																					
4/1	Foxhall Road Left	5.3	28.9	74.1%																					
4/2	Foxhall Road Left Ahead	5.3	28.7	73.8%																					
9/1	Ahead Right	2.4	36.4	52.3%																					
9/2	Right	2.5	31.5	56.8%																					
11/1	Ahead	8.1	41.6	83.7%																					
11/2	Right	1.4	25.4	26.3%																					
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%):</td> <td>26.1</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>7.41</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>7.6</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>15.21</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>7.6</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>28.64</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	26.1	Total Delay for Signalled Lanes (pcuHr):	7.41	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%):	7.6	Total Delay for Signalled Lanes (pcuHr):	15.21	Cycle Time (s):	60		PRC Over All Lanes (%):	7.6	Total Delay Over All Lanes(pcuHr):	28.64		
C1	Stream: 1 PRC for Signalled Lanes (%):	26.1	Total Delay for Signalled Lanes (pcuHr):	7.41	Cycle Time (s):	60																			
C1	Stream: 2 PRC for Signalled Lanes (%):	7.6	Total Delay for Signalled Lanes (pcuHr):	15.21	Cycle Time (s):	60																			
	PRC Over All Lanes (%):	7.6	Total Delay Over All Lanes(pcuHr):	28.64																					

Basic Results Summary

Scenario 20: '34OP 17:00-18:00' (FG20: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																		
Network	-	-	-	89.4%																		
A12 / Foxhall Road / Newbourne Road	-	-	-	89.4%																		
1/1	A12 (North) Left Ahead	10.3	9.2	71.8%																		
1/2	A12 (North) Ahead	11.3	9.2	73.0%																		
1/3	A12 (North) Ahead	0.0	3.6	0.1%																		
2/1	Newbourne Road Left	0.8	10.3	27.1%																		
2/2	Newbourne Road Ahead	3.2	18.8	59.5%																		
3/1	A12 (South) Left	3.0	7.3	31.9%																		
3/2	A12 (South) Ahead	16.4	18.0	84.8%																		
3/3	A12 (South) Ahead	14.9	18.0	83.9%																		
4/1	Foxhall Road Left	3.5	22.2	58.5%																		
4/2	Foxhall Road Left Ahead	3.5	22.2	58.5%																		
9/1	Ahead Right	3.8	45.8	70.8%																		
9/2	Right	2.3	31.3	53.7%																		
11/1	Ahead	9.4	55.5	89.4%																		
11/2	Right	0.8	25.7	16.5%																		
<table border="0" style="width: 100%;"> <tr> <td style="width: 10%;">C1</td> <td style="width: 30%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 10%;">23.3</td> <td style="width: 20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 10%;">8.55</td> <td style="width: 20%;">Cycle Time (s): 60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>0.7</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>17.01</td> <td>Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>0.7</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>29.76</td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	23.3	Total Delay for Signalled Lanes (pcuHr):	8.55	Cycle Time (s): 60	C1	Stream: 2 PRC for Signalled Lanes (%):	0.7	Total Delay for Signalled Lanes (pcuHr):	17.01	Cycle Time (s): 60		PRC Over All Lanes (%):	0.7	Total Delay Over All Lanes(pcuHr):	29.76	
C1	Stream: 1 PRC for Signalled Lanes (%):	23.3	Total Delay for Signalled Lanes (pcuHr):	8.55	Cycle Time (s): 60																	
C1	Stream: 2 PRC for Signalled Lanes (%):	0.7	Total Delay for Signalled Lanes (pcuHr):	17.01	Cycle Time (s): 60																	
	PRC Over All Lanes (%):	0.7	Total Delay Over All Lanes(pcuHr):	29.76																		

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	2019.10.23 J22_Model_v12 fixed.lsg3x
Author:	
Company:	
Address:	

Basic Results Summary

Scenario 2: '28RC 07:00-08:00' (FG2: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	65.2%		
A12 / Foxhall Road / Newbourne Road	-	-	-	65.2%		
1/1	A12 (North) Left Ahead	7.5	7.7	60.6%		
1/2	A12 (North) Ahead	8.1	7.7	62.1%		
1/3	A12 (North) Ahead	0.0	0.0	0.0%		
2/1	Newbourne Road Left	0.4	6.6	18.5%		
2/2	Newbourne Road Ahead	1.2	8.8	37.1%		
3/1	A12 (South) Left	0.5	4.0	7.6%		
3/2	A12 (South) Ahead	8.6	7.9	63.6%		
3/3	A12 (South) Ahead	7.6	7.9	62.0%		
4/1	Foxhall Road Left	4.1	16.8	65.2%		
4/2	Foxhall Road Left Ahead	4.1	16.7	65.0%		
9/1	Ahead Right	2.6	33.6	51.7%		
9/2	Right	3.0	33.0	55.7%		
11/1	Ahead	3.6	39.2	65.0%		
11/2	Right	2.3	33.8	46.5%		
C1 Stream: 1 PRC for Signalled Lanes (%):		45.0	Total Delay for Signalled Lanes (pcuHr):	6.38	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		38.5	Total Delay for Signalled Lanes (pcuHr):	6.90	Cycle Time (s):	60
PRC Over All Lanes (%):		37.9	Total Delay Over All Lanes(pcuHr):	16.42		

Basic Results Summary

Scenario 3: '28RC 08:00-09:00' (FG3: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	96.0%		
A12 / Foxhall Road / Newbourne Road	-	-	-	96.0%		
1/1	A12 (North) Left Ahead	10.8	10.6	73.0%		
1/2	A12 (North) Ahead	11.9	10.6	74.0%		
1/3	A12 (North) Ahead	0.0	0.0	0.0%		
2/1	Newbourne Road Left	1.2	11.6	33.8%		
2/2	Newbourne Road Ahead	3.8	21.9	66.3%		
3/1	A12 (South) Left	1.3	5.9	15.4%		
3/2	A12 (South) Ahead	20.9	23.2	90.8%		
3/3	A12 (South) Ahead	19.1	23.2	90.1%		
4/1	Foxhall Road Left	10.6	91.4	96.0%		
4/2	Foxhall Road Left Ahead	10.5	89.4	95.7%		
9/1	Ahead Right	3.7	39.6	64.3%		
9/2	Right	3.7	23.2	64.3%		
11/1	Ahead	3.3	29.7	52.1%		
11/2	Right	3.5	39.1	48.4%		
C1	Stream: 1 PRC for Signalled Lanes (%)	21.6	Total Delay for Signalled Lanes (pcuHr):	9.26	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-0.8	Total Delay for Signalled Lanes (pcuHr):	18.28	Cycle Time (s):	60
	PRC Over All Lanes (%)	-6.7	Total Delay Over All Lanes(pcuHr):	44.04		

Basic Results Summary

Scenario 4: '28RC 15:00-16:00' (FG4: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	78.0%	
A12 / Foxhall Road / Newbourne Road	-	-	-	78.0%	
1/1	A12 (North) Left Ahead	7.3	7.2	61.1%	
1/2	A12 (North) Ahead	8.1	7.2	62.5%	
1/3	A12 (North) Ahead	0.0	3.6	0.1%	
2/1	Newbourne Road Left	0.7	7.2	25.8%	
2/2	Newbourne Road Ahead	2.0	10.8	49.7%	
3/1	A12 (South) Left	1.7	6.1	19.8%	
3/2	A12 (South) Ahead	11.3	12.1	72.5%	
3/3	A12 (South) Ahead	10.4	12.0	71.1%	
4/1	Foxhall Road Left	3.8	18.2	61.3%	
4/2	Foxhall Road Left Ahead	3.8	18.1	61.1%	
9/1	Ahead Right	2.4	36.1	51.9%	
9/2	Right	2.6	34.0	56.4%	
11/1	Ahead	6.3	39.2	78.0%	
11/2	Right	1.7	23.8	29.3%	
C1 Stream: 1 PRC for Signalled Lanes (%):		43.9	Total Delay for Signalled Lanes (pcuHr):	6.12	Cycle Time (s): 60
C1 Stream: 2 PRC for Signalled Lanes (%):		15.4	Total Delay for Signalled Lanes (pcuHr):	10.31	Cycle Time (s): 60
PRC Over All Lanes (%):		15.4	Total Delay Over All Lanes(pcuHr):	19.95	

Basic Results Summary

Scenario 5: '28RC 17:00-18:00' (FG5: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	83.6%	
A12 / Foxhall Road / Newbourne Road	-	-	-	83.6%	
1/1	A12 (North) Left Ahead	7.7	7.5	62.7%	
1/2	A12 (North) Ahead	8.6	7.5	64.2%	
1/3	A12 (North) Ahead	0.0	3.6	0.1%	
2/1	Newbourne Road Left	0.6	7.2	23.3%	
2/2	Newbourne Road Ahead	1.4	9.5	40.4%	
3/1	A12 (South) Left	2.9	7.3	31.1%	
3/2	A12 (South) Ahead	12.8	14.1	76.9%	
3/3	A12 (South) Ahead	11.8	14.1	75.8%	
4/1	Foxhall Road Left	2.7	15.4	48.1%	
4/2	Foxhall Road Left Ahead	2.7	15.4	48.1%	
9/1	Ahead Right	1.7	31.7	41.9%	
9/2	Right	1.9	30.8	46.0%	
11/1	Ahead	7.8	43.3	83.6%	
11/2	Right	0.9	21.1	15.5%	
C1 Stream: 1 PRC for Signalled Lanes (%):		40.2	Total Delay for Signalled Lanes (pcuHr):	5.61	Cycle Time (s): 60
C1 Stream: 2 PRC for Signalled Lanes (%):		7.7	Total Delay for Signalled Lanes (pcuHr):	12.40	Cycle Time (s): 60
PRC Over All Lanes (%):		7.7	Total Delay Over All Lanes(pcuHr):	20.47	

Basic Results Summary

Scenario 6: '28PC 06:00-07:00' (FG6: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																		
Network	-	-	-	35.4%																		
A12 / Foxhall Road / Newbourne Road	-	-	-	35.4%																		
1/1	A12 (North) Left Ahead	2.6	4.7	31.6%																		
1/2	A12 (North) Ahead	3.1	4.7	33.9%																		
1/3	A12 (North) Ahead	0.0	0.0	0.0%																		
2/1	Newbourne Road Left	0.1	2.9	6.9%																		
2/2	Newbourne Road Ahead	0.1	2.9	6.1%																		
3/1	A12 (South) Left	0.2	3.7	3.0%																		
3/2	A12 (South) Ahead	3.2	4.8	35.4%																		
3/3	A12 (South) Ahead	2.8	4.8	33.1%																		
4/1	Foxhall Road Left	0.3	3.3	18.4%																		
4/2	Foxhall Road Left Ahead	0.3	3.3	18.4%																		
9/1	Ahead Right	1.2	32.8	28.5%																		
9/2	Right	1.5	33.9	32.5%																		
11/1	Ahead	1.1	32.5	27.2%																		
11/2	Right	0.3	31.2	6.8%																		
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;"></td> <td style="width: 30%;">C1 Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 15%;">165.6</td> <td style="width: 20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 10%;">2.62</td> <td style="width: 15%;">Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>C1 Stream: 2 PRC for Signalled Lanes (%):</td> <td>153.9</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>2.04</td> <td>Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>153.9</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>4.96</td> <td></td> </tr> </table>						C1 Stream: 1 PRC for Signalled Lanes (%):	165.6	Total Delay for Signalled Lanes (pcuHr):	2.62	Cycle Time (s): 60		C1 Stream: 2 PRC for Signalled Lanes (%):	153.9	Total Delay for Signalled Lanes (pcuHr):	2.04	Cycle Time (s): 60		PRC Over All Lanes (%):	153.9	Total Delay Over All Lanes(pcuHr):	4.96	
	C1 Stream: 1 PRC for Signalled Lanes (%):	165.6	Total Delay for Signalled Lanes (pcuHr):	2.62	Cycle Time (s): 60																	
	C1 Stream: 2 PRC for Signalled Lanes (%):	153.9	Total Delay for Signalled Lanes (pcuHr):	2.04	Cycle Time (s): 60																	
	PRC Over All Lanes (%):	153.9	Total Delay Over All Lanes(pcuHr):	4.96																		

Basic Results Summary

Scenario 7: '28PC 07:00-08:00' (FG7: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	71.9%	
A12 / Foxhall Road / Newbourne Road	-	-	-	71.9%	
1/1	A12 (North) Left Ahead	7.5	7.7	60.5%	
1/2	A12 (North) Ahead	8.1	7.7	62.1%	
1/3	A12 (North) Ahead	0.0	0.0	0.0%	
2/1	Newbourne Road Left	0.4	6.6	18.4%	
2/2	Newbourne Road Ahead	1.3	8.8	37.6%	
3/1	A12 (South) Left	0.5	4.0	7.6%	
3/2	A12 (South) Ahead	10.1	9.0	69.6%	
3/3	A12 (South) Ahead	9.3	9.0	68.2%	
4/1	Foxhall Road Left	4.8	24.1	71.9%	
4/2	Foxhall Road Left Ahead	4.8	24.1	71.9%	
9/1	Ahead Right	2.6	33.8	51.4%	
9/2	Right	2.9	30.6	56.0%	
11/1	Ahead	3.8	40.8	67.6%	
11/2	Right	2.3	34.0	47.2%	
C1 Stream: 1 PRC for Signalled Lanes (%):		45.0	Total Delay for Signalled Lanes (pcuHr):	6.27	Cycle Time (s): 60
C1 Stream: 2 PRC for Signalled Lanes (%):		29.4	Total Delay for Signalled Lanes (pcuHr):	7.99	Cycle Time (s): 60
PRC Over All Lanes (%):		25.2	Total Delay Over All Lanes(pcuHr):	18.52	

Basic Results Summary

Scenario 8: '28PC 08:00-09:00' (FG8: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																					
Network	-	-	-	102.0%																					
A12 / Foxhall Road / Newbourne Road	-	-	-	102.0%																					
1/1	A12 (North) Left Ahead	10.2	9.5	71.0%																					
1/2	A12 (North) Ahead	11.2	9.5	72.2%																					
1/3	A12 (North) Ahead	0.0	0.0	0.0%																					
2/1	Newbourne Road Left	1.1	10.8	32.7%																					
2/2	Newbourne Road Ahead	4.0	22.0	67.7%																					
3/1	A12 (South) Left	1.3	5.9	15.4%																					
3/2	A12 (South) Ahead	25.3	31.2	94.6%																					
3/3	A12 (South) Ahead	23.5	31.2	94.2%																					
4/1	Foxhall Road Left	20.2	144.6	102.0%																					
4/2	Foxhall Road Left Ahead	19.8	141.0	101.7%																					
9/1	Ahead Right	3.9	44.6	69.2%																					
9/2	Right	3.9	28.0	69.6%																					
11/1	Ahead	3.6	30.5	54.2%																					
11/2	Right	3.4	38.7	48.7%																					
<table border="0"> <tr> <td>C1</td> <td>Stream: 1 PRC for Signalled Lanes (%):</td> <td>24.7</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>9.09</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>-5.1</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>24.19</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>-13.4</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>58.27</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	24.7	Total Delay for Signalled Lanes (pcuHr):	9.09	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%):	-5.1	Total Delay for Signalled Lanes (pcuHr):	24.19	Cycle Time (s):	60		PRC Over All Lanes (%):	-13.4	Total Delay Over All Lanes(pcuHr):	58.27		
C1	Stream: 1 PRC for Signalled Lanes (%):	24.7	Total Delay for Signalled Lanes (pcuHr):	9.09	Cycle Time (s):	60																			
C1	Stream: 2 PRC for Signalled Lanes (%):	-5.1	Total Delay for Signalled Lanes (pcuHr):	24.19	Cycle Time (s):	60																			
	PRC Over All Lanes (%):	-13.4	Total Delay Over All Lanes(pcuHr):	58.27																					

Basic Results Summary

Scenario 9: '28PC 15:00-16:00' (FG9: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																		
Network	-	-	-	78.0%																		
A12 / Foxhall Road / Newbourne Road	-	-	-	78.0%																		
1/1	A12 (North) Left Ahead	7.6	7.3	61.7%																		
1/2	A12 (North) Ahead	8.2	7.3	63.1%																		
1/3	A12 (North) Ahead	0.0	3.6	0.1%																		
2/1	Newbourne Road Left	0.7	7.3	26.0%																		
2/2	Newbourne Road Ahead	2.0	11.0	50.0%																		
3/1	A12 (South) Left	1.7	6.1	19.8%																		
3/2	A12 (South) Ahead	12.0	12.7	74.8%																		
3/3	A12 (South) Ahead	11.1	12.7	73.6%																		
4/1	Foxhall Road Left	3.8	19.2	61.0%																		
4/2	Foxhall Road Left Ahead	3.8	19.1	60.8%																		
9/1	Ahead Right	2.4	36.0	51.9%																		
9/2	Right	2.6	33.3	56.4%																		
11/1	Ahead	6.3	39.2	78.0%																		
11/2	Right	1.7	23.7	29.3%																		
<table border="0" style="width: 100%;"> <tr> <td style="width: 10%;">C1</td> <td style="width: 30%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 10%;">42.7</td> <td style="width: 20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 10%;">6.16</td> <td style="width: 20%;">Cycle Time (s): 60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>15.4</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>10.83</td> <td>Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>15.4</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>20.58</td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	42.7	Total Delay for Signalled Lanes (pcuHr):	6.16	Cycle Time (s): 60	C1	Stream: 2 PRC for Signalled Lanes (%):	15.4	Total Delay for Signalled Lanes (pcuHr):	10.83	Cycle Time (s): 60		PRC Over All Lanes (%):	15.4	Total Delay Over All Lanes(pcuHr):	20.58	
C1	Stream: 1 PRC for Signalled Lanes (%):	42.7	Total Delay for Signalled Lanes (pcuHr):	6.16	Cycle Time (s): 60																	
C1	Stream: 2 PRC for Signalled Lanes (%):	15.4	Total Delay for Signalled Lanes (pcuHr):	10.83	Cycle Time (s): 60																	
	PRC Over All Lanes (%):	15.4	Total Delay Over All Lanes(pcuHr):	20.58																		

Basic Results Summary

Scenario 10: '28PC 17:00-18:00' (FG10: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	82.6%		
A12 / Foxhall Road / Newbourne Road	-	-	-	82.6%		
1/1	A12 (North) Left Ahead	7.5	7.3	61.3%		
1/2	A12 (North) Ahead	8.2	7.3	62.7%		
1/3	A12 (North) Ahead	0.0	3.6	0.1%		
2/1	Newbourne Road Left	0.4	6.4	17.5%		
2/2	Newbourne Road Ahead	1.7	9.8	44.8%		
3/1	A12 (South) Left	2.9	7.3	31.1%		
3/2	A12 (South) Ahead	12.8	14.1	77.0%		
3/3	A12 (South) Ahead	11.8	14.1	75.8%		
4/1	Foxhall Road Left	2.7	15.5	48.2%		
4/2	Foxhall Road Left Ahead	2.7	15.5	48.2%		
9/1	Ahead Right	1.7	31.7	41.9%		
9/2	Right	1.9	30.8	46.0%		
11/1	Ahead	7.5	42.2	82.6%		
11/2	Right	0.9	21.1	15.8%		
C1 Stream: 1 PRC for Signalled Lanes (%):		43.6	Total Delay for Signalled Lanes (pcuHr):	5.42	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		9.0	Total Delay for Signalled Lanes (pcuHr):	12.27	Cycle Time (s):	60
PRC Over All Lanes (%):		9.0	Total Delay Over All Lanes(pcuHr):	20.16		

Basic Results Summary

Scenario 11: '34RC 06:00-07:00' (FG11: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	34.7%	
A12 / Foxhall Road / Newbourne Road	-	-	-	34.7%	
1/1	A12 (North) Left Ahead	2.8	4.8	32.7%	
1/2	A12 (North) Ahead	3.2	4.8	34.7%	
1/3	A12 (North) Ahead	0.0	0.0	0.0%	
2/1	Newbourne Road Left	0.1	3.0	7.3%	
2/2	Newbourne Road Ahead	0.1	2.9	6.1%	
3/1	A12 (South) Left	0.2	3.7	3.1%	
3/2	A12 (South) Ahead	2.7	4.6	30.5%	
3/3	A12 (South) Ahead	2.3	4.6	28.1%	
4/1	Foxhall Road Left	0.2	3.0	17.6%	
4/2	Foxhall Road Left Ahead	0.2	3.0	17.5%	
9/1	Ahead Right	1.3	33.1	29.7%	
9/2	Right	1.6	34.1	33.6%	
11/1	Ahead	1.1	32.6	28.1%	
11/2	Right	0.2	31.1	6.0%	
C1 Stream: 1 PRC for Signalled Lanes (%):		159.3	Total Delay for Signalled Lanes (pcuHr):	2.73	Cycle Time (s): 60
C1 Stream: 2 PRC for Signalled Lanes (%):		195.0	Total Delay for Signalled Lanes (pcuHr):	1.79	Cycle Time (s): 60
PRC Over All Lanes (%):		159.3	Total Delay Over All Lanes(pcuHr):	4.81	

Basic Results Summary

Scenario 12: '34RC 07:00-08:00' (FG12: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	72.1%		
A12 / Foxhall Road / Newbourne Road	-	-	-	72.1%		
1/1	A12 (North) Left Ahead	7.7	7.9	62.2%		
1/2	A12 (North) Ahead	8.6	7.9	63.7%		
1/3	A12 (North) Ahead	0.0	0.0	0.0%		
2/1	Newbourne Road Left	0.5	7.1	20.0%		
2/2	Newbourne Road Ahead	1.3	9.5	39.2%		
3/1	A12 (South) Left	0.6	4.8	8.1%		
3/2	A12 (South) Ahead	9.8	9.7	67.6%		
3/3	A12 (South) Ahead	8.8	9.7	66.2%		
4/1	Foxhall Road Left	5.1	22.1	72.1%		
4/2	Foxhall Road Left Ahead	5.1	22.1	72.1%		
9/1	Ahead Right	2.7	34.7	53.6%		
9/2	Right	3.1	32.0	58.1%		
11/1	Ahead	4.5	36.2	68.6%		
11/2	Right	2.1	28.1	38.3%		
C1 Stream: 1 PRC for Signalled Lanes (%):		41.3	Total Delay for Signalled Lanes (pcuHr):	6.70	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		31.1	Total Delay for Signalled Lanes (pcuHr):	8.02	Cycle Time (s):	60
PRC Over All Lanes (%):		24.8	Total Delay Over All Lanes(pcuHr):	19.11		

Basic Results Summary

Scenario 13: '34RC 08:00-09:00' (FG13: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	96.6%		
A12 / Foxhall Road / Newbourne Road	-	-	-	96.6%		
1/1	A12 (North) Left Ahead	11.3	10.9	73.9%		
1/2	A12 (North) Ahead	12.2	10.9	75.0%		
1/3	A12 (North) Ahead	0.0	0.0	0.0%		
2/1	Newbourne Road Left	1.7	13.5	41.2%		
2/2	Newbourne Road Ahead	3.9	23.2	67.5%		
3/1	A12 (South) Left	1.3	5.9	15.4%		
3/2	A12 (South) Ahead	20.0	21.9	89.8%		
3/3	A12 (South) Ahead	18.2	21.8	89.0%		
4/1	Foxhall Road Left	11.1	94.1	96.6%		
4/2	Foxhall Road Left Ahead	10.9	92.1	96.2%		
9/1	Ahead Right	4.1	40.7	67.0%		
9/2	Right	3.9	23.7	64.9%		
11/1	Ahead	3.2	29.3	51.0%		
11/2	Right	3.6	38.8	49.5%		
C1 Stream: 1 PRC for Signalled Lanes (%):		19.9	Total Delay for Signalled Lanes (pcuHr):	9.68	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		0.2	Total Delay for Signalled Lanes (pcuHr):	17.27	Cycle Time (s):	60
PRC Over All Lanes (%):		-7.3	Total Delay Over All Lanes(pcuHr):	44.39		

Basic Results Summary

Scenario 14: '34RC 15:00-16:00' (FG14: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	80.6%		
A12 / Foxhall Road / Newbourne Road	-	-	-	80.6%		
1/1	A12 (North) Left Ahead	7.7	7.4	62.3%		
1/2	A12 (North) Ahead	8.6	7.4	63.8%		
1/3	A12 (North) Ahead	0.0	3.6	0.1%		
2/1	Newbourne Road Left	1.1	8.5	34.7%		
2/2	Newbourne Road Ahead	1.9	11.0	49.0%		
3/1	A12 (South) Left	1.7	6.1	20.0%		
3/2	A12 (South) Ahead	12.7	13.2	76.3%		
3/3	A12 (South) Ahead	11.7	13.2	75.2%		
4/1	Foxhall Road Left	5.8	29.3	77.0%		
4/2	Foxhall Road Left Ahead	5.8	29.1	76.7%		
9/1	Ahead Right	2.5	38.4	54.0%		
9/2	Right	2.7	32.7	58.8%		
11/1	Ahead	6.7	41.8	80.6%		
11/2	Right	1.6	24.5	31.7%		
C1 Stream: 1 PRC for Signalled Lanes (%):		41.1	Total Delay for Signalled Lanes (pcuHr):	6.42	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		11.7	Total Delay for Signalled Lanes (pcuHr):	11.64	Cycle Time (s):	60
PRC Over All Lanes (%):		11.7	Total Delay Over All Lanes(pcuHr):	24.09		

Basic Results Summary

Scenario 15: '34RC 17:00-18:00' (FG15: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	85.8%		
A12 / Foxhall Road / Newbourne Road	-	-	-	85.8%		
1/1	A12 (North) Left Ahead	7.8	7.6	63.4%		
1/2	A12 (North) Ahead	8.7	7.6	64.7%		
1/3	A12 (North) Ahead	0.0	3.6	0.1%		
2/1	Newbourne Road Left	0.8	7.9	28.1%		
2/2	Newbourne Road Ahead	1.6	10.1	43.0%		
3/1	A12 (South) Left	3.0	7.3	31.4%		
3/2	A12 (South) Ahead	14.1	15.4	80.2%		
3/3	A12 (South) Ahead	13.0	15.4	79.0%		
4/1	Foxhall Road Left	3.7	20.1	58.7%		
4/2	Foxhall Road Left Ahead	3.7	20.0	58.5%		
9/1	Ahead Right	3.3	42.1	64.9%		
9/2	Right	2.5	30.6	53.4%		
11/1	Ahead	8.3	46.5	85.8%		
11/2	Right	0.8	21.2	16.3%		
C1 Stream: 1 PRC for Signalled Lanes (%):		38.7	Total Delay for Signalled Lanes (pcuHr):	6.78	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		4.9	Total Delay for Signalled Lanes (pcuHr):	13.86	Cycle Time (s):	60
PRC Over All Lanes (%):		4.9	Total Delay Over All Lanes(pcuHr):	24.13		

Basic Results Summary

Scenario 16: '34OP 06:00-07:00' (FG16: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																		
Network	-	-	-	34.8%																		
A12 / Foxhall Road / Newbourne Road	-	-	-	34.8%																		
1/1	A12 (North) Left Ahead	2.8	4.8	32.7%																		
1/2	A12 (North) Ahead	3.2	4.8	34.8%																		
1/3	A12 (North) Ahead	0.0	0.0	0.0%																		
2/1	Newbourne Road Left	0.1	3.0	7.3%																		
2/2	Newbourne Road Ahead	0.1	2.9	6.1%																		
3/1	A12 (South) Left	0.2	3.7	3.1%																		
3/2	A12 (South) Ahead	2.7	4.6	30.6%																		
3/3	A12 (South) Ahead	2.3	4.6	28.1%																		
4/1	Foxhall Road Left	0.2	3.0	17.6%																		
4/2	Foxhall Road Left Ahead	0.2	3.0	17.5%																		
9/1	Ahead Right	1.3	33.1	29.7%																		
9/2	Right	1.6	34.1	33.6%																		
11/1	Ahead	1.1	32.6	28.1%																		
11/2	Right	0.2	31.1	6.0%																		
<table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">C1</td> <td style="width: 35%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 15%;">158.8</td> <td style="width: 15%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 10%;">2.73</td> <td style="width: 10%;">Cycle Time (s): 60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>194.4</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>1.79</td> <td>Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>158.8</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>4.82</td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	158.8	Total Delay for Signalled Lanes (pcuHr):	2.73	Cycle Time (s): 60	C1	Stream: 2 PRC for Signalled Lanes (%):	194.4	Total Delay for Signalled Lanes (pcuHr):	1.79	Cycle Time (s): 60		PRC Over All Lanes (%):	158.8	Total Delay Over All Lanes(pcuHr):	4.82	
C1	Stream: 1 PRC for Signalled Lanes (%):	158.8	Total Delay for Signalled Lanes (pcuHr):	2.73	Cycle Time (s): 60																	
C1	Stream: 2 PRC for Signalled Lanes (%):	194.4	Total Delay for Signalled Lanes (pcuHr):	1.79	Cycle Time (s): 60																	
	PRC Over All Lanes (%):	158.8	Total Delay Over All Lanes(pcuHr):	4.82																		

Basic Results Summary

Scenario 17: '34OP 07:00-08:00' (FG17: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	71.1%		
A12 / Foxhall Road / Newbourne Road	-	-	-	71.1%		
1/1	A12 (North) Left Ahead	8.1	8.1	63.1%		
1/2	A12 (North) Ahead	8.8	8.0	64.5%		
1/3	A12 (North) Ahead	0.0	0.0	0.0%		
2/1	Newbourne Road Left	0.5	7.3	20.2%		
2/2	Newbourne Road Ahead	1.4	9.8	39.7%		
3/1	A12 (South) Left	0.6	4.8	8.1%		
3/2	A12 (South) Ahead	9.9	9.8	67.8%		
3/3	A12 (South) Ahead	8.8	9.8	66.4%		
4/1	Foxhall Road Left	4.9	21.4	70.9%		
4/2	Foxhall Road Left Ahead	4.9	21.3	70.7%		
9/1	Ahead Right	2.7	34.6	53.6%		
9/2	Right	3.1	31.9	57.7%		
11/1	Ahead	4.8	37.7	71.1%		
11/2	Right	2.1	27.9	38.3%		
C1 Stream: 1 PRC for Signalled Lanes (%):		39.6	Total Delay for Signalled Lanes (pcuHr):	6.79	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		26.5	Total Delay for Signalled Lanes (pcuHr):	8.21	Cycle Time (s):	60
PRC Over All Lanes (%):		26.5	Total Delay Over All Lanes(pcuHr):	19.20		

Basic Results Summary

Scenario 18: '34OP 08:00-09:00' (FG18: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	100.6%	
A12 / Foxhall Road / Newbourne Road	-	-	-	100.6%	
1/1	A12 (North) Left Ahead	11.5	11.1	74.7%	
1/2	A12 (North) Ahead	12.6	11.1	75.8%	
1/3	A12 (North) Ahead	0.0	0.0	0.0%	
2/1	Newbourne Road Left	2.0	15.2	46.4%	
2/2	Newbourne Road Ahead	3.6	21.9	64.0%	
3/1	A12 (South) Left	1.3	6.3	15.8%	
3/2	A12 (South) Ahead	23.8	29.7	93.7%	
3/3	A12 (South) Ahead	21.8	29.7	93.2%	
4/1	Foxhall Road Left	20.1	126.7	100.6%	
4/2	Foxhall Road Left Ahead	19.7	123.6	100.3%	
9/1	Ahead Right	4.1	40.4	67.3%	
9/2	Right	3.9	23.2	64.8%	
11/1	Ahead	2.7	26.1	44.7%	
11/2	Right	3.6	36.1	45.9%	
C1 Stream: 1 PRC for Signalled Lanes (%):		18.7	Total Delay for Signalled Lanes (pcuHr):	9.83	Cycle Time (s): 60
C1 Stream: 2 PRC for Signalled Lanes (%):		-4.1	Total Delay for Signalled Lanes (pcuHr):	22.05	Cycle Time (s): 60
PRC Over All Lanes (%):		-11.8	Total Delay Over All Lanes(pcuHr):	55.32	

Basic Results Summary

Scenario 19: '34OP 15:00-16:00' (FG19: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	80.6%		
A12 / Foxhall Road / Newbourne Road	-	-	-	80.6%		
1/1	A12 (North) Left Ahead	7.7	7.4	62.1%		
1/2	A12 (North) Ahead	8.3	7.4	63.6%		
1/3	A12 (North) Ahead	0.0	3.6	0.1%		
2/1	Newbourne Road Left	1.1	8.4	33.9%		
2/2	Newbourne Road Ahead	2.0	11.0	49.6%		
3/1	A12 (South) Left	1.7	6.1	20.0%		
3/2	A12 (South) Ahead	12.7	13.2	76.4%		
3/3	A12 (South) Ahead	11.7	13.2	75.2%		
4/1	Foxhall Road Left	5.9	29.4	77.0%		
4/2	Foxhall Road Left Ahead	5.8	29.2	76.8%		
9/1	Ahead Right	2.5	38.4	54.0%		
9/2	Right	2.7	32.7	58.8%		
11/1	Ahead	6.7	41.8	80.6%		
11/2	Right	1.6	24.5	31.7%		
C1 Stream: 1 PRC for Signalled Lanes (%):		41.6	Total Delay for Signalled Lanes (pcuHr):	6.40	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		11.7	Total Delay for Signalled Lanes (pcuHr):	11.65	Cycle Time (s):	60
PRC Over All Lanes (%):		11.7	Total Delay Over All Lanes(pcuHr):	24.09		

Basic Results Summary

Scenario 20: '34OP 17:00-18:00' (FG20: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																		
Network	-	-	-	85.5%																		
A12 / Foxhall Road / Newbourne Road	-	-	-	85.5%																		
1/1	A12 (North) Left Ahead	7.8	7.6	63.4%																		
1/2	A12 (North) Ahead	8.7	7.6	64.7%																		
1/3	A12 (North) Ahead	0.0	3.6	0.1%																		
2/1	Newbourne Road Left	0.8	7.8	26.9%																		
2/2	Newbourne Road Ahead	1.6	10.4	44.2%																		
3/1	A12 (South) Left	3.0	7.3	31.4%																		
3/2	A12 (South) Ahead	14.2	15.4	80.2%																		
3/3	A12 (South) Ahead	13.1	15.4	79.1%																		
4/1	Foxhall Road Left	3.2	18.6	54.2%																		
4/2	Foxhall Road Left Ahead	3.2	18.6	54.2%																		
9/1	Ahead Right	3.3	41.6	64.9%																		
9/2	Right	2.4	31.4	53.4%																		
11/1	Ahead	8.3	46.1	85.5%																		
11/2	Right	0.9	21.0	16.3%																		
<table border="0" style="width: 100%;"> <tr> <td style="width: 10%;">C1</td> <td style="width: 30%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 10%;">38.7</td> <td style="width: 20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 10%;">6.79</td> <td style="width: 20%;">Cycle Time (s): 60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>5.2</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>13.83</td> <td>Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>5.2</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>23.73</td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	38.7	Total Delay for Signalled Lanes (pcuHr):	6.79	Cycle Time (s): 60	C1	Stream: 2 PRC for Signalled Lanes (%):	5.2	Total Delay for Signalled Lanes (pcuHr):	13.83	Cycle Time (s): 60		PRC Over All Lanes (%):	5.2	Total Delay Over All Lanes(pcuHr):	23.73	
C1	Stream: 1 PRC for Signalled Lanes (%):	38.7	Total Delay for Signalled Lanes (pcuHr):	6.79	Cycle Time (s): 60																	
C1	Stream: 2 PRC for Signalled Lanes (%):	5.2	Total Delay for Signalled Lanes (pcuHr):	13.83	Cycle Time (s): 60																	
	PRC Over All Lanes (%):	5.2	Total Delay Over All Lanes(pcuHr):	23.73																		

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: 2019.10.18_J23_Model_CV_v11.j9
 Path: \\user01cam1uk.uk.wspgroup.com\projects\50400326 - Sizewell C transport planning\ID Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\For Issue\Scoped In\11\J23\Model
 Report generation date: 16/03/2020 13:55:44

- »Base Year, 6-7 AM
- »Base Year, 7-8 AM
- »Base Year, 8-9 AM
- »Base Year, 3-4 PM
- »Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
- »2023 Reference Case, 8-9 AM
- »2023 Reference Case, 3-4 PM
- »2023 Reference Case, 5-6 PM
- »2023 Early Years, 6-7 AM
- »2023 Early Years, 7-8 AM
- »2023 Early Years, 8-9 AM
- »2023 Early Years, 3-4 PM
- »2023 Early Years, 5-6 PM
- »2028 Reference Case, 6-7 AM
- »2028 Reference Case, 7-8 AM
- »2028 Reference Case, 8-9 AM
- »2028 Reference Case, 3-4 PM
- »2028 Reference Case, 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case, 6-7 AM
- »2034 Reference Case, 7-8 AM
- »2034 Reference Case, 8-9 AM
- »2034 Reference Case, 3-4 PM
- »2034 Reference Case, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
Base Year																									
A - A12 North	D1	0.9	3.96	0.48	A	D2	18.1	47.41	0.97	E	D3	75.7	167.68	1.10	F	D4	7.7	20.20	0.89	C	D5	7.1	17.51	0.89	C
B - Eagle Way West		0.1	4.22	0.08	A		1.1	21.03	0.53	C		40.8	655.46	1.69	F		1.1	22.33	0.53	C		0.6	14.04	0.37	B
C - A12 South		0.5	2.22	0.32	A		3.4	6.65	0.78	A		40.2	57.84	1.01	F		4.3	8.11	0.81	A		3.8	7.22	0.80	A
D - Barrack Square East		0.1	4.16	0.08	A		0.5	8.86	0.33	A		1.3	12.83	0.58	B		11.2	70.95	0.96	F		13.3	81.96	0.98	F
2023 Reference Case																									
A - A12 North	D6	1.1	4.26	0.52	A	D7	76.3	153.40	1.09	F	D8	162.3	427.70	1.21	F	D9	60.5	114.43	1.06	F	D10	50.5	93.46	1.04	F
B - Eagle Way West		0.1	4.45	0.09	A		2.6	46.48	0.74	E		80.4	1540.18	2.09	F		3.3	61.95	0.80	F		0.8	18.83	0.46	C
C - A12 South		0.5	2.29	0.35	A		5.0	9.15	0.84	A		125.0	149.60	1.09	F		7.9	13.99	0.89	B		5.3	9.51	0.84	A
D - Barrack Square East		0.1	4.36	0.08	A		0.5	9.60	0.35	A		1.5	13.81	0.60	B		37.8	221.70	1.12	F		47.1	262.28	1.17	F
2023 Early Years																									
A - A12 North	D11	1.1	4.33	0.53	A	D12	107.5	229.01	1.13	F	D13	152.9	395.23	1.20	F	D14	75.3	140.65	1.08	F	D15	80.7	142.02	1.08	F
B - Eagle Way West		0.1	4.75	0.10	A		24.1	360.86	1.29	F		88.2	2152.41	2.13	F		4.0	75.78	0.84	F		0.9	21.32	0.49	C
C - A12 South		0.6	2.49	0.39	A		12.7	22.03	0.94	C		165.7	221.39	1.13	F		8.8	15.66	0.91	C		6.0	10.77	0.86	B
D - Barrack Square East		0.1	4.39	0.08	A		0.5	9.56	0.35	A		1.5	14.18	0.60	B		39.0	247.08	1.13	F		50.4	339.40	1.18	F
2028 Reference Case																									
A - A12 North	D16	1.1	4.29	0.52	A	D17	38.1	86.38	1.03	F	D18	85.8	186.79	1.10	F	D19	8.4	21.84	0.90	C	D20	7.9	19.50	0.90	C
B - Eagle Way West		0.1	4.55	0.10	A		14.2	214.71	1.09	F		131.1	3871.46	3.08	F		11.3	180.96	1.05	F		1.9	41.02	0.67	E
C - A12 South		0.6	2.33	0.36	A		7.7	13.73	0.89	B		170.9	233.70	1.14	F		11.5	20.34	0.93	C		9.7	17.16	0.92	C
D - Barrack Square East		0.1	4.37	0.09	A		0.8	10.94	0.46	B		5.0	33.70	0.85	D		19.0	99.47	1.01	F		34.7	163.28	1.08	F
2028 Peak Construction																									
A - A12 North	D21	1.1	4.29	0.52	A	D22	31.0	72.74	1.01	F	D23	90.2	201.37	1.11	F	D24	12.4	31.81	0.94	D	D25	8.8	22.12	0.91	C
B - Eagle Way West		0.1	5.12	0.11	A		42.5	610.97	1.66	F		141.3	5021.87	3.11	F		14.8	228.45	1.11	F		1.4	31.37	0.60	D
C - A12 South		0.8	2.64	0.43	A		15.6	26.87	0.95	D		199.3	293.51	1.17	F		13.3	23.74	0.94	C		7.7	13.78	0.89	B
D - Barrack Square East		0.1	4.37	0.09	A		0.8	10.64	0.45	B		5.2	35.10	0.86	E		27.5	137.24	1.06	F		38.4	179.37	1.10	F
2034 Reference Case																									
A - A12 North	D26	1.2	4.48	0.54	A	D27	51.7	108.99	1.05	F	D28	144.9	349.64	1.18	F	D29	55.2	104.70	1.05	F	D30	39.8	76.91	1.02	F
B - Eagle Way West		0.1	4.72	0.10	A		51.7	723.86	1.87	F		177.1	7614.16	4.28	F		43.4	680.84	1.69	F		4.3	93.28	0.86	F
C - A12 South		0.6	2.40	0.38	A		15.1	25.91	0.95	D		216.6	332.10	1.18	F		39.3	58.42	1.01	F		17.2	29.03	0.96	D
D - Barrack Square East		0.1	4.49	0.09	A		1.3	13.35	0.56	B		26.8	134.35	1.04	F		53.5	287.24	1.15	F		79.2	388.06	1.25	F
2034 Operational Led																									

A - A12 North		1.2	4.49	0.54	A		51.8	109.19	1.05	F		159.2	392.01	1.20	F		49.3	95.24	1.04	F		41.1	78.90	1.02	F
B - Eagle Way West	D31	0.1	4.72	0.10	A	D32	51.4	719.16	1.86	F	D33	177.0	7609.21	4.28	F	D34	43.0	670.71	1.68	F	D35	4.1	89.07	0.85	F
C - A12 South		0.6	2.40	0.38	A		14.8	25.44	0.95	D		214.9	329.61	1.18	F		38.1	56.99	1.01	F		16.6	28.10	0.96	D
D - Barrack Square East		0.1	4.49	0.09	A		1.3	13.60	0.57	B		27.1	135.74	1.04	F		52.3	266.93	1.15	F		79.3	391.98	1.25	F

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / Eagle Way / Barrack Square
Location	52° 3'36.26"N, 1°16'35.87"E
Site number	23
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Eagle Way West	
C	A12 South	
D	Barrack Square East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.00	7.00	0.0	33.0	75.3	5.0	
B - Eagle Way West	3.50	7.50	12.7	29.9	75.3	26.0	
C - A12 South	7.60	7.60	0.0	27.3	75.3	6.5	
D - Barrack Square East	3.70	6.90	22.6	24.1	75.3	30.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-330
B - Eagle Way West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-350
C - A12 South	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	100
D - Barrack Square East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-350

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.607	2016
B - Eagle Way West	0.494	1364
C - A12 South	0.631	2621
D - Barrack Square East	0.503	1453

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	768	100.000
B - Eagle Way West		ONE HOUR	✓	66	100.000
C - A12 South		ONE HOUR	✓	695	100.000
D - Barrack Square East		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	727	39
	B - Eagle Way West	14	0	47	5
	C - A12 South	524	8	0	163
	D - Barrack Square East	0	6	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To

		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	7	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	12	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.48	3.96	0.9	A	705	1057
B - Eagle Way West	0.08	4.22	0.1	A	61	91
C - A12 South	0.32	2.22	0.5	A	638	957
D - Barrack Square East	0.08	4.16	0.1	A	62	94

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	578	145	161	1798	0.321	576	404	0.0	0.5	2.942	A
B - Eagle Way West	50	12	516	1053	0.047	49	12	0.0	0.0	3.588	A
C - A12 South	523	131	6	2386	0.219	522	627	0.0	0.3	1.930	A
D - Barrack Square East	51	13	582	1078	0.047	51	155	0.0	0.0	3.503	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	690	173	193	1780	0.388	690	483	0.5	0.6	3.300	A
B - Eagle Way West	59	15	617	999	0.059	59	14	0.0	0.1	3.828	A
C - A12 South	625	156	7	2385	0.262	624	751	0.3	0.4	2.044	A
D - Barrack Square East	61	15	697	1020	0.060	61	186	0.0	0.1	3.751	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	846	211	237	1755	0.482	844	592	0.6	0.9	3.950	A
B - Eagle Way West	73	18	756	927	0.078	73	18	0.1	0.1	4.215	A
C - A12 South	765	191	9	2384	0.321	765	919	0.4	0.5	2.223	A
D - Barrack Square East	75	19	853	942	0.080	75	228	0.1	0.1	4.153	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	846	211	237	1755	0.482	846	592	0.9	0.9	3.960	A
B - Eagle Way West	73	18	756	926	0.078	73	18	0.1	0.1	4.217	A
C - A12 South	765	191	9	2384	0.321	765	920	0.5	0.5	2.223	A
D - Barrack Square East	75	19	854	941	0.080	75	228	0.1	0.1	4.155	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	690	173	193	1780	0.388	692	484	0.9	0.6	3.313	A
B - Eagle Way West	59	15	618	999	0.059	59	14	0.1	0.1	3.833	A
C - A12 South	625	156	7	2385	0.262	625	753	0.5	0.4	2.047	A
D - Barrack Square East	61	15	699	1020	0.060	61	186	0.1	0.1	3.755	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	578	145	162	1798	0.322	579	405	0.6	0.5	2.955	A
B - Eagle Way West	50	12	518	1052	0.047	50	12	0.1	0.0	3.594	A
C - A12 South	523	131	6	2386	0.219	524	630	0.4	0.3	1.934	A
D - Barrack Square East	51	13	585	1077	0.048	51	156	0.1	0.1	3.511	A

Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	23.18	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1301	100.000
B - Eagle Way West		ONE HOUR	✓	173	100.000
C - A12 South		ONE HOUR	✓	1702	100.000
D - Barrack Square East		ONE HOUR	✓	181	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1259	41
	B - Eagle Way West	40	0	110	23
	C - A12 South	1161	26	0	515
	D - Barrack Square East	19	8	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	9	8	0	5
	D - Barrack Square East	5	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	47.41	18.1	E	1194	1791
B - Eagle Way West	0.53	21.03	1.1	C	159	238
C - A12 South	0.78	6.65	3.4	A	1562	2343
D - Barrack Square East	0.33	8.86	0.5	A	166	249

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	979	245	487	1609	0.609	973	915	0.0	1.5	5.608	A
B - Eagle Way West	130	33	1272	668	0.195	129	26	0.0	0.2	6.664	A
C - A12 South	1281	320	22	2422	0.529	1277	1139	0.0	1.1	3.133	A
D - Barrack Square East	136	34	1025	834	0.163	135	435	0.0	0.2	5.149	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1170	292	582	1552	0.753	1164	1095	1.5	2.9	9.138	A

B - Eagle Way West	156	39	1522	539	0.288	155	31	0.2	0.4	9.349	A
C - A12 South	1530	383	26	2419	0.633	1528	1362	1.1	1.7	4.029	A
D - Barrack Square East	163	41	1226	736	0.221	162	520	0.2	0.3	6.273	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1432	358	711	1476	0.971	1388	1338	2.9	14.1	31.374	D
B - Eagle Way West	190	48	1861	364	0.523	188	38	0.4	1.0	20.109	C
C - A12 South	1874	468	32	2415	0.776	1867	1630	1.7	3.4	6.495	A
D - Barrack Square East	199	50	1464	620	0.322	199	635	0.3	0.5	8.535	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1432	358	714	1474	0.972	1417	1343	14.1	18.1	47.411	E
B - Eagle Way West	190	48	1867	361	0.527	190	39	1.0	1.1	21.034	C
C - A12 South	1874	468	32	2415	0.776	1874	1660	3.4	3.4	6.647	A
D - Barrack Square East	199	50	1493	605	0.329	199	638	0.5	0.5	8.865	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1170	292	588	1549	0.755	1229	1102	18.1	3.2	13.208	B
B - Eagle Way West	156	39	1531	535	0.291	158	32	1.1	0.4	9.630	A
C - A12 South	1530	383	26	2419	0.633	1537	1428	3.4	1.7	4.111	A
D - Barrack Square East	163	41	1291	704	0.231	163	526	0.5	0.3	6.671	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	979	245	490	1607	0.609	986	920	3.2	1.6	5.853	A
B - Eagle Way West	130	33	1279	665	0.196	131	26	0.4	0.2	6.752	A
C - A12 South	1281	320	22	2422	0.529	1284	1153	1.7	1.1	3.169	A
D - Barrack Square East	136	34	1038	827	0.165	137	438	0.3	0.2	5.216	A

Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	117.00	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1333	100.000
B - Eagle Way West		ONE HOUR	✓	193	100.000
C - A12 South		ONE HOUR	✓	2204	100.000
D - Barrack Square East		ONE HOUR	✓	348	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	17	1283	33
	B - Eagle Way West	50	0	123	20
	C - A12 South	1376	62	1	765
	D - Barrack Square East	18	17	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	8	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.10	167.68	75.7	F	1223	1835
B - Eagle Way West	1.69	655.46	40.8	F	177	266
C - A12 South	1.01	57.84	40.2	F	2022	3034
D - Barrack Square East	0.58	12.83	1.3	B	319	479

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1004	251	681	1475	0.680	995	1081	0.0	2.1	7.380	A
B - Eagle Way West	145	36	1618	497	0.292	144	72	0.0	0.4	10.138	B
C - A12 South	1659	415	40	2417	0.687	1651	1283	0.0	2.2	4.648	A
D - Barrack Square East	262	65	1063	827	0.317	260	613	0.0	0.5	6.331	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1198	300	813	1399	0.857	1185	1292	2.1	5.3	15.946	C

B - Eagle Way West	174	43	1934	332	0.522	171	86	0.4	1.0	21.990	C
C - A12 South	1981	495	47	2412	0.822	1972	1530	2.2	4.4	8.030	A
D - Barrack Square East	313	78	1266	724	0.432	312	733	0.5	0.7	8.709	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1468	367	917	1339	1.096	1320	1514	5.3	42.3	76.088	F
B - Eagle Way West	212	53	2290	146	1.455	141	101	1.0	19.0	307.708	F
C - A12 South	2427	607	56	2406	1.008	2335	1702	4.4	27.3	32.546	D
D - Barrack Square East	383	96	1378	666	0.575	381	859	0.7	1.3	12.524	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1468	367	919	1338	1.097	1334	1535	42.3	75.7	167.682	F
B - Eagle Way West	212	53	2329	126	1.692	125	103	19.0	40.8	655.464	F
C - A12 South	2427	607	57	2406	1.009	2375	1709	27.3	40.2	57.843	F
D - Barrack Square East	383	96	1382	663	0.578	383	872	1.3	1.3	12.827	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1198	300	924	1336	0.897	1319	1406	75.7	45.6	166.869	F
B - Eagle Way West	174	43	2080	256	0.678	250	92	40.8	21.7	418.196	F
C - A12 South	1981	495	49	2411	0.822	2122	1711	40.2	4.9	18.231	C
D - Barrack Square East	313	78	1446	634	0.494	314	796	1.3	1.0	11.317	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1004	251	752	1435	0.699	1176	1116	45.6	2.4	25.696	D
B - Eagle Way West	145	36	1638	487	0.298	230	75	21.7	0.4	19.823	C
C - A12 South	1659	415	42	2415	0.687	1670	1516	4.9	2.2	4.900	A
D - Barrack Square East	262	65	1295	711	0.369	264	633	1.0	0.6	8.084	A

Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	21.74	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1318	100.000
B - Eagle Way West		ONE HOUR	✓	167	100.000
C - A12 South		ONE HOUR	✓	1761	100.000
D - Barrack Square East		ONE HOUR	✓	542	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	48	1255	14
	B - Eagle Way West	52	0	83	32
	C - A12 South	1367	89	0	305
	D - Barrack Square East	84	27	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	7	7
	B - Eagle Way West	8	0	2	0
	C - A12 South	6	2	0	2
	D - Barrack Square East	5	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	20.20	7.7	C	1209	1814
B - Eagle Way West	0.53	22.33	1.1	C	153	230
C - A12 South	0.81	8.11	4.3	A	1616	2424
D - Barrack Square East	0.96	70.95	11.2	F	497	746

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	992	248	315	1708	0.581	987	1128	0.0	1.4	4.957	A
B - Eagle Way West	126	31	1318	654	0.192	125	123	0.0	0.2	6.793	A
C - A12 South	1326	331	120	2415	0.549	1321	1323	0.0	1.2	3.274	A
D - Barrack Square East	408	102	1038	877	0.465	405	264	0.0	0.9	7.569	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1185	296	378	1671	0.709	1181	1349	1.4	2.4	7.278	A

B - Eagle Way West	150	38	1577	524	0.287	149	147	0.2	0.4	9.607	A
C - A12 South	1583	396	144	2401	0.659	1580	1583	1.2	1.9	4.374	A
D - Barrack Square East	487	122	1243	770	0.633	484	316	0.9	1.7	12.440	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1451	363	460	1623	0.894	1432	1644	2.4	7.1	17.324	C
B - Eagle Way West	184	46	1923	350	0.526	181	178	0.4	1.1	21.045	C
C - A12 South	1939	485	171	2384	0.813	1930	1906	1.9	4.2	7.781	A
D - Barrack Square East	597	149	1507	632	0.944	570	385	1.7	8.3	45.846	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1451	363	463	1622	0.895	1449	1654	7.1	7.7	20.197	C
B - Eagle Way West	184	46	1933	344	0.534	184	180	1.1	1.1	22.332	C
C - A12 South	1939	485	175	2381	0.814	1938	1935	4.2	4.3	8.110	A
D - Barrack Square East	597	149	1525	623	0.958	585	387	8.3	11.2	70.945	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1185	296	382	1669	0.710	1206	1366	7.7	2.5	8.102	A
B - Eagle Way West	150	38	1595	515	0.292	153	151	1.1	0.4	10.024	B
C - A12 South	1583	396	153	2395	0.661	1592	1640	4.3	2.0	4.538	A
D - Barrack Square East	487	122	1269	757	0.644	525	319	11.2	1.9	17.878	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	992	248	318	1706	0.582	997	1135	2.5	1.4	5.107	A
B - Eagle Way West	126	31	1327	649	0.194	126	124	0.4	0.2	6.894	A
C - A12 South	1326	331	122	2414	0.549	1329	1339	2.0	1.2	3.325	A
D - Barrack Square East	408	102	1049	871	0.468	412	266	1.9	0.9	7.905	A

Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	21.81	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1400	100.000
B - Eagle Way West		ONE HOUR	✓	134	100.000
C - A12 South		ONE HOUR	✓	1754	100.000
D - Barrack Square East		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	60	1319	21
	B - Eagle Way West	38	0	80	16
	C - A12 South	1386	124	1	243
	D - Barrack Square East	82	39	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	5
	B - Eagle Way West	3	0	1	0
	C - A12 South	2	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	17.51	7.1	C	1285	1927
B - Eagle Way West	0.37	14.04	0.6	B	123	184
C - A12 South	0.80	7.22	3.8	A	1609	2414
D - Barrack Square East	0.98	81.96	13.3	F	500	750

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1054	263	255	1814	0.581	1049	1129	0.0	1.4	4.670	A
B - Eagle Way West	101	25	1284	703	0.144	100	167	0.0	0.2	5.970	A
C - A12 South	1320	330	135	2467	0.535	1316	1365	0.0	1.1	3.114	A
D - Barrack Square East	410	103	1093	872	0.470	407	210	0.0	0.9	7.681	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1259	315	305	1783	0.706	1255	1351	1.4	2.3	6.759	A

B - Eagle Way West	120	30	1536	577	0.209	120	200	0.2	0.3	7.878	A
C - A12 South	1577	394	162	2450	0.644	1574	1633	1.1	1.8	4.097	A
D - Barrack Square East	490	122	1308	764	0.641	487	251	0.9	1.7	12.820	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1541	385	372	1742	0.885	1524	1647	2.3	6.7	15.417	C
B - Eagle Way West	148	37	1873	408	0.361	146	242	0.3	0.6	13.681	B
C - A12 South	1931	483	192	2431	0.794	1923	1967	1.8	3.7	6.983	A
D - Barrack Square East	600	150	1590	623	0.964	569	307	1.7	9.5	50.723	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1541	385	374	1741	0.885	1540	1656	6.7	7.1	17.506	C
B - Eagle Way West	148	37	1882	404	0.365	147	244	0.6	0.6	14.044	B
C - A12 South	1931	483	196	2429	0.795	1931	1995	3.7	3.8	7.218	A
D - Barrack Square East	600	150	1606	615	0.976	585	308	9.5	13.3	81.959	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1259	315	308	1782	0.706	1277	1367	7.1	2.5	7.385	A
B - Eagle Way West	120	30	1553	568	0.212	122	205	0.6	0.3	8.082	A
C - A12 South	1577	394	174	2443	0.646	1585	1693	3.8	1.8	4.234	A
D - Barrack Square East	490	122	1332	752	0.651	535	253	13.3	2.0	19.855	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1054	263	257	1813	0.581	1058	1137	2.5	1.4	4.794	A
B - Eagle Way West	101	25	1292	699	0.144	101	169	0.3	0.2	6.030	A
C - A12 South	1320	330	137	2466	0.536	1323	1381	1.8	1.2	3.160	A
D - Barrack Square East	410	103	1104	867	0.473	414	211	2.0	0.9	8.028	A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	837	100.000
B - Eagle Way West		ONE HOUR	✓	73	100.000
C - A12 South		ONE HOUR	✓	769	100.000
D - Barrack Square East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	796	39
	B - Eagle Way West	16	0	52	6
	C - A12 South	598	9	0	163
	D - Barrack Square East	0	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	9	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.52	4.26	1.1	A	768	1153
B - Eagle Way West	0.09	4.45	0.1	A	67	101
C - A12 South	0.35	2.29	0.5	A	706	1059
D - Barrack Square East	0.08	4.36	0.1	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	630	158	166	1811	0.348	628	461	0.0	0.5	3.038	A
B - Eagle Way West	55	14	571	1028	0.054	55	13	0.0	0.1	3.698	A
C - A12 South	579	145	7	2422	0.239	578	683	0.0	0.3	1.951	A
D - Barrack Square East	52	13	638	1050	0.049	51	156	0.0	0.1	3.604	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	753	188	198	1792	0.420	752	551	0.5	0.7	3.459	A

B - Eagle Way West	66	16	683	970	0.068	66	16	0.1	0.1	3.980	A
C - A12 South	692	173	8	2421	0.286	691	818	0.3	0.4	2.081	A
D - Barrack Square East	62	15	764	988	0.063	62	186	0.1	0.1	3.888	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	922	230	243	1766	0.522	920	675	0.7	1.1	4.251	A
B - Eagle Way West	81	20	837	891	0.091	81	20	0.1	0.1	4.444	A
C - A12 South	847	212	10	2420	0.350	847	1001	0.4	0.5	2.288	A
D - Barrack Square East	76	19	935	902	0.084	76	228	0.1	0.1	4.355	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	922	230	243	1766	0.522	922	675	1.1	1.1	4.265	A
B - Eagle Way West	81	20	837	890	0.091	81	20	0.1	0.1	4.445	A
C - A12 South	847	212	10	2420	0.350	847	1002	0.5	0.5	2.289	A
D - Barrack Square East	76	19	936	901	0.084	76	229	0.1	0.1	4.359	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	753	188	199	1792	0.420	754	552	1.1	0.7	3.475	A
B - Eagle Way West	66	16	684	970	0.068	66	16	0.1	0.1	3.983	A
C - A12 South	692	173	8	2421	0.286	692	820	0.5	0.4	2.082	A
D - Barrack Square East	62	15	766	986	0.063	62	187	0.1	0.1	3.893	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	630	158	166	1811	0.348	631	462	0.7	0.5	3.054	A
B - Eagle Way West	55	14	573	1027	0.054	55	13	0.1	0.1	3.702	A
C - A12 South	579	145	7	2422	0.239	580	686	0.4	0.3	1.954	A
D - Barrack Square East	52	13	641	1049	0.049	52	156	0.1	0.1	3.609	A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	67.83	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1450	100.000
B - Eagle Way West		ONE HOUR	✓	192	100.000
C - A12 South		ONE HOUR	✓	1841	100.000
D - Barrack Square East		ONE HOUR	✓	182	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1408	41
	B - Eagle Way West	44	0	122	26
	C - A12 South	1297	29	0	515
	D - Barrack Square East	19	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	8	8	0	5
	D - Barrack Square East	5	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.09	153.40	76.3	F	1330	1995
B - Eagle Way West	0.74	46.48	2.6	E	176	264
C - A12 South	0.84	9.15	5.0	A	1690	2534
D - Barrack Square East	0.35	9.60	0.5	A	167	250

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1091	273	497	1603	0.681	1083	1020	0.0	2.1	6.821	A
B - Eagle Way West	145	36	1374	617	0.234	143	29	0.0	0.3	7.581	A
C - A12 South	1386	347	22	2426	0.571	1381	1257	0.0	1.3	3.428	A
D - Barrack Square East	137	34	1144	775	0.177	136	437	0.0	0.2	5.628	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1303	326	595	1545	0.844	1292	1221	2.1	4.9	13.655	B

B - Eagle Way West	173	43	1644	478	0.361	172	35	0.3	0.6	11.714	B
C - A12 South	1655	414	27	2423	0.683	1652	1501	1.3	2.1	4.650	A
D - Barrack Square East	164	41	1365	667	0.245	163	522	0.2	0.3	7.136	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1596	399	722	1469	1.087	1446	1489	4.9	42.4	69.447	F
B - Eagle Way West	212	53	2007	291	0.727	205	42	0.6	2.3	38.953	E
C - A12 South	2027	507	33	2419	0.838	2016	1702	2.1	4.9	8.711	A
D - Barrack Square East	200	50	1535	584	0.343	199	633	0.3	0.5	9.347	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1596	399	730	1464	1.090	1461	1498	42.4	76.3	153.404	F
B - Eagle Way West	212	53	2017	286	0.740	210	43	2.3	2.6	46.484	E
C - A12 South	2027	507	33	2419	0.838	2027	1720	4.9	5.0	9.151	A
D - Barrack Square East	200	50	1553	575	0.348	200	637	0.5	0.5	9.595	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1303	326	606	1538	0.847	1518	1233	76.3	22.5	120.727	F
B - Eagle Way West	173	43	1659	471	0.367	181	35	2.6	0.6	12.733	B
C - A12 South	1655	414	27	2423	0.683	1667	1727	5.0	2.2	4.830	A
D - Barrack Square East	164	41	1590	556	0.294	164	534	0.5	0.4	9.180	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1091	273	501	1600	0.682	1173	1027	22.5	2.2	10.088	B
B - Eagle Way West	145	36	1383	613	0.236	146	29	0.6	0.3	7.727	A
C - A12 South	1386	347	23	2426	0.571	1390	1347	2.2	1.3	3.487	A
D - Barrack Square East	137	34	1232	732	0.187	138	442	0.4	0.2	6.071	A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	297.29	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1514	100.000
B - Eagle Way West		ONE HOUR	✓	214	100.000
C - A12 South		ONE HOUR	✓	2395	100.000
D - Barrack Square East		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	19	1462	33
	B - Eagle Way West	56	0	137	22
	C - A12 South	1561	69	1	765
	D - Barrack Square East	18	19	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	8	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	9	5	0	2
	D - Barrack Square East	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.21	427.70	162.3	F	1390	2084
B - Eagle Way West	2.09	1540.18	80.4	F	197	295
C - A12 South	1.09	149.60	125.0	F	2198	3297
D - Barrack Square East	0.60	13.81	1.5	B	321	482

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1140	285	692	1469	0.776	1127	1222	0.0	3.3	10.169	B
B - Eagle Way West	161	40	1755	429	0.376	159	80	0.0	0.6	13.211	B
C - A12 South	1803	451	42	2424	0.744	1792	1423	0.0	2.8	5.604	A
D - Barrack Square East	263	66	1204	755	0.349	261	614	0.0	0.5	7.261	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1361	340	821	1395	0.976	1316	1455	3.3	14.6	34.246	D

B - Eagle Way West	193	48	2091	254	0.759	185	95	0.6	2.6	47.726	E
C - A12 South	2153	538	50	2419	0.890	2136	1669	2.8	7.2	12.031	B
D - Barrack Square East	315	79	1406	653	0.482	313	731	0.5	0.9	10.551	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1667	417	855	1374	1.213	1370	1610	14.6	88.9	144.986	F
B - Eagle Way West	236	59	2345	122	1.939	120	107	2.6	31.5	572.726	F
C - A12 South	2637	659	59	2414	1.093	2393	1742	7.2	68.3	64.453	F
D - Barrack Square East	385	96	1418	645	0.597	383	808	0.9	1.4	13.633	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1667	417	855	1374	1.213	1374	1620	88.9	162.3	335.091	F
B - Eagle Way West	236	59	2362	113	2.093	113	107	31.5	62.4	1540.178	F
C - A12 South	2637	659	59	2413	1.093	2411	1743	68.3	125.0	149.602	F
D - Barrack Square East	385	96	1417	646	0.597	385	813	1.4	1.5	13.811	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1361	340	857	1373	0.991	1364	1610	162.3	161.7	427.702	F
B - Eagle Way West	193	48	2347	121	1.597	121	103	62.4	80.4	1408.893	F
C - A12 South	2153	538	51	2418	0.891	2399	1677	125.0	63.6	142.965	F
D - Barrack Square East	315	79	1412	648	0.485	316	809	1.5	1.0	10.920	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1140	285	875	1364	0.836	1356	1423	161.7	107.8	358.813	F
B - Eagle Way West	161	40	2001	301	0.536	297	90	80.4	46.4	772.256	F
C - A12 South	1803	451	45	2422	0.745	2046	1735	63.6	3.0	18.104	C
D - Barrack Square East	263	66	1517	599	0.440	264	714	1.0	0.8	10.776	B

2023 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	79.53	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1562	100.000
B - Eagle Way West		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	1937	100.000
D - Barrack Square East		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	53	1494	14
	B - Eagle Way West	58	0	92	36
	C - A12 South	1533	99	0	305
	D - Barrack Square East	84	30	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	6	7
	B - Eagle Way West	8	0	2	0
	C - A12 South	6	2	0	2
	D - Barrack Square East	5	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.06	114.43	60.5	F	1434	2151
B - Eagle Way West	0.80	61.95	3.3	F	171	256
C - A12 South	0.89	13.99	7.9	B	1778	2666
D - Barrack Square East	1.12	221.70	37.8	F	500	750

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1176	294	325	1715	0.686	1168	1256	0.0	2.1	6.478	A
B - Eagle Way West	140	35	1442	591	0.237	139	137	0.0	0.3	7.936	A
C - A12 South	1458	365	126	2410	0.605	1452	1506	0.0	1.5	3.736	A
D - Barrack Square East	410	103	1226	783	0.524	406	266	0.0	1.1	9.441	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1405	351	389	1678	0.837	1394	1502	2.1	4.7	12.244	B

B - Eagle Way West	167	42	1725	449	0.372	166	163	0.3	0.6	12.673	B
C - A12 South	1742	435	151	2395	0.727	1737	1797	1.5	2.6	5.437	A
D - Barrack Square East	490	122	1464	660	0.742	484	319	1.1	2.7	19.748	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1720	430	469	1631	1.055	1598	1816	4.7	35.2	55.273	F
B - Eagle Way West	205	51	2089	266	0.770	196	192	0.6	2.7	47.187	E
C - A12 South	2133	533	167	2385	0.894	2113	2043	2.6	7.5	12.457	B
D - Barrack Square East	600	150	1681	547	1.096	529	386	2.7	20.6	97.953	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1720	430	476	1627	1.057	1619	1833	35.2	60.5	114.431	F
B - Eagle Way West	205	51	2106	257	0.796	202	194	2.7	3.3	61.951	F
C - A12 South	2133	533	169	2384	0.895	2131	2068	7.5	7.9	13.990	B
D - Barrack Square East	600	150	1705	535	1.122	531	390	20.6	37.8	213.545	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1405	351	401	1671	0.841	1619	1532	60.5	6.9	73.867	F
B - Eagle Way West	167	42	1755	433	0.385	178	175	3.3	0.6	14.612	B
C - A12 South	1742	435	168	2385	0.730	1762	2052	7.9	2.8	5.967	A
D - Barrack Square East	490	122	1693	541	0.905	527	327	37.8	28.4	221.698	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1176	294	329	1713	0.687	1195	1283	6.9	2.2	7.179	A
B - Eagle Way West	140	35	1470	577	0.242	141	144	0.6	0.3	8.282	A
C - A12 South	1458	365	151	2395	0.609	1463	1622	2.8	1.6	3.886	A
D - Barrack Square East	410	103	1254	769	0.534	519	269	28.4	1.2	22.349	C

2023 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	75.48	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1631	100.000
B - Eagle Way West		ONE HOUR	✓	149	100.000
C - A12 South		ONE HOUR	✓	1856	100.000
D - Barrack Square East		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	67	1544	21
	B - Eagle Way West	42	0	89	18
	C - A12 South	1474	138	1	243
	D - Barrack Square East	82	43	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	5
	B - Eagle Way West	3	0	1	0
	C - A12 South	3	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.04	93.46	50.5	F	1497	2245
B - Eagle Way West	0.46	18.83	0.8	C	137	205
C - A12 South	0.84	9.51	5.3	A	1703	2555
D - Barrack Square East	1.17	262.28	47.1	F	504	756

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1228	307	263	1806	0.680	1220	1198	0.0	2.1	6.060	A
B - Eagle Way West	112	28	1350	666	0.169	111	186	0.0	0.2	6.483	A
C - A12 South	1397	349	143	2448	0.571	1392	1537	0.0	1.3	3.393	A
D - Barrack Square East	414	103	1271	781	0.530	409	211	0.0	1.1	9.578	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1467	367	315	1774	0.827	1457	1433	2.1	4.5	11.028	B

B - Eagle Way West	134	34	1614	533	0.252	134	222	0.2	0.3	9.000	A
C - A12 South	1668	417	171	2431	0.686	1665	1835	1.3	2.2	4.683	A
D - Barrack Square East	494	123	1519	656	0.753	487	253	1.1	2.8	20.514	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1796	449	383	1732	1.037	1690	1737	4.5	31.0	47.649	E
B - Eagle Way West	164	41	1958	360	0.456	162	261	0.3	0.8	18.032	C
C - A12 South	2043	511	187	2420	0.844	2032	2096	2.2	5.1	9.001	A
D - Barrack Square East	605	151	1766	532	1.138	517	307	2.8	24.7	114.675	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1796	449	386	1730	1.038	1718	1746	31.0	50.5	93.460	F
B - Eagle Way West	164	41	1968	355	0.462	164	263	0.8	0.8	18.828	C
C - A12 South	2043	511	188	2420	0.844	2043	2122	5.1	5.3	9.506	A
D - Barrack Square East	605	151	1795	517	1.169	515	309	24.7	47.1	262.281	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1467	367	318	1772	0.828	1647	1455	50.5	5.5	46.703	E
B - Eagle Way West	134	34	1637	521	0.257	136	236	0.8	0.4	9.390	A
C - A12 South	1668	417	193	2417	0.690	1680	2064	5.3	2.3	4.966	A
D - Barrack Square East	494	123	1708	561	0.880	550	257	47.1	33.2	257.534	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1228	307	265	1805	0.681	1241	1225	5.5	2.2	6.537	A
B - Eagle Way West	112	28	1378	652	0.172	113	198	0.4	0.2	6.681	A
C - A12 South	1397	349	174	2428	0.575	1401	1661	2.3	1.4	3.515	A
D - Barrack Square East	414	103	1294	770	0.537	542	213	33.2	1.2	27.706	D

2023 Early Years, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	850	100.000
B - Eagle Way West		ONE HOUR	✓	73	100.000
C - A12 South		ONE HOUR	✓	845	100.000
D - Barrack Square East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	809	39
	B - Eagle Way West	16	0	52	6
	C - A12 South	673	9	0	163
	D - Barrack Square East	0	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	12	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.53	4.33	1.1	A	780	1170
B - Eagle Way West	0.10	4.75	0.1	A	67	101
C - A12 South	0.39	2.49	0.6	A	775	1163
D - Barrack Square East	0.08	4.39	0.1	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	640	160	166	1813	0.353	638	517	0.0	0.5	3.058	A
B - Eagle Way West	55	14	628	993	0.056	55	13	0.0	0.1	3.838	A
C - A12 South	636	159	7	2378	0.268	635	692	0.0	0.4	2.063	A
D - Barrack Square East	52	13	647	1046	0.049	51	156	0.0	0.1	3.620	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	764	191	198	1794	0.426	763	619	0.5	0.7	3.492	A

B - Eagle Way West	66	16	751	928	0.071	66	16	0.1	0.1	4.176	A
C - A12 South	760	190	8	2377	0.320	759	829	0.4	0.5	2.225	A
D - Barrack Square East	62	15	775	982	0.063	62	186	0.1	0.1	3.910	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	936	234	243	1767	0.529	934	758	0.7	1.1	4.312	A
B - Eagle Way West	81	20	920	839	0.096	81	20	0.1	0.1	4.748	A
C - A12 South	930	233	10	2375	0.392	930	1014	0.5	0.6	2.488	A
D - Barrack Square East	76	19	949	896	0.084	75	228	0.1	0.1	4.389	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	936	234	243	1767	0.529	936	758	1.1	1.1	4.328	A
B - Eagle Way West	81	20	920	838	0.096	81	20	0.1	0.1	4.750	A
C - A12 South	930	233	10	2375	0.392	930	1016	0.6	0.6	2.490	A
D - Barrack Square East	76	19	950	895	0.084	76	229	0.1	0.1	4.393	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	764	191	199	1793	0.426	765	620	1.1	0.7	3.506	A
B - Eagle Way West	66	16	752	927	0.071	66	16	0.1	0.1	4.180	A
C - A12 South	760	190	8	2377	0.320	760	831	0.6	0.5	2.229	A
D - Barrack Square East	62	15	777	981	0.063	62	187	0.1	0.1	3.916	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	640	160	166	1812	0.353	641	519	0.7	0.5	3.075	A
B - Eagle Way West	55	14	630	992	0.056	55	13	0.1	0.1	3.845	A
C - A12 South	636	159	7	2378	0.268	636	696	0.5	0.4	2.069	A
D - Barrack Square East	52	13	651	1044	0.050	52	156	0.1	0.1	3.628	A

2023 Early Years, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	116.71	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1518	100.000
B - Eagle Way West		ONE HOUR	✓	192	100.000
C - A12 South		ONE HOUR	✓	2001	100.000
D - Barrack Square East		ONE HOUR	✓	182	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1476	41
	B - Eagle Way West	44	0	122	26
	C - A12 South	1457	29	0	515
	D - Barrack Square East	19	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	12	8	0	5
	D - Barrack Square East	5	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.13	229.01	107.5	F	1393	2090
B - Eagle Way West	1.29	360.86	24.1	F	176	264
C - A12 South	0.94	22.03	12.7	C	1836	2755
D - Barrack Square East	0.35	9.56	0.5	A	167	250

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1143	286	497	1592	0.718	1133	1139	0.0	2.5	7.682	A
B - Eagle Way West	145	36	1493	533	0.271	143	29	0.0	0.4	9.191	A
C - A12 South	1507	377	22	2358	0.639	1500	1307	0.0	1.7	4.164	A
D - Barrack Square East	137	34	1193	747	0.183	136	436	0.0	0.2	5.886	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1365	341	594	1535	0.889	1347	1363	2.5	6.8	17.738	C

B - Eagle Way West	173	43	1786	378	0.457	171	35	0.4	0.8	17.223	C
C - A12 South	1799	450	27	2355	0.764	1794	1556	1.7	3.1	6.355	A
D - Barrack Square East	164	41	1420	636	0.257	163	522	0.2	0.3	7.609	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1671	418	688	1479	1.130	1465	1640	6.8	58.3	89.907	F
B - Eagle Way West	212	53	2162	179	1.184	167	42	0.8	11.9	174.548	F
C - A12 South	2204	551	33	2350	0.937	2171	1699	3.1	11.3	17.532	C
D - Barrack Square East	200	50	1532	580	0.345	200	621	0.3	0.5	9.444	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1671	418	692	1476	1.132	1475	1659	58.3	107.5	209.126	F
B - Eagle Way West	212	53	2188	164	1.286	163	43	11.9	24.1	360.857	F
C - A12 South	2204	551	33	2350	0.938	2198	1706	11.3	12.7	22.030	C
D - Barrack Square East	200	50	1538	577	0.347	200	628	0.5	0.5	9.558	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1365	341	677	1487	0.918	1473	1416	107.5	80.4	229.009	F
B - Eagle Way West	173	43	1828	356	0.486	265	36	24.1	1.0	79.832	F
C - A12 South	1799	450	27	2354	0.764	1837	1739	12.7	3.3	7.431	A
D - Barrack Square East	164	41	1602	547	0.299	164	549	0.5	0.4	9.396	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1143	286	503	1589	0.719	1453	1150	80.4	2.8	72.321	F
B - Eagle Way West	145	36	1506	526	0.275	147	30	1.0	0.4	9.553	A
C - A12 South	1507	377	23	2357	0.639	1513	1622	3.3	1.8	4.296	A
D - Barrack Square East	137	34	1508	592	0.231	137	449	0.4	0.3	7.934	A

2023 Early Years, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	350.13	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1505	100.000
B - Eagle Way West		ONE HOUR	✓	214	100.000
C - A12 South		ONE HOUR	✓	2419	100.000
D - Barrack Square East		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	19	1453	33
	B - Eagle Way West	56	0	137	22
	C - A12 South	1584	69	1	765
	D - Barrack Square East	18	19	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	9	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	13	5	0	2
	D - Barrack Square East	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.20	395.23	152.9	F	1381	2071
B - Eagle Way West	2.13	2152.41	88.2	F	197	295
C - A12 South	1.13	221.39	165.7	F	2220	3329
D - Barrack Square East	0.60	14.18	1.5	B	321	482

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1133	283	691	1461	0.775	1120	1239	0.0	3.3	10.181	B
B - Eagle Way West	161	40	1771	399	0.405	159	80	0.0	0.7	14.855	B
C - A12 South	1821	455	42	2367	0.769	1808	1416	0.0	3.2	6.298	A
D - Barrack Square East	263	66	1197	756	0.349	261	614	0.0	0.5	7.251	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1353	338	814	1391	0.973	1309	1470	3.3	14.1	33.485	D

B - Eagle Way West	193	48	2105	220	0.875	179	94	0.7	4.1	72.466	F
C - A12 South	2174	544	50	2363	0.920	2149	1658	3.2	9.5	15.332	C
D - Barrack Square East	315	79	1396	654	0.481	313	728	0.5	0.9	10.505	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1657	414	829	1382	1.199	1377	1586	14.1	84.0	137.410	F
B - Eagle Way West	236	59	2300	117	2.025	115	105	4.1	34.2	655.123	F
C - A12 South	2663	666	59	2358	1.130	2346	1746	9.5	88.9	82.693	F
D - Barrack Square East	385	96	1421	639	0.603	383	785	0.9	1.5	13.922	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1657	414	829	1382	1.199	1381	1591	84.0	152.9	314.807	F
B - Eagle Way West	236	59	2310	111	2.127	111	105	34.2	65.5	1657.862	F
C - A12 South	2663	666	59	2357	1.130	2356	1749	88.9	165.7	199.080	F
D - Barrack Square East	385	96	1422	639	0.603	385	788	1.5	1.5	14.183	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1353	338	831	1381	0.980	1372	1584	152.9	148.1	395.226	F
B - Eagle Way West	193	48	2298	117	1.644	117	101	65.5	84.3	2052.519	F
C - A12 South	2174	544	51	2362	0.921	2348	1682	165.7	122.3	221.390	F
D - Barrack Square East	315	79	1417	641	0.490	317	786	1.5	1.0	11.151	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1133	283	836	1378	0.822	1369	1554	148.1	89.0	313.059	F
B - Eagle Way West	161	40	2244	146	1.103	146	97	84.3	88.2	2152.406	F
C - A12 South	1821	455	46	2365	0.770	2295	1652	122.3	4.0	91.640	F
D - Barrack Square East	263	66	1433	634	0.415	264	772	1.0	0.7	9.770	A

2023 Early Years, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	93.77	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1562	100.000
B - Eagle Way West		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	1932	100.000
D - Barrack Square East		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	53	1494	14
	B - Eagle Way West	58	0	92	36
	C - A12 South	1528	99	0	305
	D - Barrack Square East	84	30	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	8	7
	B - Eagle Way West	8	0	2	0
	C - A12 South	8	2	0	2
	D - Barrack Square East	5	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.08	140.65	75.3	F	1433	2150
B - Eagle Way West	0.84	75.78	4.0	F	171	256
C - A12 South	0.91	15.66	8.8	C	1773	2659
D - Barrack Square East	1.13	247.08	39.0	F	500	750

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1176	294	325	1678	0.701	1167	1252	0.0	2.3	6.920	A
B - Eagle Way West	140	35	1438	582	0.240	139	137	0.0	0.3	8.096	A
C - A12 South	1455	364	126	2374	0.613	1448	1505	0.0	1.6	3.864	A
D - Barrack Square East	410	103	1225	770	0.533	406	266	0.0	1.1	9.763	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1404	351	389	1642	0.855	1392	1497	2.3	5.4	13.761	B

B - Eagle Way West	167	42	1720	438	0.381	166	163	0.3	0.6	13.162	B
C - A12 South	1737	434	150	2360	0.736	1732	1794	1.6	2.7	5.698	A
D - Barrack Square East	490	122	1462	645	0.759	483	319	1.1	2.9	21.323	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1720	430	467	1597	1.077	1572	1808	5.4	42.3	64.701	F
B - Eagle Way West	205	51	2080	254	0.806	195	191	0.6	3.1	53.854	F
C - A12 South	2127	532	166	2350	0.905	2105	2015	2.7	8.2	13.627	B
D - Barrack Square East	600	150	1655	543	1.105	526	385	2.9	21.5	102.260	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1720	430	475	1592	1.080	1588	1826	42.3	75.3	140.654	F
B - Eagle Way West	205	51	2100	244	0.838	201	192	3.1	4.0	75.777	F
C - A12 South	2127	532	167	2349	0.906	2125	2036	8.2	8.8	15.658	C
D - Barrack Square East	600	150	1674	533	1.125	530	389	21.5	39.0	222.213	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1404	351	403	1634	0.860	1612	1529	75.3	23.3	113.536	F
B - Eagle Way West	167	42	1751	422	0.396	180	174	4.0	0.7	15.654	C
C - A12 South	1737	434	164	2351	0.739	1761	2036	8.8	2.9	6.329	A
D - Barrack Square East	490	122	1687	526	0.932	513	328	39.0	33.4	247.076	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1176	294	329	1676	0.702	1259	1282	23.3	2.4	10.432	B
B - Eagle Way West	140	35	1470	566	0.247	141	148	0.7	0.3	8.499	A
C - A12 South	1455	364	157	2355	0.618	1460	1699	2.9	1.6	4.044	A
D - Barrack Square East	410	103	1318	721	0.569	538	270	33.4	1.4	37.544	E

2023 Early Years, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	104.75	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1656	100.000
B - Eagle Way West		ONE HOUR	✓	149	100.000
C - A12 South		ONE HOUR	✓	1885	100.000
D - Barrack Square East		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	67	1568	21
	B - Eagle Way West	42	0	89	18
	C - A12 South	1503	138	1	243
	D - Barrack Square East	82	43	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	5	5
	B - Eagle Way West	3	0	1	0
	C - A12 South	4	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.08	142.02	80.7	F	1519	2279
B - Eagle Way West	0.49	21.32	0.9	C	137	205
C - A12 South	0.86	10.77	6.0	B	1730	2595
D - Barrack Square East	1.18	339.40	50.4	F	504	756

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1247	312	263	1760	0.709	1237	1220	0.0	2.4	6.774	A
B - Eagle Way West	112	28	1371	650	0.173	111	186	0.0	0.2	6.670	A
C - A12 South	1419	355	143	2432	0.584	1414	1554	0.0	1.4	3.516	A
D - Barrack Square East	414	103	1289	756	0.547	409	211	0.0	1.2	10.247	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1489	372	315	1729	0.861	1476	1459	2.4	5.6	13.571	B

B - Eagle Way West	134	34	1640	515	0.260	133	222	0.2	0.3	9.431	A
C - A12 South	1695	424	170	2415	0.702	1691	1853	1.4	2.3	4.944	A
D - Barrack Square East	494	123	1538	627	0.787	485	253	1.2	3.3	24.076	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1823	456	383	1688	1.080	1664	1766	5.6	45.4	64.947	F
B - Eagle Way West	164	41	1987	339	0.485	162	258	0.3	0.9	20.124	C
C - A12 South	2076	519	184	2407	0.862	2062	2068	2.3	5.8	10.037	B
D - Barrack Square East	605	151	1741	523	1.158	510	306	3.3	26.9	125.585	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1823	456	386	1686	1.081	1682	1777	45.4	80.7	142.019	F
B - Eagle Way West	164	41	1999	333	0.494	164	260	0.9	0.9	21.315	C
C - A12 South	2076	519	184	2407	0.862	2075	2086	5.8	6.0	10.773	B
D - Barrack Square East	605	151	1759	513	1.179	511	308	26.9	50.4	287.994	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1489	372	319	1726	0.862	1705	1476	80.7	26.6	116.557	F
B - Eagle Way West	134	34	1659	505	0.265	136	233	0.9	0.4	9.825	A
C - A12 South	1695	424	183	2408	0.704	1709	2083	6.0	2.4	5.256	A
D - Barrack Square East	494	123	1766	509	0.970	500	258	50.4	48.7	339.401	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1247	312	265	1758	0.709	1343	1257	26.6	2.5	10.821	B
B - Eagle Way West	112	28	1409	632	0.178	113	206	0.4	0.2	6.942	A
C - A12 South	1419	355	192	2402	0.591	1423	1805	2.4	1.5	3.694	A
D - Barrack Square East	414	103	1394	701	0.590	602	214	48.7	1.6	95.145	F

2028 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	828	100.000
B - Eagle Way West		ONE HOUR	✓	77	100.000
C - A12 South		ONE HOUR	✓	792	100.000
D - Barrack Square East		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	786	40
	B - Eagle Way West	16	0	55	6
	C - A12 South	620	9	0	163
	D - Barrack Square East	4	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	9	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.52	4.29	1.1	A	760	1140
B - Eagle Way West	0.10	4.55	0.1	A	71	106
C - A12 South	0.36	2.33	0.6	A	727	1091
D - Barrack Square East	0.09	4.37	0.1	A	67	100

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	623	156	168	1797	0.347	621	481	0.0	0.5	3.057	A
B - Eagle Way West	58	14	591	1018	0.057	58	14	0.0	0.1	3.747	A
C - A12 South	597	149	10	2422	0.246	595	677	0.0	0.3	1.969	A
D - Barrack Square East	55	14	633	1053	0.052	55	157	0.0	0.1	3.606	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	744	186	201	1777	0.419	744	575	0.5	0.7	3.481	A

B - Eagle Way West	69	17	707	958	0.072	69	17	0.1	0.1	4.048	A
C - A12 South	712	178	12	2421	0.294	712	811	0.3	0.4	2.106	A
D - Barrack Square East	65	16	757	990	0.066	65	187	0.1	0.1	3.893	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	912	228	246	1751	0.521	910	704	0.7	1.1	4.274	A
B - Eagle Way West	85	21	866	876	0.097	85	21	0.1	0.1	4.547	A
C - A12 South	872	218	14	2419	0.361	872	992	0.4	0.6	2.326	A
D - Barrack Square East	80	20	927	904	0.089	80	229	0.1	0.1	4.366	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	912	228	246	1751	0.521	912	705	1.1	1.1	4.288	A
B - Eagle Way West	85	21	866	876	0.097	85	21	0.1	0.1	4.549	A
C - A12 South	872	218	14	2419	0.361	872	994	0.6	0.6	2.326	A
D - Barrack Square East	80	20	928	904	0.089	80	230	0.1	0.1	4.370	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	744	186	201	1777	0.419	746	576	1.1	0.7	3.496	A
B - Eagle Way West	69	17	708	958	0.072	69	17	0.1	0.1	4.051	A
C - A12 South	712	178	12	2421	0.294	713	813	0.6	0.4	2.109	A
D - Barrack Square East	65	16	759	989	0.066	66	188	0.1	0.1	3.900	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	623	156	169	1796	0.347	624	482	0.7	0.5	3.074	A
B - Eagle Way West	58	14	593	1018	0.057	58	14	0.1	0.1	3.754	A
C - A12 South	597	149	10	2422	0.246	597	680	0.4	0.3	1.973	A
D - Barrack Square East	55	14	635	1051	0.052	55	157	0.1	0.1	3.612	A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	50.47	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1367	100.000
B - Eagle Way West		ONE HOUR	✓	202	100.000
C - A12 South		ONE HOUR	✓	1923	100.000
D - Barrack Square East		ONE HOUR	✓	250	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1309	56
	B - Eagle Way West	47	0	128	27
	C - A12 South	1378	30	0	515
	D - Barrack Square East	87	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	8	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.03	86.38	38.1	F	1254	1881
B - Eagle Way West	1.09	214.71	14.2	F	185	278
C - A12 South	0.89	13.73	7.7	B	1765	2647
D - Barrack Square East	0.46	10.94	0.8	B	230	345

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1029	257	503	1595	0.645	1022	1133	0.0	1.8	6.208	A
B - Eagle Way West	152	38	1485	562	0.271	151	31	0.0	0.4	8.723	A
C - A12 South	1448	362	74	2395	0.604	1442	1189	0.0	1.5	3.754	A
D - Barrack Square East	188	47	1075	825	0.228	187	449	0.0	0.3	5.634	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1229	307	601	1536	0.800	1221	1355	1.8	3.8	11.126	B

B - Eagle Way West	181	45	1776	412	0.441	180	37	0.4	0.8	15.413	C
C - A12 South	1729	432	88	2386	0.725	1724	1421	1.5	2.6	5.407	A
D - Barrack Square East	225	56	1285	720	0.312	224	537	0.3	0.4	7.252	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1505	376	711	1471	1.023	1423	1643	3.8	24.1	45.999	E
B - Eagle Way West	222	56	2162	214	1.041	193	45	0.8	8.2	114.923	F
C - A12 South	2117	529	108	2374	0.892	2098	1654	2.6	7.3	12.295	B
D - Barrack Square East	276	69	1487	619	0.446	274	647	0.4	0.8	10.416	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1505	376	720	1465	1.027	1449	1657	24.1	38.1	86.382	F
B - Eagle Way West	222	56	2179	205	1.087	198	45	8.2	14.2	214.707	F
C - A12 South	2117	529	108	2373	0.892	2116	1682	7.3	7.7	13.735	B
D - Barrack Square East	276	69	1515	605	0.456	275	654	0.8	0.8	10.935	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1229	307	650	1508	0.815	1361	1386	38.1	4.9	38.118	E
B - Eagle Way West	181	45	1801	399	0.455	235	37	14.2	0.9	29.423	D
C - A12 South	1729	432	89	2385	0.725	1749	1592	7.7	2.7	5.827	A
D - Barrack Square East	225	56	1455	636	0.354	226	557	0.8	0.6	8.811	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1029	257	508	1592	0.646	1041	1142	4.9	1.9	6.680	A
B - Eagle Way West	152	38	1496	556	0.273	154	31	0.9	0.4	8.994	A
C - A12 South	1448	362	75	2395	0.605	1452	1211	2.7	1.5	3.840	A
D - Barrack Square East	188	47	1096	815	0.231	189	453	0.6	0.3	5.765	A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	368.57	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1412	100.000
B - Eagle Way West		ONE HOUR	✓	225	100.000
C - A12 South		ONE HOUR	✓	2378	100.000
D - Barrack Square East		ONE HOUR	✓	518	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	20	1325	67
	B - Eagle Way West	58	0	144	23
	C - A12 South	1539	72	1	765
	D - Barrack Square East	185	20	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	8	3
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	1	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.10	186.79	85.8	F	1296	1944
B - Eagle Way West	3.08	3871.46	131.1	F	207	310
C - A12 South	1.14	233.70	170.9	F	2182	3273
D - Barrack Square East	0.85	33.70	5.0	D	475	713

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1063	266	697	1469	0.724	1053	1332	0.0	2.5	8.464	A
B - Eagle Way West	170	42	1862	376	0.451	166	84	0.0	0.8	16.923	C
C - A12 South	1790	448	168	2346	0.763	1778	1328	0.0	3.1	6.205	A
D - Barrack Square East	390	97	1110	819	0.476	386	640	0.0	0.9	8.248	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1269	317	810	1403	0.905	1249	1578	2.5	7.6	21.037	C

B - Eagle Way West	202	51	2214	193	1.047	174	100	0.8	7.9	138.164	F
C - A12 South	2138	534	201	2326	0.919	2113	1563	3.1	9.3	15.326	C
D - Barrack Square East	466	116	1302	720	0.647	462	758	0.9	1.8	13.798	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1555	389	803	1407	1.105	1392	1705	7.6	48.4	83.105	F
B - Eagle Way West	248	62	2422	86	2.879	86	111	7.9	48.4	1248.596	F
C - A12 South	2618	654	242	2302	1.137	2291	1699	9.3	91.1	86.113	F
D - Barrack Square East	570	143	1382	676	0.844	559	813	1.8	4.5	28.492	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1555	389	801	1408	1.104	1405	1712	48.4	85.8	179.723	F
B - Eagle Way West	248	62	2433	81	3.079	81	111	48.4	90.3	2645.342	F
C - A12 South	2618	654	246	2300	1.138	2299	1713	91.1	170.9	209.497	F
D - Barrack Square East	570	143	1391	671	0.850	568	816	4.5	5.0	33.699	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1269	317	813	1401	0.906	1385	1688	85.8	56.8	186.789	F
B - Eagle Way West	202	51	2409	92	2.203	92	108	90.3	118.0	3435.257	F
C - A12 South	2138	534	209	2322	0.921	2308	1647	170.9	128.3	233.695	F
D - Barrack Square East	466	116	1379	677	0.687	476	819	5.0	2.3	18.773	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1063	266	824	1395	0.762	1276	1652	56.8	3.6	61.195	F
B - Eagle Way West	170	42	2359	117	1.451	117	103	118.0	131.1	3871.461	F
C - A12 South	1790	448	175	2342	0.764	2287	1511	128.3	4.0	99.616	F
D - Barrack Square East	390	97	1291	724	0.539	394	809	2.3	1.2	11.074	B

2028 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	39.91	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1326	100.000
B - Eagle Way West		ONE HOUR	✓	196	100.000
C - A12 South		ONE HOUR	✓	1967	100.000
D - Barrack Square East		ONE HOUR	✓	617	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	56	1151	118
	B - Eagle Way West	61	0	97	37
	C - A12 South	1558	104	0	305
	D - Barrack Square East	154	32	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	8	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	6	2	0	2
	D - Barrack Square East	3	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	21.84	8.4	C	1217	1825
B - Eagle Way West	1.05	180.96	11.3	F	179	269
C - A12 South	0.93	20.34	11.5	C	1805	2708
D - Barrack Square East	1.01	99.47	19.0	F	566	849

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	998	250	330	1697	0.588	993	1329	0.0	1.4	5.069	A
B - Eagle Way West	147	37	1513	557	0.264	146	144	0.0	0.4	8.730	A
C - A12 South	1481	370	182	2377	0.623	1475	1255	0.0	1.6	3.962	A
D - Barrack Square East	464	116	977	908	0.511	460	346	0.0	1.0	7.961	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1192	298	394	1660	0.718	1188	1589	1.4	2.5	7.557	A

B - Eagle Way West	176	44	1809	408	0.431	174	172	0.4	0.7	15.304	C
C - A12 South	1769	442	218	2355	0.751	1763	1501	1.6	2.9	6.032	A
D - Barrack Square East	554	139	1169	807	0.687	550	413	1.0	2.1	13.770	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1460	365	465	1619	0.902	1439	1912	2.5	7.6	18.282	C
B - Eagle Way West	215	54	2185	219	0.982	192	207	0.7	6.5	97.295	F
C - A12 South	2166	542	255	2332	0.929	2137	1789	2.9	10.3	16.417	C
D - Barrack Square East	679	170	1407	682	0.996	638	497	2.1	12.5	56.599	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1460	365	471	1615	0.904	1457	1937	7.6	8.4	21.844	C
B - Eagle Way West	215	54	2212	206	1.048	196	210	6.5	11.3	180.964	F
C - A12 South	2166	542	261	2328	0.930	2161	1817	10.3	11.5	20.339	C
D - Barrack Square East	679	170	1425	672	1.010	653	503	12.5	19.0	99.468	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1192	298	430	1639	0.727	1214	1651	8.4	2.8	8.899	A
B - Eagle Way West	176	44	1863	381	0.461	217	179	11.3	0.9	27.602	D
C - A12 South	1769	442	240	2341	0.755	1802	1594	11.5	3.2	7.073	A
D - Barrack Square East	554	139	1214	784	0.707	620	430	19.0	2.6	29.673	D

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	998	250	334	1695	0.589	1003	1343	2.8	1.5	5.245	A
B - Eagle Way West	147	37	1527	550	0.268	149	145	0.9	0.4	9.041	A
C - A12 South	1481	370	186	2375	0.624	1487	1273	3.2	1.7	4.083	A
D - Barrack Square East	464	116	988	902	0.515	470	349	2.6	1.1	8.447	A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	41.15	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1405	100.000
B - Eagle Way West		ONE HOUR	✓	157	100.000
C - A12 South		ONE HOUR	✓	1958	100.000
D - Barrack Square East		ONE HOUR	✓	640	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	70	1224	111
	B - Eagle Way West	45	0	94	19
	C - A12 South	1569	145	1	243
	D - Barrack Square East	171	46	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	3	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	3	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.90	19.50	7.9	C	1289	1933
B - Eagle Way West	0.67	41.02	1.9	E	144	216
C - A12 South	0.92	17.16	9.7	C	1797	2696
D - Barrack Square East	1.08	163.26	34.7	F	587	881

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1057	264	267	1799	0.588	1052	1337	0.0	1.4	4.784	A
B - Eagle Way West	118	30	1486	599	0.197	117	196	0.0	0.2	7.461	A
C - A12 South	1474	369	214	2406	0.613	1468	1303	0.0	1.6	3.812	A
D - Barrack Square East	482	120	1040	898	0.537	477	279	0.0	1.1	8.473	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1263	316	319	1767	0.715	1259	1598	1.4	2.4	7.024	A

B - Eagle Way West	141	35	1777	453	0.312	140	234	0.2	0.4	11.491	B
C - A12 South	1761	440	256	2380	0.740	1756	1559	1.6	2.8	5.718	A
D - Barrack Square East	576	144	1244	794	0.725	570	334	1.1	2.5	15.691	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1547	387	386	1726	0.896	1527	1925	2.4	7.3	16.665	C
B - Eagle Way West	173	43	2143	269	0.642	168	280	0.4	1.6	34.153	D
C - A12 South	2156	539	291	2358	0.914	2132	1853	2.8	9.0	14.516	B
D - Barrack Square East	705	176	1508	661	1.067	635	405	2.5	19.8	79.993	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1547	387	391	1723	0.898	1544	1946	7.3	7.9	19.503	C
B - Eagle Way West	173	43	2165	258	0.670	172	283	1.6	1.9	41.016	E
C - A12 South	2156	539	295	2356	0.915	2153	1876	9.0	9.7	17.164	C
D - Barrack Square East	705	176	1526	651	1.082	645	409	19.8	34.7	163.259	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1263	316	328	1762	0.717	1284	1660	7.9	2.6	7.855	A
B - Eagle Way West	141	35	1842	421	0.335	146	247	1.9	0.5	13.356	B
C - A12 South	1761	440	301	2352	0.749	1787	1672	9.7	3.1	6.664	A
D - Barrack Square East	576	144	1271	781	0.737	701	340	34.7	3.2	74.328	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1057	264	270	1797	0.588	1062	1350	2.6	1.4	4.929	A
B - Eagle Way West	118	30	1501	591	0.200	119	198	0.5	0.3	7.642	A
C - A12 South	1474	369	219	2403	0.613	1480	1322	3.1	1.6	3.924	A
D - Barrack Square East	482	120	1050	893	0.540	490	282	3.2	1.2	9.120	A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	830	100.000
B - Eagle Way West		ONE HOUR	✓	77	100.000
C - A12 South		ONE HOUR	✓	939	100.000
D - Barrack Square East		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	788	40
	B - Eagle Way West	16	0	55	6
	C - A12 South	766	9	0	163
	D - Barrack Square East	4	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	10	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.52	4.29	1.1	A	761	1142
B - Eagle Way West	0.11	5.12	0.1	A	71	106
C - A12 South	0.43	2.64	0.8	A	861	1292
D - Barrack Square East	0.09	4.37	0.1	A	67	100

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	625	156	168	1798	0.347	623	591	0.0	0.5	3.058	A
B - Eagle Way West	58	14	701	958	0.061	58	14	0.0	0.1	3.998	A
C - A12 South	707	177	10	2399	0.295	705	679	0.0	0.4	2.123	A
D - Barrack Square East	55	14	634	1052	0.052	55	157	0.0	0.1	3.608	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	746	186	201	1779	0.419	745	706	0.5	0.7	3.482	A

B - Eagle Way West	69	17	838	886	0.078	69	17	0.1	0.1	4.406	A
C - A12 South	844	211	12	2397	0.352	843	812	0.4	0.5	2.316	A
D - Barrack Square East	65	16	759	989	0.066	65	187	0.1	0.1	3.896	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	914	228	246	1752	0.521	912	865	0.7	1.1	4.279	A
B - Eagle Way West	85	21	1026	788	0.108	85	21	0.1	0.1	5.117	A
C - A12 South	1033	258	14	2396	0.431	1033	994	0.5	0.8	2.640	A
D - Barrack Square East	80	20	929	904	0.089	80	229	0.1	0.1	4.370	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	914	228	246	1752	0.521	914	866	1.1	1.1	4.293	A
B - Eagle Way West	85	21	1027	787	0.108	85	21	0.1	0.1	5.122	A
C - A12 South	1033	258	14	2396	0.431	1033	996	0.8	0.8	2.642	A
D - Barrack Square East	80	20	930	903	0.089	80	230	0.1	0.1	4.374	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	746	186	201	1778	0.419	747	708	1.1	0.7	3.498	A
B - Eagle Way West	69	17	840	885	0.078	69	17	0.1	0.1	4.413	A
C - A12 South	844	211	12	2397	0.352	845	815	0.8	0.5	2.319	A
D - Barrack Square East	65	16	761	988	0.066	66	188	0.1	0.1	3.901	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	625	156	169	1798	0.348	625	592	0.7	0.5	3.075	A
B - Eagle Way West	58	14	703	957	0.061	58	14	0.1	0.1	4.005	A
C - A12 South	707	177	10	2399	0.295	707	682	0.5	0.4	2.130	A
D - Barrack Square East	55	14	637	1051	0.052	55	157	0.1	0.1	3.617	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	71.31	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1370	100.000
B - Eagle Way West		ONE HOUR	✓	202	100.000
C - A12 South		ONE HOUR	✓	2014	100.000
D - Barrack Square East		ONE HOUR	✓	250	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1313	56
	B - Eagle Way West	47	0	128	27
	C - A12 South	1469	30	0	515
	D - Barrack Square East	87	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	11	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	72.74	31.0	F	1257	1886
B - Eagle Way West	1.66	610.97	42.5	F	185	278
C - A12 South	0.95	26.87	15.6	D	1848	2773
D - Barrack Square East	0.45	10.64	0.8	B	230	345

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1032	258	502	1595	0.647	1024	1201	0.0	1.8	6.236	A
B - Eagle Way West	152	38	1552	512	0.297	150	31	0.0	0.4	9.919	A
C - A12 South	1516	379	74	2349	0.646	1509	1192	0.0	1.8	4.252	A
D - Barrack Square East	188	47	1078	824	0.229	187	449	0.0	0.3	5.646	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1232	308	600	1537	0.802	1224	1436	1.8	3.8	11.217	B

B - Eagle Way West	181	45	1856	352	0.515	179	37	0.4	1.0	20.523	C
C - A12 South	1811	453	88	2340	0.774	1805	1423	1.8	3.3	6.650	A
D - Barrack Square East	225	56	1287	719	0.313	224	536	0.3	0.5	7.273	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1509	377	669	1495	1.009	1439	1717	3.8	21.3	41.770	E
B - Eagle Way West	222	56	2241	150	1.478	145	44	1.0	20.3	311.166	F
C - A12 South	2218	554	108	2328	0.953	2178	1639	3.3	13.4	20.059	C
D - Barrack Square East	276	69	1472	625	0.441	274	636	0.5	0.8	10.228	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1509	377	669	1495	1.009	1470	1738	21.3	31.0	72.735	F
B - Eagle Way West	222	56	2273	134	1.660	134	45	20.3	42.5	610.974	F
C - A12 South	2218	554	108	2328	0.953	2209	1661	13.4	15.6	26.868	D
D - Barrack Square East	276	69	1494	614	0.449	276	644	0.8	0.8	10.642	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1232	308	719	1468	0.839	1332	1507	31.0	6.0	36.423	E
B - Eagle Way West	181	45	1910	324	0.560	316	38	42.5	8.7	297.207	F
C - A12 South	1811	453	89	2340	0.774	1859	1615	15.6	3.5	8.202	A
D - Barrack Square East	225	56	1479	625	0.360	226	573	0.8	0.6	9.038	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1032	258	533	1577	0.654	1048	1220	6.0	1.9	6.997	A
B - Eagle Way West	152	38	1567	504	0.302	185	31	8.7	0.4	12.492	B
C - A12 South	1516	379	75	2348	0.646	1523	1237	3.5	1.8	4.397	A
D - Barrack Square East	188	47	1122	802	0.235	190	458	0.6	0.3	5.886	A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	456.10	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1414	100.000
B - Eagle Way West		ONE HOUR	✓	225	100.000
C - A12 South		ONE HOUR	✓	2383	100.000
D - Barrack Square East		ONE HOUR	✓	517	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	20	1327	67
	B - Eagle Way West	58	0	144	23
	C - A12 South	1545	72	1	765
	D - Barrack Square East	184	20	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	10	3
	B - Eagle Way West	4	0	0	5
	C - A12 South	13	5	0	2
	D - Barrack Square East	1	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.11	201.37	90.2	F	1297	1946
B - Eagle Way West	3.11	5021.87	141.3	F	207	310
C - A12 South	1.17	293.51	199.3	F	2187	3281
D - Barrack Square East	0.86	35.10	5.2	E	475	712

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1064	266	696	1451	0.733	1054	1335	0.0	2.7	8.836	A
B - Eagle Way West	170	42	1865	355	0.478	166	84	0.0	0.9	18.744	C
C - A12 South	1794	449	168	2297	0.781	1781	1328	0.0	3.4	6.803	A
D - Barrack Square East	389	97	1110	812	0.479	386	639	0.0	0.9	8.373	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1271	318	797	1393	0.912	1249	1574	2.7	8.1	22.208	C

B - Eagle Way West	202	51	2211	171	1.182	160	99	0.9	11.5	206.546	F
C - A12 South	2143	536	201	2278	0.941	2110	1554	3.4	11.7	18.602	C
D - Barrack Square East	465	116	1293	716	0.650	462	754	0.9	1.8	13.966	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1556	389	785	1400	1.112	1386	1677	8.1	50.7	86.947	F
B - Eagle Way West	248	62	2378	84	2.962	84	109	11.5	52.6	1435.353	F
C - A12 South	2624	656	241	2254	1.164	2246	1692	11.7	106.1	101.199	F
D - Barrack Square East	569	142	1375	670	0.850	558	796	1.8	4.7	29.399	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1556	389	784	1401	1.111	1398	1682	50.7	90.2	189.098	F
B - Eagle Way West	248	62	2386	80	3.115	80	110	52.6	94.7	3021.785	F
C - A12 South	2624	656	245	2252	1.165	2251	1706	106.1	199.3	248.020	F
D - Barrack Square East	569	142	1384	665	0.856	567	798	4.7	5.2	35.095	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1271	318	795	1394	0.911	1379	1659	90.2	63.1	201.371	F
B - Eagle Way West	202	51	2364	90	2.246	90	106	94.7	122.8	4194.037	F
C - A12 South	2143	536	208	2273	0.943	2262	1640	199.3	169.6	293.505	F
D - Barrack Square East	465	116	1372	672	0.692	476	801	5.2	2.4	19.355	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1064	266	804	1389	0.766	1302	1643	63.1	3.8	76.208	F
B - Eagle Way West	170	42	2351	95	1.776	95	103	122.8	141.3	5021.866	F
C - A12 South	1794	449	175	2293	0.783	2279	1521	169.6	48.3	174.025	F
D - Barrack Square East	389	97	1302	709	0.549	394	804	2.4	1.3	11.578	B

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	52.06	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1356	100.000
B - Eagle Way West		ONE HOUR	✓	196	100.000
C - A12 South		ONE HOUR	✓	1958	100.000
D - Barrack Square East		ONE HOUR	✓	617	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	56	1181	118
	B - Eagle Way West	61	0	97	37
	C - A12 South	1549	104	0	305
	D - Barrack Square East	154	32	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	10	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	9	2	0	2
	D - Barrack Square East	3	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.94	31.81	12.4	D	1245	1867
B - Eagle Way West	1.11	228.45	14.8	F	179	269
C - A12 South	0.94	23.74	13.3	C	1797	2695
D - Barrack Square East	1.06	137.24	27.5	F	566	849

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1021	255	330	1664	0.614	1015	1322	0.0	1.6	5.492	A
B - Eagle Way West	147	37	1506	546	0.269	146	144	0.0	0.4	8.955	A
C - A12 South	1474	369	182	2332	0.632	1467	1277	0.0	1.7	4.130	A
D - Barrack Square East	464	116	999	886	0.524	460	345	0.0	1.1	8.372	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1219	305	394	1628	0.749	1214	1580	1.6	2.9	8.597	A

B - Eagle Way West	176	44	1800	396	0.444	174	172	0.4	0.8	16.140	C
C - A12 South	1760	440	218	2311	0.762	1755	1527	1.7	3.1	6.408	A
D - Barrack Square East	554	139	1195	781	0.710	550	413	1.1	2.3	15.253	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1493	373	460	1590	0.939	1463	1893	2.9	10.6	23.978	C
B - Eagle Way West	215	54	2166	208	1.035	187	206	0.8	7.9	115.485	F
C - A12 South	2156	539	251	2291	0.941	2121	1801	3.1	11.7	18.390	C
D - Barrack Square East	679	170	1428	655	1.037	624	494	2.3	16.2	70.117	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1493	373	465	1587	0.941	1486	1918	10.6	12.4	31.808	D
B - Eagle Way West	215	54	2195	193	1.114	188	208	7.9	14.8	228.452	F
C - A12 South	2156	539	255	2288	0.942	2149	1830	11.7	13.3	23.736	C
D - Barrack Square East	679	170	1450	643	1.056	634	501	16.2	27.5	137.244	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1219	305	440	1601	0.762	1256	1659	12.4	3.3	11.409	B
B - Eagle Way West	176	44	1869	361	0.487	231	181	14.8	1.0	39.631	E
C - A12 South	1760	440	250	2291	0.768	1800	1662	13.3	3.4	7.892	A
D - Barrack Square East	554	139	1261	746	0.743	651	435	27.5	3.3	58.847	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1021	255	335	1661	0.615	1028	1337	3.3	1.6	5.742	A
B - Eagle Way West	147	37	1522	538	0.274	150	146	1.0	0.4	9.325	A
C - A12 South	1474	369	187	2330	0.633	1481	1299	3.4	1.7	4.274	A
D - Barrack Square East	464	116	1013	878	0.529	473	349	3.3	1.1	9.055	A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	42.79	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1386	100.000
B - Eagle Way West		ONE HOUR	✓	157	100.000
C - A12 South		ONE HOUR	✓	1900	100.000
D - Barrack Square East		ONE HOUR	✓	640	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	70	1205	111
	B - Eagle Way West	45	0	94	19
	C - A12 South	1511	145	1	243
	D - Barrack Square East	171	46	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	6	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	4	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	22.12	8.8	C	1272	1906
B - Eagle Way West	0.60	31.37	1.4	D	144	216
C - A12 South	0.89	13.78	7.7	B	1744	2615
D - Barrack Square East	1.10	179.37	38.4	F	587	881

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1044	261	267	1753	0.595	1038	1293	0.0	1.5	4.993	A
B - Eagle Way West	118	30	1443	617	0.191	117	196	0.0	0.2	7.184	A
C - A12 South	1431	358	214	2396	0.597	1425	1289	0.0	1.5	3.683	A
D - Barrack Square East	482	120	1026	891	0.541	477	279	0.0	1.2	8.605	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1246	312	319	1722	0.724	1242	1547	1.5	2.5	7.429	A

B - Eagle Way West	141	35	1726	475	0.297	140	234	0.2	0.4	10.730	B
C - A12 South	1708	427	255	2370	0.721	1704	1542	1.5	2.5	5.369	A
D - Barrack Square East	576	144	1228	786	0.732	570	334	1.2	2.6	16.218	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1526	382	387	1682	0.908	1504	1864	2.5	8.0	18.411	C
B - Eagle Way West	173	43	2082	295	0.586	169	280	0.4	1.3	27.862	D
C - A12 South	2092	523	289	2350	0.890	2073	1827	2.5	7.2	12.273	B
D - Barrack Square East	705	176	1487	652	1.082	629	405	2.6	21.4	85.614	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1526	382	392	1679	0.909	1523	1881	8.0	8.8	22.117	C
B - Eagle Way West	173	43	2100	286	0.604	172	282	1.3	1.4	31.375	D
C - A12 South	2092	523	292	2347	0.891	2090	1850	7.2	7.7	13.778	B
D - Barrack Square East	705	176	1506	642	1.098	637	409	21.4	38.4	179.373	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1246	312	326	1718	0.725	1271	1605	8.8	2.7	8.461	A
B - Eagle Way West	141	35	1786	445	0.317	145	247	1.4	0.5	12.138	B
C - A12 South	1708	427	306	2339	0.730	1728	1666	7.7	2.8	6.073	A
D - Barrack Square East	576	144	1257	771	0.746	715	340	38.4	3.6	92.536	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1044	261	270	1752	0.596	1049	1306	2.7	1.5	5.157	A
B - Eagle Way West	118	30	1457	610	0.194	119	198	0.5	0.2	7.340	A
C - A12 South	1431	358	219	2393	0.598	1436	1309	2.8	1.5	3.782	A
D - Barrack Square East	482	120	1037	886	0.544	491	281	3.6	1.2	9.336	A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	864	100.000
B - Eagle Way West		ONE HOUR	✓	80	100.000
C - A12 South		ONE HOUR	✓	840	100.000
D - Barrack Square East		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	822	40
	B - Eagle Way West	17	0	57	6
	C - A12 South	667	10	0	163
	D - Barrack Square East	4	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	9	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.54	4.48	1.2	A	793	1190
B - Eagle Way West	0.10	4.72	0.1	A	73	110
C - A12 South	0.38	2.40	0.6	A	771	1156
D - Barrack Square East	0.09	4.49	0.1	A	67	101

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	651	163	170	1801	0.361	649	517	0.0	0.6	3.119	A
B - Eagle Way West	60	15	626	1001	0.060	60	15	0.0	0.1	3.825	A
C - A12 South	632	158	10	2428	0.260	631	706	0.0	0.4	2.003	A
D - Barrack Square East	55	14	661	1038	0.053	55	157	0.0	0.1	3.660	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	777	194	203	1781	0.436	776	618	0.6	0.8	3.578	A

B - Eagle Way West	72	18	749	938	0.077	72	17	0.1	0.1	4.158	A
C - A12 South	755	189	12	2427	0.311	754	845	0.4	0.5	2.153	A
D - Barrack Square East	66	16	792	973	0.068	66	188	0.1	0.1	3.968	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	952	238	249	1755	0.542	950	757	0.8	1.2	4.465	A
B - Eagle Way West	88	22	917	851	0.103	88	21	0.1	0.1	4.719	A
C - A12 South	925	231	15	2425	0.381	924	1035	0.5	0.6	2.397	A
D - Barrack Square East	80	20	969	884	0.091	80	230	0.1	0.1	4.481	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	952	238	249	1755	0.542	952	757	1.2	1.2	4.484	A
B - Eagle Way West	88	22	918	850	0.103	88	21	0.1	0.1	4.721	A
C - A12 South	925	231	15	2425	0.381	925	1036	0.6	0.6	2.399	A
D - Barrack Square East	80	20	971	883	0.091	80	230	0.1	0.1	4.485	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	777	194	203	1781	0.436	779	619	1.2	0.8	3.596	A
B - Eagle Way West	72	18	750	937	0.077	72	17	0.1	0.1	4.163	A
C - A12 South	755	189	12	2427	0.311	756	848	0.6	0.5	2.154	A
D - Barrack Square East	66	16	794	972	0.068	66	188	0.1	0.1	3.974	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	651	163	170	1800	0.361	652	518	0.8	0.6	3.135	A
B - Eagle Way West	60	15	628	1000	0.060	60	15	0.1	0.1	3.830	A
C - A12 South	632	158	10	2428	0.260	633	709	0.5	0.4	2.005	A
D - Barrack Square East	55	14	665	1037	0.053	55	157	0.1	0.1	3.667	A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	90.37	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1432	100.000
B - Eagle Way West		ONE HOUR	✓	209	100.000
C - A12 South		ONE HOUR	✓	2029	100.000
D - Barrack Square East		ONE HOUR	✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1370	61
	B - Eagle Way West	48	0	133	28
	C - A12 South	1483	31	0	515
	D - Barrack Square East	151	10	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	7	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	108.99	51.7	F	1314	1972
B - Eagle Way West	1.87	723.86	51.7	F	192	288
C - A12 South	0.95	25.91	15.1	D	1862	2793
D - Barrack Square East	0.56	13.35	1.3	B	289	433

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1078	270	507	1599	0.675	1070	1260	0.0	2.0	6.715	A
B - Eagle Way West	158	39	1611	505	0.312	156	32	0.0	0.4	10.270	B
C - A12 South	1528	382	122	2386	0.640	1521	1237	0.0	1.8	4.130	A
D - Barrack Square East	237	59	1124	813	0.291	235	453	0.0	0.4	6.218	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1288	322	605	1540	0.836	1277	1507	2.0	4.7	13.171	B

B - Eagle Way West	188	47	1926	344	0.548	185	38	0.4	1.1	22.353	C
C - A12 South	1824	456	146	2371	0.769	1818	1477	1.8	3.2	6.447	A
D - Barrack Square East	283	71	1341	703	0.402	282	541	0.4	0.7	8.526	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1577	394	663	1504	1.048	1470	1800	4.7	31.4	54.922	F
B - Eagle Way West	231	58	2327	139	1.653	136	46	1.1	24.8	399.274	F
C - A12 South	2234	559	178	2351	0.950	2195	1660	3.2	13.0	19.501	C
D - Barrack Square East	346	87	1494	624	0.555	344	639	0.7	1.2	12.760	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1577	394	661	1505	1.048	1496	1821	31.4	51.7	108.990	F
B - Eagle Way West	231	58	2359	123	1.869	123	46	24.8	51.7	723.857	F
C - A12 South	2234	559	179	2350	0.951	2226	1678	13.0	15.1	25.910	D
D - Barrack Square East	346	87	1511	615	0.563	346	646	1.2	1.3	13.347	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1288	322	715	1476	0.872	1451	1575	51.7	10.9	83.971	F
B - Eagle Way West	188	47	1979	317	0.594	311	39	51.7	21.0	406.926	F
C - A12 South	1824	456	147	2370	0.770	1871	1724	15.1	3.5	7.858	A
D - Barrack Square East	283	71	1587	580	0.487	284	579	1.3	1.0	12.195	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1078	270	575	1559	0.692	1113	1291	10.9	2.3	8.659	A
B - Eagle Way West	158	39	1626	497	0.317	240	32	21.0	0.5	19.518	C
C - A12 South	1528	382	124	2384	0.641	1534	1333	3.5	1.8	4.268	A
D - Barrack Square East	237	59	1218	766	0.309	239	469	1.0	0.5	6.853	A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	650.27	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1552	100.000
B - Eagle Way West		ONE HOUR	✓	234	100.000
C - A12 South		ONE HOUR	✓	2408	100.000
D - Barrack Square East		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	21	1454	78
	B - Eagle Way West	61	0	149	24
	C - A12 South	1567	75	1	765
	D - Barrack Square East	301	21	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	7	3
	B - Eagle Way West	4	0	0	5
	C - A12 South	9	5	0	2
	D - Barrack Square East	0	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.18	349.64	144.9	F	1424	2136
B - Eagle Way West	4.28	7614.16	177.1	F	214	322
C - A12 South	1.18	332.10	216.6	F	2210	3315
D - Barrack Square East	1.04	134.35	26.8	F	583	874

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1168	292	700	1486	0.786	1154	1439	0.0	3.5	10.457	B
B - Eagle Way West	176	44	1967	329	0.535	172	87	0.0	1.1	22.368	C
C - A12 South	1813	453	255	2305	0.786	1799	1423	0.0	3.6	6.926	A
D - Barrack Square East	478	119	1207	782	0.611	472	648	0.0	1.5	11.392	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1395	349	779	1439	0.969	1354	1686	3.5	13.8	32.252	D

B - Eagle Way West	210	53	2328	143	1.471	138	102	1.1	19.2	418.223	F
C - A12 South	2165	541	303	2277	0.951	2127	1632	3.6	13.0	20.247	C
D - Barrack Square East	571	143	1375	695	0.822	561	758	1.5	4.0	25.247	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1709	427	762	1449	1.179	1443	1783	13.8	80.1	126.364	F
B - Eagle Way West	257	64	2482	64	4.009	64	110	19.2	67.5	2405.124	F
C - A12 South	2651	663	348	2250	1.178	2244	1711	13.0	115.0	109.349	F
D - Barrack Square East	699	175	1413	673	1.038	646	793	4.0	17.3	75.788	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1709	427	760	1450	1.178	1450	1790	80.1	144.9	285.537	F
B - Eagle Way West	257	64	2490	60	4.280	60	111	67.5	116.8	4628.394	F
C - A12 South	2651	663	355	2246	1.181	2245	1722	115.0	216.6	269.778	F
D - Barrack Square East	699	175	1416	671	1.041	661	793	17.3	26.8	134.353	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1395	349	762	1449	0.963	1439	1781	144.9	134.0	349.641	F
B - Eagle Way West	210	53	2478	66	3.176	66	110	116.8	152.8	6372.334	F
C - A12 South	2165	541	348	2250	0.962	2240	1709	216.6	197.9	332.096	F
D - Barrack Square East	571	143	1410	675	0.846	647	791	26.8	7.9	102.540	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1168	292	785	1436	0.814	1425	1743	134.0	69.8	259.003	F
B - Eagle Way West	176	44	2450	78	2.241	78	106	152.8	177.1	7614.156	F
C - A12 South	1813	453	273	2295	0.790	2283	1631	197.9	80.3	220.705	F
D - Barrack Square East	478	119	1405	678	0.705	499	805	7.9	2.6	22.198	C

2034 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	134.26	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1586	100.000
B - Eagle Way West		ONE HOUR	✓	203	100.000
C - A12 South		ONE HOUR	✓	2136	100.000
D - Barrack Square East		ONE HOUR	✓	663	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	58	1328	199
	B - Eagle Way West	63	0	101	39
	C - A12 South	1723	108	0	305
	D - Barrack Square East	200	33	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	6	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	5	2	0	2
	D - Barrack Square East	2	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	104.70	55.2	F	1456	2184
B - Eagle Way West	1.69	680.84	43.4	F	186	280
C - A12 South	1.01	58.42	39.3	F	1960	2940
D - Barrack Square East	1.15	287.24	53.5	F	609	913

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1194	299	333	1722	0.694	1185	1487	0.0	2.2	6.610	A
B - Eagle Way West	153	38	1669	485	0.315	151	149	0.0	0.5	10.712	B
C - A12 South	1608	402	218	2373	0.678	1600	1388	0.0	2.1	4.607	A
D - Barrack Square East	500	125	1112	846	0.590	494	407	0.0	1.4	10.067	B

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1426	357	397	1684	0.847	1415	1775	2.2	5.1	12.855	B

B - Eagle Way West	183	46	1993	324	0.564	180	178	0.5	1.2	24.431	C
C - A12 South	1920	480	259	2348	0.818	1911	1654	2.1	4.3	8.089	A
D - Barrack Square East	596	149	1326	735	0.812	587	486	1.4	3.8	23.010	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1747	437	425	1668	1.047	1632	2061	5.1	33.6	52.832	F
B - Eagle Way West	224	56	2339	151	1.479	146	206	1.2	20.5	317.382	F
C - A12 South	2352	588	283	2333	1.008	2262	1847	4.3	26.7	32.865	D
D - Barrack Square East	731	183	1500	644	1.135	630	557	3.8	29.0	110.611	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1747	437	420	1670	1.046	1660	2088	33.6	55.2	104.701	F
B - Eagle Way West	224	56	2377	132	1.689	132	209	20.5	43.4	680.840	F
C - A12 South	2352	588	285	2332	1.008	2301	1865	26.7	39.3	58.418	F
D - Barrack Square East	731	183	1518	635	1.151	632	563	29.0	53.5	248.694	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1426	357	463	1645	0.867	1610	1923	55.2	9.3	76.042	F
B - Eagle Way West	183	46	2141	250	0.731	244	194	43.4	28.0	474.094	F
C - A12 South	1920	480	278	2336	0.822	2058	1869	39.3	4.9	18.812	C
D - Barrack Square East	596	149	1529	629	0.948	618	543	53.5	48.1	287.242	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1194	299	413	1675	0.713	1221	1594	9.3	2.6	8.396	A
B - Eagle Way West	153	38	1745	448	0.341	263	161	28.0	0.5	36.209	E
C - A12 South	1608	402	287	2331	0.690	1619	1597	4.9	2.3	5.132	A
D - Barrack Square East	500	125	1199	802	0.623	685	436	48.1	1.8	77.184	F

2034 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	102.91	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1609	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	2055	100.000
D - Barrack Square East		ONE HOUR	✓	689	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	73	1355	181
	B - Eagle Way West	46	0	97	19
	C - A12 South	1660	151	1	243
	D - Barrack Square East	218	47	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	2	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.02	76.91	39.8	F	1476	2214
B - Eagle Way West	0.86	93.28	4.3	F	150	224
C - A12 South	0.96	29.03	17.2	D	1886	2829
D - Barrack Square East	1.25	388.06	79.2	F	632	948

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1211	303	270	1809	0.669	1203	1441	0.0	2.0	5.866	A
B - Eagle Way West	123	31	1589	552	0.222	122	203	0.0	0.3	8.347	A
C - A12 South	1547	387	252	2396	0.646	1540	1402	0.0	1.8	4.172	A
D - Barrack Square East	519	130	1141	851	0.610	513	332	0.0	1.5	10.462	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1446	362	323	1777	0.814	1438	1721	2.0	4.1	10.354	B

B - Eagle Way West	147	37	1898	398	0.368	145	242	0.3	0.6	14.201	B
C - A12 South	1848	462	299	2366	0.781	1841	1672	1.8	3.4	6.768	A
D - Barrack Square East	619	155	1363	739	0.838	608	397	1.5	4.4	25.496	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1771	443	385	1739	1.019	1685	2034	4.1	25.6	41.499	E
B - Eagle Way West	179	45	2249	222	0.808	169	281	0.6	3.1	60.199	F
C - A12 South	2263	566	312	2358	0.960	2218	1898	3.4	14.5	21.128	C
D - Barrack Square East	759	190	1598	621	1.222	613	472	4.4	40.9	149.618	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1771	443	392	1734	1.021	1714	2060	25.6	39.8	76.908	F
B - Eagle Way West	179	45	2278	208	0.865	175	285	3.1	4.3	93.281	F
C - A12 South	2263	566	311	2359	0.959	2252	1921	14.5	17.2	29.030	D
D - Barrack Square East	759	190	1626	606	1.251	605	480	40.9	79.2	359.474	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1446	362	341	1766	0.819	1585	1790	39.8	5.0	31.197	D
B - Eagle Way West	147	37	1970	362	0.405	161	257	4.3	0.7	19.098	C
C - A12 South	1848	462	326	2350	0.786	1901	1838	17.2	3.8	8.929	A
D - Barrack Square East	619	155	1504	668	0.927	660	423	79.2	69.1	388.059	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1211	303	274	1807	0.670	1223	1540	5.0	2.1	6.278	A
B - Eagle Way West	123	31	1689	503	0.244	124	224	0.7	0.3	9.547	A
C - A12 South	1547	387	358	2329	0.664	1555	1589	3.8	2.0	4.691	A
D - Barrack Square East	519	130	1160	841	0.616	788	336	69.1	1.9	140.976	F

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	865	100.000
B - Eagle Way West		ONE HOUR	✓	80	100.000
C - A12 South		ONE HOUR	✓	840	100.000
D - Barrack Square East		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	823	40
	B - Eagle Way West	17	0	57	6
	C - A12 South	668	10	0	163
	D - Barrack Square East	4	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	9	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.54	4.49	1.2	A	794	1191
B - Eagle Way West	0.10	4.72	0.1	A	73	110
C - A12 South	0.38	2.40	0.6	A	771	1157
D - Barrack Square East	0.09	4.49	0.1	A	67	101

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	651	163	170	1801	0.362	649	517	0.0	0.6	3.120	A
B - Eagle Way West	60	15	627	1001	0.060	60	15	0.0	0.1	3.826	A
C - A12 South	633	158	10	2428	0.261	631	707	0.0	0.4	2.004	A
D - Barrack Square East	55	14	662	1038	0.053	55	157	0.0	0.1	3.661	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	778	194	203	1781	0.437	777	618	0.6	0.8	3.579	A

B - Eagle Way West	72	18	750	937	0.077	72	17	0.1	0.1	4.159	A
C - A12 South	755	189	12	2427	0.311	755	846	0.4	0.5	2.153	A
D - Barrack Square East	66	16	792	972	0.068	66	188	0.1	0.1	3.969	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	952	238	249	1755	0.543	951	757	0.8	1.2	4.468	A
B - Eagle Way West	88	22	918	850	0.103	88	21	0.1	0.1	4.721	A
C - A12 South	925	231	15	2425	0.382	925	1035	0.5	0.6	2.398	A
D - Barrack Square East	80	20	970	883	0.091	80	230	0.1	0.1	4.482	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	952	238	249	1755	0.543	952	758	1.2	1.2	4.487	A
B - Eagle Way West	88	22	919	850	0.104	88	21	0.1	0.1	4.723	A
C - A12 South	925	231	15	2425	0.382	925	1037	0.6	0.6	2.400	A
D - Barrack Square East	80	20	971	883	0.091	80	230	0.1	0.1	4.487	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	778	194	203	1781	0.437	779	619	1.2	0.8	3.600	A
B - Eagle Way West	72	18	751	937	0.077	72	17	0.1	0.1	4.165	A
C - A12 South	755	189	12	2427	0.311	756	848	0.6	0.5	2.157	A
D - Barrack Square East	66	16	795	971	0.068	66	188	0.1	0.1	3.976	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	651	163	170	1801	0.362	652	519	0.8	0.6	3.136	A
B - Eagle Way West	60	15	629	1000	0.060	60	15	0.1	0.1	3.831	A
C - A12 South	633	158	10	2428	0.261	633	710	0.5	0.4	2.007	A
D - Barrack Square East	55	14	665	1036	0.053	55	157	0.1	0.1	3.667	A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	89.99	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1432	100.000
B - Eagle Way West		ONE HOUR	✓	209	100.000
C - A12 South		ONE HOUR	✓	2021	100.000
D - Barrack Square East		ONE HOUR	✓	319	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1370	61
	B - Eagle Way West	48	0	133	28
	C - A12 South	1475	31	0	515
	D - Barrack Square East	156	10	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	7	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	109.19	51.8	F	1314	1971
B - Eagle Way West	1.86	719.16	51.4	F	192	288
C - A12 South	0.95	25.44	14.8	D	1855	2782
D - Barrack Square East	0.57	13.60	1.3	B	293	440

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1078	270	507	1599	0.675	1070	1258	0.0	2.0	6.714	A
B - Eagle Way West	158	39	1608	505	0.312	156	32	0.0	0.4	10.253	B
C - A12 South	1522	380	125	2381	0.639	1515	1237	0.0	1.7	4.122	A
D - Barrack Square East	240	60	1124	813	0.296	239	453	0.0	0.4	6.251	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1288	322	605	1540	0.836	1277	1504	2.0	4.7	13.170	B

B - Eagle Way West	188	47	1923	345	0.547	186	38	0.4	1.1	22.261	C
C - A12 South	1817	454	150	2366	0.768	1811	1477	1.7	3.2	6.422	A
D - Barrack Square East	287	72	1341	703	0.408	286	541	0.4	0.7	8.604	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1577	394	663	1504	1.048	1470	1798	4.7	31.4	54.983	F
B - Eagle Way West	231	58	2325	140	1.648	136	46	1.1	24.7	395.969	F
C - A12 South	2226	556	183	2346	0.949	2187	1660	3.2	12.8	19.267	C
D - Barrack Square East	352	88	1494	624	0.563	349	639	0.7	1.2	12.977	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1577	394	661	1505	1.048	1496	1818	31.4	51.8	109.195	F
B - Eagle Way West	231	58	2356	124	1.859	124	46	24.7	51.4	719.155	F
C - A12 South	2226	556	184	2345	0.949	2218	1678	12.8	14.8	25.435	D
D - Barrack Square East	352	88	1511	616	0.571	351	646	1.2	1.3	13.597	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1288	322	715	1476	0.872	1451	1572	51.8	11.0	84.304	F
B - Eagle Way West	188	47	1975	318	0.592	312	39	51.4	20.5	401.614	F
C - A12 South	1817	454	151	2365	0.768	1863	1725	14.8	3.4	7.780	A
D - Barrack Square East	287	72	1588	580	0.495	288	579	1.3	1.0	12.381	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1078	270	573	1560	0.691	1113	1288	11.0	2.3	8.652	A
B - Eagle Way West	158	39	1624	498	0.317	238	32	20.5	0.5	19.021	C
C - A12 South	1522	380	127	2380	0.639	1528	1332	3.4	1.8	4.259	A
D - Barrack Square East	240	60	1217	767	0.313	243	469	1.0	0.5	6.889	A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	661.53	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1572	100.000
B - Eagle Way West		ONE HOUR	✓	234	100.000
C - A12 South		ONE HOUR	✓	2403	100.000
D - Barrack Square East		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	21	1474	78
	B - Eagle Way West	61	0	149	24
	C - A12 South	1562	75	1	765
	D - Barrack Square East	301	21	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	7	3
	B - Eagle Way West	4	0	0	5
	C - A12 South	9	5	0	2
	D - Barrack Square East	0	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.20	392.01	159.2	F	1443	2164
B - Eagle Way West	4.28	7609.21	177.0	F	214	322
C - A12 South	1.18	329.61	214.9	F	2205	3308
D - Barrack Square East	1.04	135.74	27.1	F	583	874

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1184	296	700	1484	0.798	1169	1435	0.0	3.7	10.962	B
B - Eagle Way West	176	44	1964	329	0.534	172	87	0.0	1.1	22.257	C
C - A12 South	1809	452	255	2302	0.786	1795	1438	0.0	3.5	6.915	A
D - Barrack Square East	478	119	1221	774	0.618	472	648	0.0	1.6	11.689	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1413	353	780	1437	0.984	1364	1682	3.7	16.0	35.862	E

B - Eagle Way West	210	53	2323	144	1.462	138	102	1.1	19.0	412.127	F
C - A12 South	2160	540	303	2274	0.950	2123	1643	3.5	12.9	20.109	C
D - Barrack Square East	571	143	1386	688	0.830	560	758	1.6	4.2	26.335	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1731	433	763	1446	1.197	1442	1780	16.0	88.2	138.943	F
B - Eagle Way West	257	64	2479	64	4.008	64	110	19.0	67.3	2393.754	F
C - A12 South	2646	661	347	2247	1.177	2241	1711	12.9	114.1	108.693	F
D - Barrack Square East	699	175	1413	672	1.040	646	792	4.2	17.5	76.975	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1731	433	760	1448	1.196	1447	1787	88.2	159.2	313.542	F
B - Eagle Way West	257	64	2487	60	4.282	60	110	67.3	116.6	4621.505	F
C - A12 South	2646	661	355	2243	1.180	2242	1721	114.1	214.9	268.124	F
D - Barrack Square East	699	175	1415	671	1.042	661	793	17.5	27.1	135.738	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1413	353	763	1446	0.977	1437	1778	159.2	153.2	392.008	F
B - Eagle Way West	210	53	2475	66	3.179	66	110	116.6	152.6	6366.635	F
C - A12 South	2160	540	348	2247	0.961	2237	1709	214.9	195.8	329.610	F
D - Barrack Square East	571	143	1410	674	0.847	647	791	27.1	8.0	104.256	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1184	296	786	1433	0.826	1424	1740	153.2	93.1	312.528	F
B - Eagle Way West	176	44	2447	78	2.242	78	106	152.6	177.0	7609.213	F
C - A12 South	1809	452	273	2292	0.789	2280	1632	195.8	78.1	217.637	F
D - Barrack Square East	478	119	1405	677	0.706	500	805	8.0	2.6	22.453	C

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	127.15	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1577	100.000
B - Eagle Way West		ONE HOUR	✓	203	100.000
C - A12 South		ONE HOUR	✓	2132	100.000
D - Barrack Square East		ONE HOUR	✓	663	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	58	1319	199
	B - Eagle Way West	63	0	101	39
	C - A12 South	1718	108	0	305
	D - Barrack Square East	200	33	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	6	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	5	2	0	2
	D - Barrack Square East	2	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.04	95.24	49.3	F	1447	2171
B - Eagle Way West	1.68	670.71	43.0	F	186	280
C - A12 South	1.01	56.99	38.1	F	1956	2934
D - Barrack Square East	1.15	266.93	52.3	F	609	913

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1187	297	333	1727	0.688	1179	1483	0.0	2.1	6.469	A
B - Eagle Way West	153	38	1666	487	0.314	151	149	0.0	0.4	10.662	B
C - A12 South	1605	401	218	2373	0.676	1597	1381	0.0	2.1	4.589	A
D - Barrack Square East	500	125	1105	852	0.587	494	407	0.0	1.4	9.921	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1418	354	397	1689	0.839	1407	1771	2.1	4.8	12.319	B

B - Eagle Way West	183	46	1989	326	0.560	180	178	0.4	1.2	24.142	C
C - A12 South	1916	479	260	2348	0.816	1908	1646	2.1	4.2	8.023	A
D - Barrack Square East	596	149	1319	741	0.805	587	486	1.4	3.7	22.237	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1736	434	426	1672	1.038	1633	2059	4.8	30.8	49.422	E
B - Eagle Way West	224	56	2337	152	1.469	147	206	1.2	20.3	312.057	F
C - A12 South	2347	587	284	2333	1.006	2260	1848	4.2	26.1	32.341	D
D - Barrack Square East	731	183	1500	647	1.130	632	558	3.7	28.3	107.898	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1736	434	421	1675	1.037	1662	2087	30.8	49.3	95.243	F
B - Eagle Way West	224	56	2375	133	1.677	133	210	20.3	43.0	670.711	F
C - A12 South	2347	587	286	2331	1.007	2299	1867	26.1	38.1	56.988	F
D - Barrack Square East	731	183	1519	637	1.147	634	565	28.3	52.3	241.759	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1418	354	464	1650	0.859	1584	1920	49.3	7.8	62.327	F
B - Eagle Way West	183	46	2137	252	0.724	246	194	43.0	27.0	463.156	F
C - A12 South	1916	479	282	2334	0.821	2049	1856	38.1	4.9	18.109	C
D - Barrack Square East	596	149	1507	644	0.927	632	541	52.3	43.5	266.932	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1187	297	410	1682	0.706	1208	1584	7.8	2.5	7.934	A
B - Eagle Way West	153	38	1736	453	0.338	259	160	27.0	0.5	33.016	D
C - A12 South	1605	401	280	2335	0.687	1615	1571	4.9	2.2	5.076	A
D - Barrack Square East	500	125	1185	811	0.616	667	434	43.5	1.7	58.750	F

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	103.67	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1612	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	2050	100.000
D - Barrack Square East		ONE HOUR	✓	688	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	73	1358	181
	B - Eagle Way West	46	0	97	19
	C - A12 South	1656	151	1	243
	D - Barrack Square East	217	47	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	2	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.02	78.90	41.1	F	1479	2219
B - Eagle Way West	0.85	89.07	4.1	F	150	224
C - A12 South	0.96	28.10	16.6	D	1882	2822
D - Barrack Square East	1.25	391.98	79.3	F	632	948

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1214	303	270	1809	0.671	1206	1437	0.0	2.0	5.888	A
B - Eagle Way West	123	31	1585	554	0.222	122	203	0.0	0.3	8.309	A
C - A12 South	1544	386	251	2396	0.644	1537	1404	0.0	1.8	4.155	A
D - Barrack Square East	518	130	1143	850	0.610	512	332	0.0	1.5	10.486	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1449	362	323	1777	0.816	1440	1716	2.0	4.2	10.437	B

B - Eagle Way West	147	37	1893	400	0.366	145	242	0.3	0.6	14.073	B
C - A12 South	1843	461	298	2367	0.779	1837	1675	1.8	3.4	6.711	A
D - Barrack Square East	619	155	1366	737	0.839	607	397	1.5	4.4	25.637	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1775	444	385	1738	1.021	1687	2029	4.2	26.2	42.214	E
B - Eagle Way West	179	45	2245	224	0.800	170	281	0.6	3.0	58.518	F
C - A12 South	2258	564	311	2358	0.957	2215	1900	3.4	14.1	20.682	C
D - Barrack Square East	758	190	1600	620	1.223	612	472	4.4	40.9	150.108	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1775	444	393	1734	1.024	1715	2055	26.2	41.1	78.901	F
B - Eagle Way West	179	45	2273	210	0.854	175	285	3.0	4.1	89.067	F
C - A12 South	2258	564	310	2359	0.957	2248	1923	14.1	16.6	28.104	D
D - Barrack Square East	758	190	1628	605	1.252	605	480	40.9	79.3	360.807	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1449	362	340	1766	0.820	1593	1782	41.1	5.1	32.927	D
B - Eagle Way West	147	37	1962	366	0.401	160	257	4.1	0.7	18.588	C
C - A12 South	1843	461	324	2350	0.784	1895	1843	16.6	3.8	8.734	A
D - Barrack Square East	619	155	1511	665	0.931	656	423	79.3	69.9	391.977	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1214	303	273	1807	0.672	1225	1537	5.1	2.1	6.312	A
B - Eagle Way West	123	31	1686	504	0.243	124	224	0.7	0.3	9.504	A
C - A12 South	1544	386	359	2329	0.663	1551	1594	3.8	2.0	4.671	A
D - Barrack Square East	518	130	1163	840	0.617	791	336	69.9	1.9	144.952	F

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: 2019.10.18_J23_Model_CV_v12.j9
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 Report generation date: 16/03/2020 13:57:55

- »Base Year, 6-7 AM
- »Base Year, 7-8 AM
- »Base Year, 8-9 AM
- »Base Year, 3-4 PM
- »Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
- »2023 Reference Case, 8-9 AM
- »2023 Reference Case, 3-4 PM
- »2023 Reference Case, 5-6 PM
- »2023 Early Years, 6-7 AM
- »2023 Early Years, 7-8 AM
- »2023 Early Years, 8-9 AM
- »2023 Early Years, 3-4 PM
- »2023 Early Years, 5-6 PM
- »2028 Reference Case, 6-7 AM
- »2028 Reference Case, 7-8 AM
- »2028 Reference Case, 8-9 AM
- »2028 Reference Case, 3-4 PM
- »2028 Reference Case, 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case, 6-7 AM
- »2034 Reference Case, 7-8 AM
- »2034 Reference Case, 8-9 AM
- »2034 Reference Case, 3-4 PM
- »2034 Reference Case, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
Base Year																									
A - A12 North	D1	0.9	3.96	0.48	A	D2	18.1	47.41	0.97	E	D3	75.7	167.68	1.10	F	D4	7.7	20.20	0.89	C	D5	7.1	17.51	0.89	C
B - Eagle Way West		0.1	4.22	0.08	A		1.1	21.03	0.53	C		40.8	655.46	1.69	F		1.1	22.33	0.53	C		0.6	14.04	0.37	B
C - A12 South		0.5	2.22	0.32	A		3.4	6.65	0.78	A		40.2	57.84	1.01	F		4.3	8.11	0.81	A		3.8	7.22	0.80	A
D - Barrack Square East		0.1	4.16	0.08	A		0.5	8.86	0.33	A		1.3	12.83	0.58	B		11.2	70.95	0.96	F		13.3	81.96	0.98	F
2023 Reference Case																									
A - A12 North	D6	1.1	4.20	0.51	A	D7	48.2	104.52	1.05	F	D8	96.9	227.48	1.13	F	D9	22.6	52.28	0.99	F	D10	13.8	32.22	0.95	D
B - Eagle Way West		0.1	4.42	0.09	A		2.1	38.54	0.70	E		78.0	1470.38	2.06	F		1.6	29.80	0.63	D		0.7	14.75	0.40	B
C - A12 South		0.5	2.28	0.35	A		4.6	8.47	0.82	A		105.2	128.39	1.08	F		5.0	9.34	0.84	A		3.9	7.47	0.80	A
D - Barrack Square East		0.1	4.33	0.08	A		0.5	9.49	0.35	A		1.4	13.54	0.59	B		28.8	160.19	1.08	F		29.2	160.64	1.08	F
2023 Early Years																									
A - A12 North	D11	1.1	4.39	0.54	A	D12	95.0	199.43	1.11	F	D13	95.0	218.88	1.12	F	D14	81.0	150.35	1.09	F	D15	19.1	43.89	0.97	E
B - Eagle Way West		0.1	4.79	0.10	A		29.7	442.66	1.40	F		82.8	1734.94	2.11	F		3.2	59.87	0.79	F		0.7	16.64	0.43	C
C - A12 South		0.7	2.51	0.40	A		14.9	25.56	0.95	D		151.7	196.82	1.12	F		7.8	14.00	0.89	B		4.6	8.49	0.82	A
D - Barrack Square East		0.1	4.42	0.09	A		0.5	9.52	0.35	A		1.5	13.96	0.60	B		39.4	250.96	1.13	F		35.4	192.59	1.11	F
2028 Reference Case																									
A - A12 North	D16	1.0	4.18	0.51	A	D17	26.0	64.04	1.00	F	D18	63.5	139.71	1.07	F	D19	8.7	22.71	0.91	C	D20	5.5	14.05	0.85	B
B - Eagle Way West		0.1	4.50	0.10	A		8.2	135.04	0.97	F		111.8	2124.35	2.96	F		8.5	142.91	0.99	F		1.6	35.55	0.64	E
C - A12 South		0.5	2.31	0.35	A		6.5	11.69	0.87	B		138.1	173.01	1.11	F		10.1	18.04	0.92	C		8.5	15.16	0.90	C
D - Barrack Square East		0.1	4.31	0.09	A		0.8	10.70	0.45	B		4.4	29.66	0.83	D		20.3	105.17	1.02	F		23.5	115.63	1.03	F
2028 Peak Construction																									
A - A12 North	D21	1.0	4.20	0.51	A	D22	19.7	50.62	0.98	F	D23	68.9	149.57	1.08	F	D24	11.6	30.20	0.94	D	D25	5.3	13.97	0.85	B
B - Eagle Way West		0.1	5.06	0.11	A		34.2	487.16	1.46	F		136.0	4711.09	3.02	F		10.6	172.50	1.03	F		1.6	34.24	0.63	D
C - A12 South		0.7	2.62	0.42	A		12.4	21.88	0.94	C		179.8	256.20	1.15	F		11.3	20.24	0.93	C		8.2	14.77	0.90	B
D - Barrack Square East		0.1	4.32	0.09	A		0.8	10.28	0.44	B		4.6	31.57	0.84	D		26.9	134.44	1.05	F		22.0	109.47	1.02	F
2034 Reference Case																									
A - A12 North	D26	1.1	4.32	0.53	A	D27	25.8	62.86	1.00	F	D28	50.1	111.31	1.05	F	D29	24.0	53.77	0.99	F	D30	9.9	23.67	0.92	C
B - Eagle Way West		0.1	4.61	0.10	A		35.4	485.59	1.44	F		157.3	4686.04	4.14	F		38.2	574.77	1.56	F		2.9	63.76	0.78	F
C - A12 South		0.6	2.34	0.37	A		10.3	18.09	0.92	C		162.6	228.88	1.14	F		28.2	44.86	0.99	E		12.6	21.89	0.94	C
D - Barrack Square East		0.1	4.40	0.09	A		1.1	12.40	0.54	B		21.3	108.26	1.02	F		47.3	213.01	1.13	F		53.6	231.44	1.15	F
2034 Operational Led																									

A - A12 North		1.1	4.33	0.53	A		33.0	76.60	1.01	F		75.2	157.38	1.09	F		27.4	60.12	1.00	F		10.1	24.21	0.92	C
B - Eagle Way West	D31	0.1	4.61	0.10	A	D32	33.4	458.03	1.40	F	D33	172.6	7287.98	4.21	F	D34	38.2	574.79	1.56	F	D35	2.3	50.14	0.73	F
C - A12 South		0.6	2.34	0.37	A		9.9	17.38	0.92	C		195.1	291.57	1.16	F		28.4	45.09	0.99	E		10.4	18.38	0.92	C
D - Barrack Square East		0.1	4.40	0.09	A		1.2	12.69	0.54	B		24.2	121.74	1.03	F		48.4	218.99	1.13	F		54.3	234.24	1.15	F

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / Eagle Way / Barrack Square
Location	52° 3'36.26"N, 1°16'35.87"E
Site number	23
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Eagle Way West	
C	A12 South	
D	Barrack Square East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.00	7.00	0.0	33.0	75.3	5.0	
B - Eagle Way West	3.50	7.50	12.7	29.9	75.3	26.0	
C - A12 South	7.60	7.60	0.0	27.3	75.3	6.5	
D - Barrack Square East	3.70	6.90	22.6	24.1	75.3	30.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-330
B - Eagle Way West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-350
C - A12 South	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	100
D - Barrack Square East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-350

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.607	2016
B - Eagle Way West	0.494	1364
C - A12 South	0.631	2621
D - Barrack Square East	0.503	1453

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	768	100.000
B - Eagle Way West		ONE HOUR	✓	66	100.000
C - A12 South		ONE HOUR	✓	695	100.000
D - Barrack Square East		ONE HOUR	✓	68	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	727	39
	B - Eagle Way West	14	0	47	5
	C - A12 South	524	8	0	163
	D - Barrack Square East	0	6	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To

		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	7	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	12	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.48	3.96	0.9	A	705	1057
B - Eagle Way West	0.08	4.22	0.1	A	61	91
C - A12 South	0.32	2.22	0.5	A	638	957
D - Barrack Square East	0.08	4.16	0.1	A	62	94

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	578	145	161	1798	0.321	576	404	0.0	0.5	2.942	A
B - Eagle Way West	50	12	516	1053	0.047	49	12	0.0	0.0	3.588	A
C - A12 South	523	131	6	2386	0.219	522	627	0.0	0.3	1.930	A
D - Barrack Square East	51	13	582	1078	0.047	51	155	0.0	0.0	3.503	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	690	173	193	1780	0.388	690	483	0.5	0.6	3.300	A
B - Eagle Way West	59	15	617	999	0.059	59	14	0.0	0.1	3.828	A
C - A12 South	625	156	7	2385	0.262	624	751	0.3	0.4	2.044	A
D - Barrack Square East	61	15	697	1020	0.060	61	186	0.0	0.1	3.751	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	846	211	237	1755	0.482	844	592	0.6	0.9	3.950	A
B - Eagle Way West	73	18	756	927	0.078	73	18	0.1	0.1	4.215	A
C - A12 South	765	191	9	2384	0.321	765	919	0.4	0.5	2.223	A
D - Barrack Square East	75	19	853	942	0.080	75	228	0.1	0.1	4.153	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	846	211	237	1755	0.482	846	592	0.9	0.9	3.960	A
B - Eagle Way West	73	18	756	926	0.078	73	18	0.1	0.1	4.217	A
C - A12 South	765	191	9	2384	0.321	765	920	0.5	0.5	2.223	A
D - Barrack Square East	75	19	854	941	0.080	75	228	0.1	0.1	4.155	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	690	173	193	1780	0.388	692	484	0.9	0.6	3.313	A
B - Eagle Way West	59	15	618	999	0.059	59	14	0.1	0.1	3.833	A
C - A12 South	625	156	7	2385	0.262	625	753	0.5	0.4	2.047	A
D - Barrack Square East	61	15	699	1020	0.060	61	186	0.1	0.1	3.755	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	578	145	162	1798	0.322	579	405	0.6	0.5	2.955	A
B - Eagle Way West	50	12	518	1052	0.047	50	12	0.1	0.0	3.594	A
C - A12 South	523	131	6	2386	0.219	524	630	0.4	0.3	1.934	A
D - Barrack Square East	51	13	585	1077	0.048	51	156	0.1	0.1	3.511	A

Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	23.18	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1301	100.000
B - Eagle Way West		ONE HOUR	✓	173	100.000
C - A12 South		ONE HOUR	✓	1702	100.000
D - Barrack Square East		ONE HOUR	✓	181	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1259	41
	B - Eagle Way West	40	0	110	23
	C - A12 South	1161	26	0	515
	D - Barrack Square East	19	8	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	9	8	0	5
	D - Barrack Square East	5	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	47.41	18.1	E	1194	1791
B - Eagle Way West	0.53	21.03	1.1	C	159	238
C - A12 South	0.78	6.65	3.4	A	1562	2343
D - Barrack Square East	0.33	8.86	0.5	A	166	249

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	979	245	487	1609	0.609	973	915	0.0	1.5	5.608	A
B - Eagle Way West	130	33	1272	668	0.195	129	26	0.0	0.2	6.664	A
C - A12 South	1281	320	22	2422	0.529	1277	1139	0.0	1.1	3.133	A
D - Barrack Square East	136	34	1025	834	0.163	135	435	0.0	0.2	5.149	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1170	292	582	1552	0.753	1164	1095	1.5	2.9	9.138	A

B - Eagle Way West	156	39	1522	539	0.288	155	31	0.2	0.4	9.349	A
C - A12 South	1530	383	26	2419	0.633	1528	1362	1.1	1.7	4.029	A
D - Barrack Square East	163	41	1226	736	0.221	162	520	0.2	0.3	6.273	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1432	358	711	1476	0.971	1388	1338	2.9	14.1	31.374	D
B - Eagle Way West	190	48	1861	364	0.523	188	38	0.4	1.0	20.109	C
C - A12 South	1874	468	32	2415	0.776	1867	1630	1.7	3.4	6.495	A
D - Barrack Square East	199	50	1464	620	0.322	199	635	0.3	0.5	8.535	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1432	358	714	1474	0.972	1417	1343	14.1	18.1	47.411	E
B - Eagle Way West	190	48	1867	361	0.527	190	39	1.0	1.1	21.034	C
C - A12 South	1874	468	32	2415	0.776	1874	1660	3.4	3.4	6.647	A
D - Barrack Square East	199	50	1493	605	0.329	199	638	0.5	0.5	8.865	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1170	292	588	1549	0.755	1229	1102	18.1	3.2	13.208	B
B - Eagle Way West	156	39	1531	535	0.291	158	32	1.1	0.4	9.630	A
C - A12 South	1530	383	26	2419	0.633	1537	1428	3.4	1.7	4.111	A
D - Barrack Square East	163	41	1291	704	0.231	163	526	0.5	0.3	6.671	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	979	245	490	1607	0.609	986	920	3.2	1.6	5.853	A
B - Eagle Way West	130	33	1279	665	0.196	131	26	0.4	0.2	6.752	A
C - A12 South	1281	320	22	2422	0.529	1284	1153	1.7	1.1	3.169	A
D - Barrack Square East	136	34	1038	827	0.165	137	438	0.3	0.2	5.216	A

Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	117.00	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1333	100.000
B - Eagle Way West		ONE HOUR	✓	193	100.000
C - A12 South		ONE HOUR	✓	2204	100.000
D - Barrack Square East		ONE HOUR	✓	348	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	17	1283	33
	B - Eagle Way West	50	0	123	20
	C - A12 South	1376	62	1	765
	D - Barrack Square East	18	17	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	8	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.10	167.68	75.7	F	1223	1835
B - Eagle Way West	1.69	655.46	40.8	F	177	266
C - A12 South	1.01	57.84	40.2	F	2022	3034
D - Barrack Square East	0.58	12.83	1.3	B	319	479

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1004	251	681	1475	0.680	995	1081	0.0	2.1	7.380	A
B - Eagle Way West	145	36	1618	497	0.292	144	72	0.0	0.4	10.138	B
C - A12 South	1659	415	40	2417	0.687	1651	1283	0.0	2.2	4.648	A
D - Barrack Square East	262	65	1063	827	0.317	260	613	0.0	0.5	6.331	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1198	300	813	1399	0.857	1185	1292	2.1	5.3	15.946	C

B - Eagle Way West	174	43	1934	332	0.522	171	86	0.4	1.0	21.990	C
C - A12 South	1981	495	47	2412	0.822	1972	1530	2.2	4.4	8.030	A
D - Barrack Square East	313	78	1266	724	0.432	312	733	0.5	0.7	8.709	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1468	367	917	1339	1.096	1320	1514	5.3	42.3	76.088	F
B - Eagle Way West	212	53	2290	146	1.455	141	101	1.0	19.0	307.708	F
C - A12 South	2427	607	56	2406	1.008	2335	1702	4.4	27.3	32.546	D
D - Barrack Square East	383	96	1378	666	0.575	381	859	0.7	1.3	12.524	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1468	367	919	1338	1.097	1334	1535	42.3	75.7	167.682	F
B - Eagle Way West	212	53	2329	126	1.692	125	103	19.0	40.8	655.464	F
C - A12 South	2427	607	57	2406	1.009	2375	1709	27.3	40.2	57.843	F
D - Barrack Square East	383	96	1382	663	0.578	383	872	1.3	1.3	12.827	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1198	300	924	1336	0.897	1319	1406	75.7	45.6	166.869	F
B - Eagle Way West	174	43	2080	256	0.678	250	92	40.8	21.7	418.196	F
C - A12 South	1981	495	49	2411	0.822	2122	1711	40.2	4.9	18.231	C
D - Barrack Square East	313	78	1446	634	0.494	314	796	1.3	1.0	11.317	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1004	251	752	1435	0.699	1176	1116	45.6	2.4	25.696	D
B - Eagle Way West	145	36	1638	487	0.298	230	75	21.7	0.4	19.823	C
C - A12 South	1659	415	42	2415	0.687	1670	1516	4.9	2.2	4.900	A
D - Barrack Square East	262	65	1295	711	0.369	264	633	1.0	0.6	8.084	A

Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	21.74	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1318	100.000
B - Eagle Way West		ONE HOUR	✓	167	100.000
C - A12 South		ONE HOUR	✓	1761	100.000
D - Barrack Square East		ONE HOUR	✓	542	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	48	1255	14
	B - Eagle Way West	52	0	83	32
	C - A12 South	1367	89	0	305
	D - Barrack Square East	84	27	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	7	7
	B - Eagle Way West	8	0	2	0
	C - A12 South	6	2	0	2
	D - Barrack Square East	5	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	20.20	7.7	C	1209	1814
B - Eagle Way West	0.53	22.33	1.1	C	153	230
C - A12 South	0.81	8.11	4.3	A	1616	2424
D - Barrack Square East	0.96	70.95	11.2	F	497	746

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	992	248	315	1708	0.581	987	1128	0.0	1.4	4.957	A
B - Eagle Way West	126	31	1318	654	0.192	125	123	0.0	0.2	6.793	A
C - A12 South	1326	331	120	2415	0.549	1321	1323	0.0	1.2	3.274	A
D - Barrack Square East	408	102	1038	877	0.465	405	264	0.0	0.9	7.569	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1185	296	378	1671	0.709	1181	1349	1.4	2.4	7.278	A

B - Eagle Way West	150	38	1577	524	0.287	149	147	0.2	0.4	9.607	A
C - A12 South	1583	396	144	2401	0.659	1580	1583	1.2	1.9	4.374	A
D - Barrack Square East	487	122	1243	770	0.633	484	316	0.9	1.7	12.440	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1451	363	460	1623	0.894	1432	1644	2.4	7.1	17.324	C
B - Eagle Way West	184	46	1923	350	0.526	181	178	0.4	1.1	21.045	C
C - A12 South	1939	485	171	2384	0.813	1930	1906	1.9	4.2	7.781	A
D - Barrack Square East	597	149	1507	632	0.944	570	385	1.7	8.3	45.846	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1451	363	463	1622	0.895	1449	1654	7.1	7.7	20.197	C
B - Eagle Way West	184	46	1933	344	0.534	184	180	1.1	1.1	22.332	C
C - A12 South	1939	485	175	2381	0.814	1938	1935	4.2	4.3	8.110	A
D - Barrack Square East	597	149	1525	623	0.958	585	387	8.3	11.2	70.945	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1185	296	382	1669	0.710	1206	1366	7.7	2.5	8.102	A
B - Eagle Way West	150	38	1595	515	0.292	153	151	1.1	0.4	10.024	B
C - A12 South	1583	396	153	2395	0.661	1592	1640	4.3	2.0	4.538	A
D - Barrack Square East	487	122	1269	757	0.644	525	319	11.2	1.9	17.878	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	992	248	318	1706	0.582	997	1135	2.5	1.4	5.107	A
B - Eagle Way West	126	31	1327	649	0.194	126	124	0.4	0.2	6.894	A
C - A12 South	1326	331	122	2414	0.549	1329	1339	2.0	1.2	3.325	A
D - Barrack Square East	408	102	1049	871	0.468	412	266	1.9	0.9	7.905	A

Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	21.81	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1400	100.000
B - Eagle Way West		ONE HOUR	✓	134	100.000
C - A12 South		ONE HOUR	✓	1754	100.000
D - Barrack Square East		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	60	1319	21
	B - Eagle Way West	38	0	80	16
	C - A12 South	1386	124	1	243
	D - Barrack Square East	82	39	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	5
	B - Eagle Way West	3	0	1	0
	C - A12 South	2	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	17.51	7.1	C	1285	1927
B - Eagle Way West	0.37	14.04	0.6	B	123	184
C - A12 South	0.80	7.22	3.8	A	1609	2414
D - Barrack Square East	0.98	81.96	13.3	F	500	750

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1054	263	255	1814	0.581	1049	1129	0.0	1.4	4.670	A
B - Eagle Way West	101	25	1284	703	0.144	100	167	0.0	0.2	5.970	A
C - A12 South	1320	330	135	2467	0.535	1316	1365	0.0	1.1	3.114	A
D - Barrack Square East	410	103	1093	872	0.470	407	210	0.0	0.9	7.681	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1259	315	305	1783	0.706	1255	1351	1.4	2.3	6.759	A

B - Eagle Way West	120	30	1536	577	0.209	120	200	0.2	0.3	7.878	A
C - A12 South	1577	394	162	2450	0.644	1574	1633	1.1	1.8	4.097	A
D - Barrack Square East	490	122	1308	764	0.641	487	251	0.9	1.7	12.820	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1541	385	372	1742	0.885	1524	1647	2.3	6.7	15.417	C
B - Eagle Way West	148	37	1873	408	0.361	146	242	0.3	0.6	13.681	B
C - A12 South	1931	483	192	2431	0.794	1923	1967	1.8	3.7	6.983	A
D - Barrack Square East	600	150	1590	623	0.964	569	307	1.7	9.5	50.723	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1541	385	374	1741	0.885	1540	1656	6.7	7.1	17.506	C
B - Eagle Way West	148	37	1882	404	0.365	147	244	0.6	0.6	14.044	B
C - A12 South	1931	483	196	2429	0.795	1931	1995	3.7	3.8	7.218	A
D - Barrack Square East	600	150	1606	615	0.976	585	308	9.5	13.3	81.959	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1259	315	308	1782	0.706	1277	1367	7.1	2.5	7.385	A
B - Eagle Way West	120	30	1553	568	0.212	122	205	0.6	0.3	8.082	A
C - A12 South	1577	394	174	2443	0.646	1585	1693	3.8	1.8	4.234	A
D - Barrack Square East	490	122	1332	752	0.651	535	253	13.3	2.0	19.855	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1054	263	257	1813	0.581	1058	1137	2.5	1.4	4.794	A
B - Eagle Way West	101	25	1292	699	0.144	101	169	0.3	0.2	6.030	A
C - A12 South	1320	330	137	2466	0.536	1323	1381	1.8	1.2	3.160	A
D - Barrack Square East	410	103	1104	867	0.473	414	211	2.0	0.9	8.028	A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	826	100.000
B - Eagle Way West		ONE HOUR	✓	73	100.000
C - A12 South		ONE HOUR	✓	759	100.000
D - Barrack Square East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	784	39
	B - Eagle Way West	16	0	52	6
	C - A12 South	588	9	0	163
	D - Barrack Square East	0	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	10	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.51	4.20	1.1	A	758	1136
B - Eagle Way West	0.09	4.42	0.1	A	67	101
C - A12 South	0.35	2.28	0.5	A	697	1045
D - Barrack Square East	0.08	4.33	0.1	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	622	155	166	1811	0.343	620	453	0.0	0.5	3.015	A
B - Eagle Way West	55	14	564	1031	0.054	55	13	0.0	0.1	3.686	A
C - A12 South	572	143	7	2417	0.237	571	674	0.0	0.3	1.949	A
D - Barrack Square East	52	13	629	1055	0.049	51	156	0.0	0.1	3.588	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	742	186	198	1792	0.414	742	542	0.5	0.7	3.425	A

B - Eagle Way West	66	16	674	974	0.068	66	16	0.1	0.1	3.963	A
C - A12 South	683	171	8	2416	0.283	682	807	0.3	0.4	2.077	A
D - Barrack Square East	62	15	753	993	0.062	62	186	0.1	0.1	3.866	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	909	227	243	1766	0.515	908	664	0.7	1.1	4.187	A
B - Eagle Way West	81	20	826	895	0.090	81	20	0.1	0.1	4.418	A
C - A12 South	836	209	10	2414	0.346	836	988	0.4	0.5	2.280	A
D - Barrack Square East	76	19	922	908	0.083	76	228	0.1	0.1	4.321	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	909	227	243	1766	0.515	909	664	1.1	1.1	4.201	A
B - Eagle Way West	81	20	826	895	0.090	81	20	0.1	0.1	4.419	A
C - A12 South	836	209	10	2414	0.346	836	989	0.5	0.5	2.280	A
D - Barrack Square East	76	19	924	908	0.083	76	229	0.1	0.1	4.325	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	742	186	199	1792	0.414	744	543	1.1	0.7	3.437	A
B - Eagle Way West	66	16	675	974	0.068	66	16	0.1	0.1	3.966	A
C - A12 South	683	171	8	2416	0.283	683	809	0.5	0.4	2.080	A
D - Barrack Square East	62	15	756	992	0.062	62	187	0.1	0.1	3.873	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	622	155	166	1811	0.343	622	454	0.7	0.5	3.032	A
B - Eagle Way West	55	14	565	1031	0.054	55	13	0.1	0.1	3.690	A
C - A12 South	572	143	7	2417	0.237	572	677	0.4	0.3	1.951	A
D - Barrack Square East	52	13	632	1053	0.049	52	156	0.1	0.1	3.596	A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	47.24	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1386	100.000
B - Eagle Way West		ONE HOUR	✓	192	100.000
C - A12 South		ONE HOUR	✓	1806	100.000
D - Barrack Square East		ONE HOUR	✓	182	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1344	41
	B - Eagle Way West	44	0	122	26
	C - A12 South	1263	29	0	515
	D - Barrack Square East	19	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	9	8	0	5
	D - Barrack Square East	5	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	104.52	48.2	F	1272	1907
B - Eagle Way West	0.70	38.54	2.1	E	176	264
C - A12 South	0.82	8.47	4.6	A	1658	2486
D - Barrack Square East	0.35	9.49	0.5	A	167	250

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1043	261	497	1598	0.653	1036	994	0.0	1.8	6.327	A
B - Eagle Way West	145	36	1348	629	0.230	143	29	0.0	0.3	7.400	A
C - A12 South	1360	340	22	2420	0.562	1355	1210	0.0	1.3	3.364	A
D - Barrack Square East	137	34	1096	796	0.172	136	437	0.0	0.2	5.445	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1246	311	595	1540	0.809	1237	1190	1.8	4.0	11.582	B

B - Eagle Way West	173	43	1613	492	0.351	172	35	0.3	0.5	11.213	B
C - A12 South	1624	406	27	2416	0.672	1621	1446	1.3	2.0	4.508	A
D - Barrack Square East	164	41	1310	692	0.236	163	522	0.2	0.3	6.803	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1526	381	724	1463	1.043	1426	1452	4.0	29.0	52.491	F
B - Eagle Way West	212	53	1969	308	0.688	206	43	0.5	2.0	33.705	D
C - A12 South	1989	497	33	2412	0.825	1979	1681	2.0	4.5	8.131	A
D - Barrack Square East	200	50	1514	592	0.338	199	635	0.3	0.5	9.154	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1526	381	730	1460	1.045	1449	1459	29.0	48.2	104.521	F
B - Eagle Way West	212	53	1979	303	0.699	211	43	2.0	2.1	38.536	E
C - A12 South	1989	497	33	2412	0.825	1988	1708	4.5	4.6	8.473	A
D - Barrack Square East	200	50	1540	579	0.346	200	639	0.5	0.5	9.494	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1246	311	604	1534	0.812	1419	1201	48.2	4.9	51.292	F
B - Eagle Way West	173	43	1626	485	0.356	179	35	2.1	0.6	11.992	B
C - A12 South	1624	406	27	2416	0.672	1634	1627	4.6	2.1	4.660	A
D - Barrack Square East	164	41	1490	603	0.271	164	533	0.5	0.4	8.211	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1043	261	501	1595	0.654	1055	1001	4.9	1.9	6.811	A
B - Eagle Way West	145	36	1356	624	0.232	146	29	0.6	0.3	7.533	A
C - A12 South	1360	340	23	2419	0.562	1363	1232	2.1	1.3	3.417	A
D - Barrack Square East	137	34	1117	786	0.174	138	440	0.4	0.2	5.552	A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	214.72	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1397	100.000
B - Eagle Way West		ONE HOUR	✓	214	100.000
C - A12 South		ONE HOUR	✓	2353	100.000
D - Barrack Square East		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	19	1346	33
	B - Eagle Way West	56	0	137	22
	C - A12 South	1518	69	1	765
	D - Barrack Square East	18	19	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	8	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.13	227.48	96.9	F	1282	1923
B - Eagle Way West	2.06	1470.38	78.0	F	197	295
C - A12 South	1.08	128.39	105.2	F	2159	3239
D - Barrack Square East	0.59	13.54	1.4	B	321	482

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1052	263	692	1469	0.716	1042	1191	0.0	2.4	8.263	A
B - Eagle Way West	161	40	1723	444	0.364	159	80	0.0	0.6	12.549	B
C - A12 South	1771	443	42	2419	0.732	1761	1339	0.0	2.7	5.384	A
D - Barrack Square East	263	66	1120	798	0.330	261	614	0.0	0.5	6.682	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1256	314	823	1394	0.901	1236	1419	2.4	7.4	20.695	C

B - Eagle Way West	193	48	2056	270	0.713	186	95	0.6	2.1	40.245	E
C - A12 South	2115	529	51	2414	0.876	2100	1590	2.7	6.5	10.972	B
D - Barrack Square East	315	79	1327	693	0.454	313	732	0.5	0.8	9.443	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1539	385	868	1367	1.126	1354	1589	7.4	53.5	91.545	F
B - Eagle Way West	236	59	2333	126	1.890	124	109	2.1	30.2	534.011	F
C - A12 South	2591	648	60	2408	1.076	2382	1725	6.5	58.6	57.031	F
D - Barrack Square East	385	96	1402	653	0.590	383	820	0.8	1.4	13.201	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1539	385	868	1367	1.126	1365	1600	53.5	96.9	205.939	F
B - Eagle Way West	236	59	2355	114	2.062	114	110	30.2	60.7	1470.381	F
C - A12 South	2591	648	60	2408	1.076	2404	1732	58.6	105.2	128.391	F
D - Barrack Square East	385	96	1407	651	0.592	385	827	1.4	1.4	13.541	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1256	314	870	1366	0.920	1352	1590	96.9	73.1	227.480	F
B - Eagle Way West	193	48	2337	123	1.561	123	105	60.7	78.0	1287.261	F
C - A12 South	2115	529	53	2413	0.877	2390	1663	105.2	36.5	109.170	F
D - Barrack Square East	315	79	1400	654	0.481	316	823	1.4	0.9	10.711	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1052	263	892	1355	0.776	1325	1338	73.1	4.8	107.260	F
B - Eagle Way West	161	40	1865	370	0.436	365	88	78.0	27.0	523.068	F
C - A12 South	1771	443	46	2416	0.733	1906	1745	36.5	2.8	9.143	A
D - Barrack Square East	263	66	1528	595	0.443	264	690	0.9	0.8	10.898	B

2023 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	46.08	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1446	100.000
B - Eagle Way West		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	1806	100.000
D - Barrack Square East		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	53	1378	14
	B - Eagle Way West	58	0	92	36
	C - A12 South	1402	99	0	305
	D - Barrack Square East	84	30	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	7	7
	B - Eagle Way West	8	0	2	0
	C - A12 South	7	2	0	2
	D - Barrack Square East	5	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.99	52.28	22.6	F	1327	1990
B - Eagle Way West	0.63	29.80	1.6	D	171	256
C - A12 South	0.84	9.34	5.0	A	1658	2486
D - Barrack Square East	1.08	160.19	28.8	F	500	750

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1089	272	325	1704	0.639	1082	1158	0.0	1.7	5.721	A
B - Eagle Way West	140	35	1345	638	0.219	139	137	0.0	0.3	7.197	A
C - A12 South	1360	340	126	2402	0.566	1355	1420	0.0	1.3	3.420	A
D - Barrack Square East	410	103	1140	824	0.498	406	267	0.0	1.0	8.541	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1300	325	389	1667	0.780	1293	1386	1.7	3.4	9.467	A

B - Eagle Way West	167	42	1608	505	0.331	166	163	0.3	0.5	10.611	B
C - A12 South	1624	406	151	2387	0.680	1621	1698	1.3	2.1	4.678	A
D - Barrack Square East	490	122	1363	708	0.692	485	319	1.0	2.1	15.857	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1592	398	473	1618	0.984	1538	1683	3.4	16.8	32.922	D
B - Eagle Way West	205	51	1955	329	0.621	200	195	0.5	1.5	27.111	D
C - A12 South	1989	497	173	2373	0.838	1978	1995	2.1	4.9	8.856	A
D - Barrack Square East	600	150	1623	573	1.048	545	388	2.1	16.0	77.936	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1592	398	477	1616	0.985	1569	1693	16.8	22.6	52.281	F
B - Eagle Way West	205	51	1966	324	0.631	204	197	1.5	1.6	29.804	D
C - A12 South	1989	497	175	2372	0.838	1988	2029	4.9	5.0	9.337	A
D - Barrack Square East	600	150	1655	556	1.080	549	391	16.0	28.8	160.192	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1300	325	395	1663	0.781	1375	1415	22.6	3.8	15.497	C
B - Eagle Way West	167	42	1639	489	0.341	171	173	1.6	0.5	11.473	B
C - A12 South	1624	406	177	2371	0.685	1635	1862	5.0	2.2	4.965	A
D - Barrack Square East	490	122	1447	664	0.738	592	323	28.8	3.3	75.697	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1089	272	328	1703	0.639	1097	1168	3.8	1.8	6.017	A
B - Eagle Way West	140	35	1355	633	0.221	141	138	0.5	0.3	7.336	A
C - A12 South	1360	340	130	2400	0.567	1364	1445	2.2	1.3	3.483	A
D - Barrack Square East	410	103	1156	816	0.503	419	269	3.3	1.0	9.272	A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	38.31	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1490	100.000
B - Eagle Way West		ONE HOUR	✓	149	100.000
C - A12 South		ONE HOUR	✓	1755	100.000
D - Barrack Square East		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	67	1402	21
	B - Eagle Way West	42	0	89	18
	C - A12 South	1373	138	1	243
	D - Barrack Square East	82	43	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	3	5
	B - Eagle Way West	3	0	1	0
	C - A12 South	3	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	32.22	13.8	D	1367	2051
B - Eagle Way West	0.40	14.75	0.7	B	137	205
C - A12 South	0.80	7.47	3.9	A	1610	2415
D - Barrack Square East	1.08	160.64	29.2	F	504	756

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1122	280	263	1805	0.621	1115	1123	0.0	1.6	5.169	A
B - Eagle Way West	112	28	1274	704	0.159	112	186	0.0	0.2	6.070	A
C - A12 South	1321	330	143	2448	0.540	1316	1433	0.0	1.2	3.169	A
D - Barrack Square East	414	103	1167	833	0.496	410	211	0.0	1.0	8.422	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1339	335	315	1774	0.755	1334	1343	1.6	3.0	8.084	A

B - Eagle Way West	134	34	1524	578	0.232	134	222	0.2	0.3	8.088	A
C - A12 South	1577	394	171	2430	0.649	1575	1714	1.2	1.8	4.197	A
D - Barrack Square East	494	123	1396	718	0.688	489	253	1.0	2.1	15.439	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1640	410	384	1731	0.948	1605	1633	3.0	11.7	23.868	C
B - Eagle Way West	164	41	1854	412	0.398	163	266	0.3	0.6	14.358	B
C - A12 South	1932	483	197	2414	0.800	1924	2032	1.8	3.9	7.227	A
D - Barrack Square East	605	151	1681	575	1.053	548	308	2.1	16.4	79.031	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1640	410	386	1730	0.948	1632	1640	11.7	13.8	32.221	D
B - Eagle Way West	164	41	1862	408	0.402	164	269	0.6	0.7	14.748	B
C - A12 South	1932	483	200	2412	0.801	1932	2063	3.9	3.9	7.475	A
D - Barrack Square East	605	151	1708	561	1.078	554	310	16.4	29.2	160.642	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1339	335	318	1772	0.756	1382	1368	13.8	3.2	10.156	B
B - Eagle Way West	134	34	1550	565	0.237	135	234	0.7	0.3	8.403	A
C - A12 South	1577	394	199	2413	0.654	1585	1845	3.9	1.9	4.393	A
D - Barrack Square East	494	123	1444	694	0.712	599	255	29.2	2.8	63.499	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1122	280	265	1804	0.622	1128	1130	3.2	1.7	5.371	A
B - Eagle Way West	112	28	1283	700	0.160	113	188	0.3	0.2	6.141	A
C - A12 South	1321	330	147	2446	0.540	1324	1454	1.9	1.2	3.219	A
D - Barrack Square East	414	103	1180	827	0.500	421	213	2.8	1.0	9.011	A

2023 Early Years, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	860	100.000
B - Eagle Way West		ONE HOUR	✓	73	100.000
C - A12 South		ONE HOUR	✓	855	100.000
D - Barrack Square East		ONE HOUR	✓	69	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	818	39
	B - Eagle Way West	16	0	52	6
	C - A12 South	684	9	0	163
	D - Barrack Square East	0	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	12	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.54	4.39	1.1	A	789	1183
B - Eagle Way West	0.10	4.79	0.1	A	67	101
C - A12 South	0.40	2.51	0.7	A	785	1178
D - Barrack Square East	0.09	4.42	0.1	A	63	95

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	647	162	166	1813	0.357	645	525	0.0	0.6	3.078	A
B - Eagle Way West	55	14	636	988	0.056	55	13	0.0	0.1	3.855	A
C - A12 South	644	161	7	2377	0.271	643	700	0.0	0.4	2.073	A
D - Barrack Square East	52	13	655	1042	0.050	51	156	0.0	0.1	3.633	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	773	193	198	1794	0.431	772	628	0.6	0.8	3.520	A

B - Eagle Way West	66	16	761	923	0.071	66	16	0.1	0.1	4.201	A
C - A12 South	769	192	8	2376	0.324	769	838	0.4	0.5	2.239	A
D - Barrack Square East	62	15	784	978	0.063	62	186	0.1	0.1	3.929	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	947	237	243	1767	0.536	945	769	0.8	1.1	4.369	A
B - Eagle Way West	81	20	931	832	0.097	81	20	0.1	0.1	4.788	A
C - A12 South	942	235	10	2375	0.397	941	1025	0.5	0.7	2.509	A
D - Barrack Square East	76	19	959	890	0.085	75	228	0.1	0.1	4.418	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	947	237	243	1767	0.536	946	770	1.1	1.1	4.385	A
B - Eagle Way West	81	20	932	832	0.097	81	20	0.1	0.1	4.790	A
C - A12 South	942	235	10	2375	0.397	942	1027	0.7	0.7	2.511	A
D - Barrack Square East	76	19	961	889	0.085	76	229	0.1	0.1	4.423	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	773	193	199	1793	0.431	774	629	1.1	0.8	3.539	A
B - Eagle Way West	66	16	762	922	0.071	66	16	0.1	0.1	4.207	A
C - A12 South	769	192	8	2376	0.324	770	840	0.7	0.5	2.241	A
D - Barrack Square East	62	15	786	977	0.063	62	187	0.1	0.1	3.935	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	647	162	166	1812	0.357	648	527	0.8	0.6	3.095	A
B - Eagle Way West	55	14	638	987	0.056	55	13	0.1	0.1	3.861	A
C - A12 South	644	161	7	2377	0.271	644	703	0.5	0.4	2.079	A
D - Barrack Square East	52	13	658	1041	0.050	52	156	0.1	0.1	3.639	A

2023 Early Years, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	110.04	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1500	100.000
B - Eagle Way West		ONE HOUR	✓	192	100.000
C - A12 South		ONE HOUR	✓	2026	100.000
D - Barrack Square East		ONE HOUR	✓	182	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1458	41
	B - Eagle Way West	44	0	122	26
	C - A12 South	1483	29	0	515
	D - Barrack Square East	19	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	12	8	0	5
	D - Barrack Square East	5	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.11	199.43	95.0	F	1376	2064
B - Eagle Way West	1.40	442.66	29.7	F	176	264
C - A12 South	0.95	25.56	14.9	D	1859	2789
D - Barrack Square East	0.35	9.52	0.5	A	167	250

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1129	282	497	1592	0.709	1120	1158	0.0	2.4	7.470	A
B - Eagle Way West	145	36	1512	523	0.276	143	29	0.0	0.4	9.431	A
C - A12 South	1526	381	22	2357	0.647	1518	1294	0.0	1.8	4.256	A
D - Barrack Square East	137	34	1180	753	0.182	136	436	0.0	0.2	5.823	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1348	337	594	1535	0.878	1333	1385	2.4	6.3	16.623	C

B - Eagle Way West	173	43	1808	366	0.472	171	35	0.4	0.9	18.242	C
C - A12 South	1822	455	27	2354	0.774	1816	1541	1.8	3.3	6.615	A
D - Barrack Square East	164	41	1405	643	0.254	163	521	0.2	0.3	7.493	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1651	413	680	1483	1.113	1467	1662	6.3	52.2	81.898	F
B - Eagle Way West	212	53	2183	167	1.268	158	42	0.9	14.3	212.516	F
C - A12 South	2231	568	33	2350	0.949	2193	1694	3.3	12.9	19.402	C
D - Barrack Square East	200	50	1528	582	0.344	200	619	0.3	0.5	9.396	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1651	413	681	1482	1.114	1480	1682	52.2	95.0	186.513	F
B - Eagle Way West	212	53	2214	151	1.403	150	43	14.3	29.7	442.660	F
C - A12 South	2231	568	33	2350	0.949	2223	1702	12.9	14.9	25.559	D
D - Barrack Square East	200	50	1535	578	0.346	200	627	0.5	0.5	9.522	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1348	337	696	1476	0.913	1461	1449	95.0	66.9	199.432	F
B - Eagle Way West	173	43	1858	339	0.509	287	36	29.7	1.2	138.944	F
C - A12 South	1822	455	27	2354	0.774	1867	1740	14.9	3.5	8.050	A
D - Barrack Square East	164	41	1603	547	0.299	164	553	0.5	0.4	9.398	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1129	282	504	1588	0.711	1386	1170	66.9	2.6	45.917	E
B - Eagle Way West	145	36	1526	516	0.280	148	30	1.2	0.4	9.855	A
C - A12 South	1526	381	23	2357	0.647	1532	1557	3.5	1.9	4.401	A
D - Barrack Square East	137	34	1442	624	0.219	138	448	0.4	0.3	7.410	A

2023 Early Years, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	260.26	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1402	100.000
B - Eagle Way West		ONE HOUR	✓	214	100.000
C - A12 South		ONE HOUR	✓	2389	100.000
D - Barrack Square East		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	19	1351	33
	B - Eagle Way West	56	0	137	22
	C - A12 South	1554	69	1	765
	D - Barrack Square East	18	19	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	9	6
	B - Eagle Way West	4	0	0	5
	C - A12 South	14	5	0	2
	D - Barrack Square East	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.12	218.88	95.0	F	1287	1930
B - Eagle Way West	2.11	1734.94	82.8	F	197	295
C - A12 South	1.12	196.82	151.7	F	2192	3288
D - Barrack Square East	0.60	13.96	1.5	B	321	482

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1056	264	691	1461	0.723	1046	1217	0.0	2.5	8.470	A
B - Eagle Way West	161	40	1749	408	0.395	159	80	0.0	0.6	14.287	B
C - A12 South	1799	450	42	2363	0.761	1786	1342	0.0	3.1	6.120	A
D - Barrack Square East	263	66	1123	794	0.332	261	614	0.0	0.5	6.740	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1261	315	817	1390	0.907	1240	1446	2.5	7.8	21.536	C

B - Eagle Way West	193	48	2081	231	0.835	181	95	0.6	3.5	62.870	F
C - A12 South	2148	537	51	2358	0.911	2125	1590	3.1	8.7	14.275	B
D - Barrack Square East	315	79	1327	689	0.456	313	729	0.5	0.8	9.533	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1544	386	838	1377	1.121	1364	1571	7.8	52.8	90.452	F
B - Eagle Way West	236	59	2291	118	1.994	117	106	3.5	33.2	622.560	F
C - A12 South	2630	658	60	2352	1.118	2338	1731	8.7	81.7	76.955	F
D - Barrack Square East	385	96	1408	646	0.596	383	794	0.8	1.4	13.532	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1544	386	838	1377	1.121	1375	1578	52.8	95.0	200.968	F
B - Eagle Way West	236	59	2304	112	2.110	112	107	33.2	64.2	1608.594	F
C - A12 South	2630	658	60	2352	1.118	2350	1740	81.7	151.7	183.573	F
D - Barrack Square East	385	96	1415	643	0.600	385	798	1.4	1.5	13.964	B

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1261	315	839	1376	0.916	1362	1570	95.0	69.8	218.882	F
B - Eagle Way West	193	48	2291	119	1.625	119	103	64.2	82.8	1734.936	F
C - A12 South	2148	537	53	2357	0.911	2341	1670	151.7	103.3	196.817	F
D - Barrack Square East	315	79	1406	647	0.486	317	795	1.5	1.0	10.952	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1056	264	848	1372	0.770	1318	1493	69.8	4.1	94.520	F
B - Eagle Way West	161	40	2149	194	0.830	192	95	82.8	75.1	1479.479	F
C - A12 South	1799	450	46	2360	0.762	2198	1629	103.3	3.5	62.887	F
D - Barrack Square East	263	66	1411	647	0.407	264	755	1.0	0.7	9.445	A

2023 Early Years, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	97.13	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1570	100.000
B - Eagle Way West		ONE HOUR	✓	186	100.000
C - A12 South		ONE HOUR	✓	1894	100.000
D - Barrack Square East		ONE HOUR	✓	545	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	53	1502	14
	B - Eagle Way West	58	0	92	36
	C - A12 South	1490	99	0	305
	D - Barrack Square East	84	30	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	9	7
	B - Eagle Way West	8	0	2	0
	C - A12 South	9	2	0	2
	D - Barrack Square East	5	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.09	150.35	81.0	F	1441	2161
B - Eagle Way West	0.79	59.87	3.2	F	171	256
C - A12 South	0.89	14.00	7.8	B	1738	2608
D - Barrack Square East	1.13	250.96	39.4	F	500	750

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1182	295	325	1675	0.706	1173	1224	0.0	2.3	7.037	A
B - Eagle Way West	140	35	1410	593	0.236	139	137	0.0	0.3	7.909	A
C - A12 South	1426	357	126	2362	0.604	1420	1511	0.0	1.5	3.799	A
D - Barrack Square East	410	103	1231	766	0.536	406	266	0.0	1.1	9.876	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1411	353	389	1639	0.861	1398	1463	2.3	5.6	14.253	B

B - Eagle Way West	167	42	1686	451	0.371	166	163	0.3	0.6	12.592	B
C - A12 South	1703	426	150	2347	0.726	1699	1801	1.5	2.6	5.514	A
D - Barrack Square East	490	122	1468	640	0.765	483	319	1.1	3.0	21.892	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1729	432	469	1593	1.085	1571	1769	5.6	45.1	68.191	F
B - Eagle Way West	205	51	2042	268	0.763	196	190	0.6	2.6	46.010	E
C - A12 South	2086	521	165	2338	0.892	2067	2014	2.6	7.3	12.485	B
D - Barrack Square East	600	150	1654	542	1.107	525	385	3.0	21.7	103.630	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1729	432	476	1589	1.088	1585	1785	45.1	81.0	150.354	F
B - Eagle Way West	205	51	2059	259	0.789	203	192	2.6	3.2	59.872	F
C - A12 South	2086	521	167	2337	0.892	2084	2034	7.3	7.8	13.998	B
D - Barrack Square East	600	150	1672	533	1.126	529	389	21.7	39.4	224.559	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1411	353	400	1632	0.865	1612	1491	81.0	30.8	127.739	F
B - Eagle Way West	167	42	1714	437	0.383	177	173	3.2	0.6	14.391	B
C - A12 South	1703	426	164	2339	0.728	1723	2034	7.8	2.7	6.028	A
D - Barrack Square East	490	122	1686	525	0.934	512	327	39.4	33.9	250.962	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1182	295	329	1673	0.706	1295	1254	30.8	2.5	12.687	B
B - Eagle Way West	140	35	1441	577	0.243	141	149	0.6	0.3	8.284	A
C - A12 South	1426	357	159	2342	0.609	1431	1735	2.7	1.6	3.973	A
D - Barrack Square East	410	103	1354	701	0.586	540	270	33.9	1.5	44.648	E

2023 Early Years, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	47.11	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1490	100.000
B - Eagle Way West		ONE HOUR	✓	149	100.000
C - A12 South		ONE HOUR	✓	1796	100.000
D - Barrack Square East		ONE HOUR	✓	549	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	67	1402	21
	B - Eagle Way West	42	0	89	18
	C - A12 South	1414	138	1	243
	D - Barrack Square East	82	43	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	5	5
	B - Eagle Way West	3	0	1	0
	C - A12 South	4	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	43.89	19.1	E	1367	2051
B - Eagle Way West	0.43	16.64	0.7	C	137	205
C - A12 South	0.82	8.49	4.6	A	1648	2472
D - Barrack Square East	1.11	192.59	35.4	F	504	756

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1122	280	263	1760	0.637	1115	1153	0.0	1.7	5.524	A
B - Eagle Way West	112	28	1305	684	0.164	111	186	0.0	0.2	6.278	A
C - A12 South	1352	338	143	2432	0.556	1347	1433	0.0	1.2	3.302	A
D - Barrack Square East	414	103	1166	819	0.505	410	211	0.0	1.0	8.710	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1339	335	315	1729	0.775	1333	1379	1.7	3.3	8.953	A

B - Eagle Way West	134	34	1560	555	0.242	134	222	0.2	0.3	8.537	A
C - A12 South	1614	404	171	2415	0.668	1611	1713	1.2	2.0	4.463	A
D - Barrack Square East	494	123	1395	701	0.704	489	253	1.0	2.2	16.571	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1640	410	384	1688	0.972	1593	1675	3.3	15.0	29.322	D
B - Eagle Way West	164	41	1896	385	0.427	163	265	0.3	0.7	16.084	C
C - A12 South	1977	494	194	2401	0.824	1967	2013	2.0	4.4	8.126	A
D - Barrack Square East	605	151	1669	560	1.081	538	308	2.2	19.0	89.781	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1640	410	386	1686	0.973	1624	1683	15.0	19.1	43.894	E
B - Eagle Way West	164	41	1905	380	0.432	164	267	0.7	0.7	16.640	C
C - A12 South	1977	494	196	2400	0.824	1977	2044	4.4	4.6	8.486	A
D - Barrack Square East	605	151	1700	544	1.113	539	310	19.0	35.4	192.589	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1339	335	318	1727	0.776	1401	1410	19.1	3.6	13.020	B
B - Eagle Way West	134	34	1592	539	0.249	136	237	0.7	0.3	8.958	A
C - A12 South	1614	404	205	2394	0.674	1624	1880	4.6	2.1	4.733	A
D - Barrack Square East	494	123	1464	666	0.742	621	256	35.4	3.6	104.284	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1122	280	265	1759	0.638	1129	1162	3.6	1.8	5.785	A
B - Eagle Way West	112	28	1314	679	0.165	113	188	0.3	0.2	6.359	A
C - A12 South	1352	338	147	2430	0.556	1355	1458	2.1	1.3	3.362	A
D - Barrack Square East	414	103	1181	811	0.510	424	213	3.6	1.1	9.517	A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	808	100.000
B - Eagle Way West		ONE HOUR	✓	77	100.000
C - A12 South		ONE HOUR	✓	776	100.000
D - Barrack Square East		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	766	40
	B - Eagle Way West	16	0	55	6
	C - A12 South	604	9	0	163
	D - Barrack Square East	3	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	10	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.51	4.18	1.0	A	741	1112
B - Eagle Way West	0.10	4.50	0.1	A	71	106
C - A12 South	0.35	2.31	0.5	A	712	1068
D - Barrack Square East	0.09	4.31	0.1	A	66	99

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	608	152	168	1797	0.338	606	468	0.0	0.5	3.018	A
B - Eagle Way West	58	14	578	1024	0.057	58	14	0.0	0.1	3.724	A
C - A12 South	584	146	9	2416	0.242	583	662	0.0	0.3	1.963	A
D - Barrack Square East	54	14	617	1060	0.051	54	157	0.0	0.1	3.579	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	726	182	201	1777	0.409	725	560	0.5	0.7	3.420	A

B - Eagle Way West	69	17	692	965	0.072	69	17	0.1	0.1	4.016	A
C - A12 South	698	174	11	2415	0.289	697	793	0.3	0.4	2.095	A
D - Barrack Square East	65	16	739	998	0.065	65	187	0.1	0.1	3.855	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	889	222	246	1751	0.508	888	685	0.7	1.0	4.164	A
B - Eagle Way West	85	21	847	885	0.096	85	21	0.1	0.1	4.499	A
C - A12 South	854	214	14	2413	0.354	854	970	0.4	0.5	2.308	A
D - Barrack Square East	79	20	905	915	0.087	79	229	0.1	0.1	4.306	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	889	222	246	1751	0.508	889	686	1.0	1.0	4.177	A
B - Eagle Way West	85	21	847	885	0.096	85	21	0.1	0.1	4.500	A
C - A12 South	854	214	14	2413	0.354	854	972	0.5	0.5	2.308	A
D - Barrack Square East	79	20	906	914	0.087	79	230	0.1	0.1	4.310	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	726	182	201	1777	0.409	728	560	1.0	0.7	3.432	A
B - Eagle Way West	69	17	692	965	0.072	69	17	0.1	0.1	4.021	A
C - A12 South	698	174	11	2415	0.289	698	795	0.5	0.4	2.097	A
D - Barrack Square East	65	16	741	997	0.065	65	188	0.1	0.1	3.861	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	608	152	169	1796	0.339	609	469	0.7	0.5	3.035	A
B - Eagle Way West	58	14	580	1023	0.057	58	14	0.1	0.1	3.728	A
C - A12 South	584	146	9	2416	0.242	585	665	0.4	0.3	1.965	A
D - Barrack Square East	54	14	620	1058	0.051	54	157	0.1	0.1	3.584	A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	37.11	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1325	100.000
B - Eagle Way West		ONE HOUR	✓	202	100.000
C - A12 South		ONE HOUR	✓	1880	100.000
D - Barrack Square East		ONE HOUR	✓	250	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1268	56
	B - Eagle Way West	47	0	128	27
	C - A12 South	1335	30	0	515
	D - Barrack Square East	87	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	8	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	64.04	26.0	F	1216	1824
B - Eagle Way West	0.97	135.04	8.2	F	185	278
C - A12 South	0.87	11.69	6.5	B	1725	2588
D - Barrack Square East	0.45	10.70	0.8	B	230	345

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	997	249	503	1595	0.625	991	1101	0.0	1.6	5.897	A
B - Eagle Way West	152	38	1453	579	0.263	151	31	0.0	0.4	8.385	A
C - A12 South	1415	354	74	2396	0.591	1410	1158	0.0	1.4	3.631	A
D - Barrack Square East	188	47	1045	841	0.224	187	449	0.0	0.3	5.503	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1191	298	601	1536	0.775	1184	1317	1.6	3.3	10.042	B

B - Eagle Way West	181	45	1738	432	0.420	180	37	0.4	0.7	14.221	B
C - A12 South	1690	423	88	2387	0.708	1686	1385	1.4	2.4	5.113	A
D - Barrack Square East	225	56	1249	738	0.305	224	537	0.3	0.4	7.000	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1459	365	720	1466	0.995	1399	1601	3.3	18.1	37.681	E
B - Eagle Way West	222	56	2118	236	0.940	203	45	0.7	5.6	82.352	F
C - A12 South	2070	517	108	2374	0.872	2054	1636	2.4	6.2	10.771	B
D - Barrack Square East	276	69	1469	628	0.439	274	650	0.4	0.8	10.151	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1459	365	731	1459	0.999	1427	1613	18.1	26.0	64.041	F
B - Eagle Way West	222	56	2132	229	0.971	212	45	5.6	8.2	135.039	F
C - A12 South	2070	517	108	2374	0.872	2069	1669	6.2	6.5	11.688	B
D - Barrack Square East	276	69	1501	612	0.451	275	656	0.8	0.8	10.700	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1191	298	631	1519	0.784	1280	1339	26.0	3.9	20.024	C
B - Eagle Way West	181	45	1758	421	0.431	211	37	8.2	0.8	19.495	C
C - A12 South	1690	423	89	2386	0.708	1706	1497	6.5	2.5	5.414	A
D - Barrack Square East	225	56	1360	683	0.330	226	550	0.8	0.5	7.905	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	997	249	508	1592	0.627	1006	1109	3.9	1.7	6.232	A
B - Eagle Way West	152	38	1463	573	0.265	154	31	0.8	0.4	8.613	A
C - A12 South	1415	354	74	2395	0.591	1419	1176	2.5	1.5	3.706	A
D - Barrack Square East	188	47	1061	832	0.226	189	452	0.5	0.3	5.607	A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	241.19	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1352	100.000
B - Eagle Way West		ONE HOUR	✓	225	100.000
C - A12 South		ONE HOUR	✓	2324	100.000
D - Barrack Square East		ONE HOUR	✓	509	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	20	1269	64
	B - Eagle Way West	58	0	144	23
	C - A12 South	1486	72	1	765
	D - Barrack Square East	176	20	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	9	3
	B - Eagle Way West	4	0	0	5
	C - A12 South	10	5	0	2
	D - Barrack Square East	1	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.07	139.71	63.5	F	1241	1862
B - Eagle Way West	2.96	2124.35	111.8	F	207	310
C - A12 South	1.11	173.01	138.1	F	2133	3199
D - Barrack Square East	0.83	29.66	4.4	D	467	700

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1018	255	697	1461	0.697	1009	1286	0.0	2.2	7.816	A
B - Eagle Way West	170	42	1817	400	0.424	167	84	0.0	0.7	15.240	C
C - A12 South	1750	437	162	2351	0.744	1739	1287	0.0	2.8	5.775	A
D - Barrack Square East	383	96	1069	838	0.457	380	638	0.0	0.8	7.805	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1216	304	821	1391	0.874	1201	1529	2.2	6.0	17.678	C

B - Eagle Way West	202	51	2164	220	0.921	185	100	0.7	5.0	82.293	F
C - A12 South	2090	522	193	2332	0.896	2071	1524	2.8	7.6	12.915	B
D - Barrack Square East	457	114	1263	737	0.621	454	758	0.8	1.6	12.625	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1489	372	824	1388	1.073	1365	1679	6.0	37.1	68.066	F
B - Eagle Way West	248	62	2412	92	2.706	91	113	5.0	44.2	1053.569	F
C - A12 South	2559	640	233	2308	1.109	2292	1677	7.6	74.5	72.023	F
D - Barrack Square East	560	140	1359	684	0.820	551	829	1.6	3.9	25.458	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1489	372	823	1389	1.072	1383	1688	37.1	63.5	139.707	F
B - Eagle Way West	248	62	2427	84	2.958	84	114	44.2	85.2	2124.349	F
C - A12 South	2559	640	236	2306	1.110	2305	1695	74.5	138.1	170.971	F
D - Barrack Square East	560	140	1372	677	0.828	559	834	3.9	4.4	29.656	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1216	304	834	1382	0.879	1361	1664	63.5	27.2	123.293	F
B - Eagle Way West	202	51	2401	96	2.105	96	110	85.2	111.8	2073.582	F
C - A12 South	2090	522	200	2328	0.898	2311	1625	138.1	82.7	173.013	F
D - Barrack Square East	457	114	1359	684	0.669	466	836	4.4	2.1	17.167	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1018	255	853	1372	0.742	1115	1516	27.2	3.0	19.232	C
B - Eagle Way West	170	42	2139	232	0.730	230	96	111.8	96.7	1631.990	F
C - A12 South	1750	437	166	2348	0.745	2069	1431	82.7	3.1	33.992	D
D - Barrack Square East	383	96	1210	766	0.500	387	758	2.1	1.0	9.627	A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	38.23	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1330	100.000
B - Eagle Way West		ONE HOUR	✓	196	100.000
C - A12 South		ONE HOUR	✓	1945	100.000
D - Barrack Square East		ONE HOUR	✓	617	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	56	1158	115
	B - Eagle Way West	61	0	97	37
	C - A12 South	1535	104	0	305
	D - Barrack Square East	154	32	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	8	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	6	2	0	2
	D - Barrack Square East	3	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	22.71	8.7	C	1220	1830
B - Eagle Way West	0.99	142.91	8.5	F	179	269
C - A12 South	0.92	18.04	10.1	C	1784	2677
D - Barrack Square East	1.02	105.17	20.3	F	566	849

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1001	250	330	1697	0.590	995	1312	0.0	1.4	5.092	A
B - Eagle Way West	147	37	1496	565	0.260	146	144	0.0	0.3	8.552	A
C - A12 South	1464	366	182	2377	0.616	1458	1260	0.0	1.6	3.890	A
D - Barrack Square East	464	116	982	906	0.513	460	343	0.0	1.0	8.006	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1195	299	394	1659	0.720	1191	1569	1.4	2.5	7.616	A

B - Eagle Way West	176	44	1789	418	0.420	174	172	0.3	0.7	14.677	B
C - A12 South	1748	437	218	2355	0.742	1743	1507	1.6	2.8	5.838	A
D - Barrack Square East	554	139	1175	804	0.689	550	411	1.0	2.1	13.925	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1464	366	468	1617	0.906	1443	1891	2.5	7.8	18.780	C
B - Eagle Way West	215	54	2163	230	0.935	197	207	0.7	5.4	82.448	F
C - A12 South	2141	535	254	2333	0.918	2115	1797	2.8	9.3	15.062	C
D - Barrack Square East	679	170	1416	677	1.002	635	495	2.1	13.0	58.578	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1464	366	476	1612	0.908	1461	1914	7.8	8.7	22.715	C
B - Eagle Way West	215	54	2187	218	0.988	203	210	5.4	8.5	142.907	F
C - A12 South	2141	535	260	2329	0.919	2138	1825	9.3	10.1	18.039	C
D - Barrack Square East	679	170	1435	667	1.018	650	502	13.0	20.3	105.166	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1195	299	422	1644	0.727	1219	1624	8.7	2.8	8.934	A
B - Eagle Way West	176	44	1839	393	0.447	206	179	8.5	0.8	22.385	C
C - A12 South	1748	437	242	2340	0.747	1777	1600	10.1	3.0	6.695	A
D - Barrack Square East	554	139	1216	783	0.708	625	425	20.3	2.6	31.730	D

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1001	250	334	1695	0.591	1006	1325	2.8	1.5	5.271	A
B - Eagle Way West	147	37	1510	558	0.264	149	145	0.8	0.4	8.835	A
C - A12 South	1464	366	186	2375	0.616	1470	1278	3.0	1.6	4.002	A
D - Barrack Square East	464	116	993	900	0.516	470	347	2.6	1.1	8.500	A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	31.31	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1335	100.000
B - Eagle Way West		ONE HOUR	✓	157	100.000
C - A12 South		ONE HOUR	✓	1926	100.000
D - Barrack Square East		ONE HOUR	✓	641	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	70	1162	103
	B - Eagle Way West	45	0	94	19
	C - A12 South	1537	145	1	243
	D - Barrack Square East	171	46	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	3	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	3	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	14.05	5.5	B	1225	1838
B - Eagle Way West	0.64	35.55	1.6	E	144	216
C - A12 South	0.90	15.16	8.5	C	1767	2651
D - Barrack Square East	1.03	115.63	23.5	F	588	882

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1005	251	267	1799	0.559	1000	1313	0.0	1.3	4.481	A
B - Eagle Way West	118	30	1463	611	0.193	117	196	0.0	0.2	7.283	A
C - A12 South	1450	362	214	2406	0.603	1444	1258	0.0	1.5	3.719	A
D - Barrack Square East	482	121	994	921	0.524	478	273	0.0	1.1	8.049	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1200	300	319	1767	0.679	1197	1570	1.3	2.1	6.283	A

B - Eagle Way West	141	35	1749	467	0.302	140	234	0.2	0.4	10.997	B
C - A12 South	1731	433	256	2380	0.727	1727	1505	1.5	2.6	5.475	A
D - Barrack Square East	576	144	1190	822	0.701	571	327	1.1	2.2	14.111	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1470	368	387	1726	0.852	1458	1898	2.1	5.3	12.856	B
B - Eagle Way West	173	43	2116	283	0.611	169	282	0.4	1.4	30.515	D
C - A12 South	2120	530	298	2354	0.901	2099	1804	2.6	7.9	13.165	B
D - Barrack Square East	705	176	1447	691	1.020	655	397	2.2	14.9	63.082	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1470	368	392	1723	0.853	1469	1918	5.3	5.5	14.054	B
B - Eagle Way West	173	43	2137	272	0.635	172	285	1.4	1.6	35.550	E
C - A12 South	2120	530	304	2350	0.902	2118	1827	7.9	8.5	15.157	C
D - Barrack Square East	705	176	1460	685	1.030	671	401	14.9	23.5	115.625	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1200	300	327	1762	0.681	1214	1617	5.5	2.2	6.714	A
B - Eagle Way West	141	35	1798	443	0.319	146	243	1.6	0.5	12.293	B
C - A12 South	1731	433	287	2361	0.733	1754	1581	8.5	2.8	6.147	A
D - Barrack Square East	576	144	1208	813	0.709	659	332	23.5	2.6	34.759	D

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1005	251	270	1797	0.559	1009	1325	2.2	1.3	4.587	A
B - Eagle Way West	118	30	1476	604	0.196	119	198	0.5	0.2	7.434	A
C - A12 South	1450	362	218	2404	0.603	1455	1273	2.8	1.5	3.813	A
D - Barrack Square East	482	121	1003	916	0.526	488	275	2.6	1.1	8.522	A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	813	100.000
B - Eagle Way West		ONE HOUR	✓	77	100.000
C - A12 South		ONE HOUR	✓	922	100.000
D - Barrack Square East		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	771	40
	B - Eagle Way West	16	0	55	6
	C - A12 South	750	9	0	163
	D - Barrack Square East	3	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	11	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.51	4.20	1.0	A	746	1119
B - Eagle Way West	0.11	5.06	0.1	A	71	106
C - A12 South	0.42	2.62	0.7	A	846	1270
D - Barrack Square East	0.09	4.32	0.1	A	66	99

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	612	153	168	1798	0.340	610	578	0.0	0.5	3.025	A
B - Eagle Way West	58	14	688	964	0.060	58	14	0.0	0.1	3.972	A
C - A12 South	694	174	9	2393	0.290	693	666	0.0	0.4	2.115	A
D - Barrack Square East	54	14	621	1058	0.051	54	157	0.0	0.1	3.585	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	731	183	201	1779	0.411	730	691	0.5	0.7	3.431	A

B - Eagle Way West	69	17	823	893	0.078	69	17	0.1	0.1	4.369	A
C - A12 South	829	207	11	2392	0.347	829	797	0.4	0.5	2.303	A
D - Barrack Square East	65	16	744	996	0.065	65	187	0.1	0.1	3.863	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	895	224	246	1752	0.511	894	847	0.7	1.0	4.185	A
B - Eagle Way West	85	21	1008	796	0.106	85	21	0.1	0.1	5.057	A
C - A12 South	1016	254	14	2390	0.425	1015	976	0.5	0.7	2.616	A
D - Barrack Square East	79	20	910	913	0.087	79	229	0.1	0.1	4.319	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	895	224	246	1752	0.511	895	847	1.0	1.0	4.199	A
B - Eagle Way West	85	21	1009	796	0.107	85	21	0.1	0.1	5.062	A
C - A12 South	1016	254	14	2390	0.425	1016	977	0.7	0.7	2.618	A
D - Barrack Square East	79	20	912	912	0.087	79	230	0.1	0.1	4.323	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	731	183	201	1778	0.411	732	692	1.0	0.7	3.446	A
B - Eagle Way West	69	17	824	892	0.078	69	17	0.1	0.1	4.374	A
C - A12 South	829	207	11	2392	0.347	830	799	0.7	0.5	2.307	A
D - Barrack Square East	65	16	746	995	0.065	65	188	0.1	0.1	3.870	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	612	153	169	1798	0.340	613	580	0.7	0.5	3.039	A
B - Eagle Way West	58	14	690	963	0.060	58	14	0.1	0.1	3.980	A
C - A12 South	694	174	9	2393	0.290	695	669	0.5	0.4	2.120	A
D - Barrack Square East	54	14	624	1057	0.051	54	157	0.1	0.1	3.591	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	54.99	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1320	100.000
B - Eagle Way West		ONE HOUR	✓	202	100.000
C - A12 South		ONE HOUR	✓	1973	100.000
D - Barrack Square East		ONE HOUR	✓	250	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1263	56
	B - Eagle Way West	47	0	128	27
	C - A12 South	1427	30	0	515
	D - Barrack Square East	87	9	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	7	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	12	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.98	50.62	19.7	F	1211	1817
B - Eagle Way West	1.46	487.16	34.2	F	185	278
C - A12 South	0.94	21.88	12.4	C	1810	2715
D - Barrack Square East	0.44	10.28	0.8	B	230	345

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	994	248	502	1595	0.623	987	1170	0.0	1.6	5.864	A
B - Eagle Way West	152	38	1521	525	0.289	150	31	0.0	0.4	9.558	A
C - A12 South	1485	371	74	2342	0.634	1478	1155	0.0	1.7	4.138	A
D - Barrack Square East	188	47	1041	842	0.224	187	448	0.0	0.3	5.488	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1187	297	600	1537	0.772	1180	1399	1.6	3.2	9.919	A

B - Eagle Way West	181	45	1820	369	0.492	179	37	0.4	0.9	18.814	C
C - A12 South	1773	443	88	2333	0.760	1768	1381	1.7	3.1	6.312	A
D - Barrack Square East	225	56	1244	740	0.304	224	536	0.3	0.4	6.970	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1453	363	682	1487	0.977	1406	1681	3.2	15.1	32.988	D
B - Eagle Way West	222	56	2204	167	1.333	159	44	0.9	16.7	238.735	F
C - A12 South	2172	543	108	2321	0.936	2140	1614	3.1	11.1	17.462	C
D - Barrack Square East	276	69	1448	638	0.432	274	640	0.4	0.7	9.877	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1453	363	684	1486	0.978	1435	1699	15.1	19.7	50.625	F
B - Eagle Way West	222	56	2230	153	1.456	152	45	16.7	34.2	487.160	F
C - A12 South	2172	543	108	2321	0.936	2167	1638	11.1	12.4	21.880	C
D - Barrack Square East	276	69	1471	626	0.441	276	647	0.7	0.8	10.278	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1187	297	714	1471	0.807	1247	1461	19.7	4.5	19.640	C
B - Eagle Way West	181	45	1862	346	0.524	313	37	34.2	1.3	178.137	F
C - A12 South	1773	443	89	2332	0.760	1810	1531	12.4	3.3	7.350	A
D - Barrack Square East	225	56	1394	668	0.337	226	568	0.8	0.5	8.168	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	994	248	510	1590	0.625	1005	1181	4.5	1.7	6.263	A
B - Eagle Way West	152	38	1535	518	0.293	156	31	1.3	0.4	10.016	B
C - A12 South	1485	371	75	2341	0.634	1491	1176	3.3	1.8	4.266	A
D - Barrack Square East	188	47	1061	832	0.226	189	453	0.5	0.3	5.609	A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	409.57	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1367	100.000
B - Eagle Way West		ONE HOUR	✓	225	100.000
C - A12 South		ONE HOUR	✓	2355	100.000
D - Barrack Square East		ONE HOUR	✓	509	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	20	1283	64
	B - Eagle Way West	58	0	144	23
	C - A12 South	1516	72	1	765
	D - Barrack Square East	176	20	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	10	3
	B - Eagle Way West	4	0	0	5
	C - A12 South	13	5	0	2
	D - Barrack Square East	1	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.08	149.57	68.9	F	1255	1882
B - Eagle Way West	3.02	4711.09	136.0	F	207	310
C - A12 South	1.15	256.20	179.8	F	2161	3241
D - Barrack Square East	0.84	31.57	4.6	D	467	700

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1029	257	696	1451	0.709	1020	1308	0.0	2.4	8.184	A
B - Eagle Way West	170	42	1838	369	0.459	166	84	0.0	0.8	17.469	C
C - A12 South	1773	443	162	2301	0.770	1760	1297	0.0	3.3	6.502	A
D - Barrack Square East	383	96	1079	828	0.462	380	637	0.0	0.8	7.965	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1229	307	806	1388	0.885	1212	1547	2.4	6.5	18.900	C

B - Eagle Way West	202	51	2183	186	1.087	170	99	0.8	9.0	156.238	F
C - A12 South	2117	529	193	2283	0.927	2089	1526	3.3	10.1	16.846	C
D - Barrack Square East	457	114	1265	730	0.626	454	754	0.8	1.6	12.896	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1505	376	797	1393	1.081	1372	1662	6.5	39.9	71.984	F
B - Eagle Way West	248	62	2372	87	2.850	87	110	9.0	49.3	1272.065	F
C - A12 South	2593	648	233	2260	1.147	2250	1681	10.1	95.8	91.852	F
D - Barrack Square East	560	140	1364	676	0.829	560	805	1.6	4.1	26.735	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1505	376	796	1394	1.080	1389	1668	39.9	68.9	149.573	F
B - Eagle Way West	248	62	2382	82	3.021	82	111	49.3	90.7	2807.513	F
C - A12 South	2593	648	236	2258	1.148	2257	1699	95.8	179.8	223.936	F
D - Barrack Square East	560	140	1377	669	0.838	558	808	4.1	4.6	31.588	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1229	307	807	1387	0.886	1368	1645	68.9	34.3	138.600	F
B - Eagle Way West	202	51	2359	93	2.179	93	108	90.7	118.1	3925.642	F
C - A12 South	2117	529	201	2279	0.929	2266	1630	179.8	142.5	256.198	F
D - Barrack Square East	457	114	1364	676	0.677	467	811	4.6	2.2	17.952	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1029	257	816	1382	0.745	1154	1629	34.3	3.1	24.640	C
B - Eagle Way West	170	42	2347	98	1.731	98	102	118.1	136.0	4711.089	F
C - A12 South	1773	443	167	2298	0.771	2282	1385	142.5	15.2	127.456	F
D - Barrack Square East	383	96	1164	782	0.490	388	806	2.2	1.0	9.252	A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	47.12	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1346	100.000
B - Eagle Way West		ONE HOUR	✓	196	100.000
C - A12 South		ONE HOUR	✓	1930	100.000
D - Barrack Square East		ONE HOUR	✓	617	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	56	1174	114
	B - Eagle Way West	61	0	97	37
	C - A12 South	1520	104	0	305
	D - Barrack Square East	154	32	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	10	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	9	2	0	2
	D - Barrack Square East	3	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.94	30.20	11.6	D	1235	1852
B - Eagle Way West	1.03	172.50	10.6	F	179	269
C - A12 South	0.93	20.24	11.3	C	1771	2656
D - Barrack Square East	1.05	134.44	26.9	F	566	849

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1013	253	330	1664	0.609	1007	1301	0.0	1.5	5.430	A
B - Eagle Way West	147	37	1484	557	0.264	146	144	0.0	0.4	8.719	A
C - A12 South	1453	363	182	2333	0.623	1446	1272	0.0	1.6	4.033	A
D - Barrack Square East	464	116	994	889	0.522	460	343	0.0	1.1	8.315	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1210	302	394	1627	0.743	1205	1555	1.5	2.8	8.417	A

B - Eagle Way West	176	44	1775	409	0.430	174	172	0.4	0.7	15.265	C
C - A12 South	1735	434	218	2311	0.751	1730	1521	1.6	2.9	6.134	A
D - Barrack Square East	554	139	1189	784	0.707	549	410	1.1	2.3	15.042	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1482	370	465	1587	0.934	1453	1869	2.8	10.0	23.057	C
B - Eagle Way West	215	54	2141	221	0.973	193	206	0.7	6.3	94.314	F
C - A12 South	2125	531	251	2291	0.927	2096	1799	2.9	10.1	16.457	C
D - Barrack Square East	679	170	1425	657	1.034	625	493	2.3	15.9	68.986	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1482	370	472	1583	0.936	1475	1892	10.0	11.6	30.200	D
B - Eagle Way West	215	54	2166	208	1.034	198	209	6.3	10.6	172.498	F
C - A12 South	2125	531	255	2289	0.928	2120	1828	10.1	11.3	20.241	C
D - Barrack Square East	679	170	1448	645	1.053	635	499	15.9	26.9	134.437	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1210	302	428	1608	0.752	1244	1622	11.6	3.2	10.732	B
B - Eagle Way West	176	44	1836	378	0.465	215	181	10.6	0.9	27.227	D
C - A12 South	1735	434	249	2292	0.757	1767	1645	11.3	3.2	7.260	A
D - Barrack Square East	554	139	1245	755	0.735	650	427	26.9	3.1	53.652	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1013	253	334	1661	0.610	1019	1315	3.2	1.6	5.659	A
B - Eagle Way West	147	37	1500	550	0.268	149	146	0.9	0.4	9.039	A
C - A12 South	1453	363	186	2330	0.623	1459	1293	3.2	1.7	4.160	A
D - Barrack Square East	464	116	1007	882	0.526	472	347	3.1	1.1	8.948	A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	30.10	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1294	100.000
B - Eagle Way West		ONE HOUR	✓	157	100.000
C - A12 South		ONE HOUR	✓	1911	100.000
D - Barrack Square East		ONE HOUR	✓	639	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	70	1124	100
	B - Eagle Way West	45	0	94	19
	C - A12 South	1522	145	1	243
	D - Barrack Square East	169	46	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	6	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	4	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	13.97	5.3	B	1188	1781
B - Eagle Way West	0.63	34.24	1.6	D	144	216
C - A12 South	0.90	14.77	8.2	B	1754	2631
D - Barrack Square East	1.02	109.47	22.0	F	586	879

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	974	244	267	1753	0.556	969	1300	0.0	1.2	4.564	A
B - Eagle Way West	118	30	1450	614	0.192	117	196	0.0	0.2	7.237	A
C - A12 South	1439	360	213	2397	0.600	1433	1229	0.0	1.5	3.713	A
D - Barrack Square East	481	120	965	923	0.521	477	271	0.0	1.1	7.989	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1163	291	319	1722	0.676	1160	1555	1.2	2.0	6.370	A

B - Eagle Way West	141	35	1734	471	0.300	140	234	0.2	0.4	10.875	B
C - A12 South	1718	430	254	2371	0.725	1714	1470	1.5	2.6	5.443	A
D - Barrack Square East	574	144	1155	824	0.697	570	325	1.1	2.2	13.897	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1425	356	387	1682	0.847	1413	1881	2.0	5.1	12.834	B
B - Eagle Way West	173	43	2099	287	0.602	169	282	0.4	1.4	29.606	D
C - A12 South	2104	526	297	2344	0.898	2084	1763	2.6	7.7	12.911	B
D - Barrack Square East	703	176	1405	694	1.013	655	395	2.2	14.2	60.806	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1425	356	392	1679	0.849	1424	1901	5.1	5.3	13.975	B
B - Eagle Way West	173	43	2120	276	0.626	172	285	1.4	1.6	34.242	D
C - A12 South	2104	526	303	2341	0.899	2102	1786	7.7	8.2	14.775	B
D - Barrack Square East	703	176	1417	688	1.022	672	398	14.2	22.0	109.466	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1163	291	326	1718	0.677	1176	1599	5.3	2.1	6.796	A
B - Eagle Way West	141	35	1780	448	0.315	145	243	1.6	0.5	12.072	B
C - A12 South	1718	430	283	2353	0.730	1740	1542	8.2	2.8	6.071	A
D - Barrack Square East	574	144	1173	815	0.704	652	330	22.0	2.6	31.488	D

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	974	244	270	1752	0.556	978	1312	2.1	1.3	4.672	A
B - Eagle Way West	118	30	1463	607	0.195	119	198	0.5	0.2	7.387	A
C - A12 South	1439	360	217	2394	0.601	1444	1244	2.8	1.5	3.806	A
D - Barrack Square East	481	120	974	918	0.524	487	274	2.6	1.1	8.443	A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	837	100.000
B - Eagle Way West		ONE HOUR	✓	80	100.000
C - A12 South		ONE HOUR	✓	807	100.000
D - Barrack Square East		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	795	40
	B - Eagle Way West	17	0	57	6
	C - A12 South	635	10	0	163
	D - Barrack Square East	3	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	9	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.53	4.32	1.1	A	768	1152
B - Eagle Way West	0.10	4.61	0.1	A	73	110
C - A12 South	0.37	2.34	0.6	A	741	1111
D - Barrack Square East	0.09	4.40	0.1	A	66	99

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	630	158	170	1801	0.350	628	492	0.0	0.5	3.064	A
B - Eagle Way West	60	15	601	1014	0.059	60	15	0.0	0.1	3.773	A
C - A12 South	608	152	10	2429	0.250	606	685	0.0	0.3	1.974	A
D - Barrack Square East	54	14	641	1048	0.052	54	157	0.0	0.1	3.622	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	752	188	203	1781	0.422	752	588	0.5	0.7	3.494	A

B - Eagle Way West	72	18	719	953	0.075	72	17	0.1	0.1	4.085	A
C - A12 South	726	181	11	2428	0.299	725	821	0.3	0.4	2.114	A
D - Barrack Square East	65	16	767	985	0.066	65	188	0.1	0.1	3.914	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	921	230	249	1755	0.525	920	720	0.7	1.1	4.304	A
B - Eagle Way West	88	22	881	870	0.101	88	21	0.1	0.1	4.604	A
C - A12 South	889	222	14	2426	0.366	888	1004	0.4	0.6	2.339	A
D - Barrack Square East	80	20	939	898	0.089	79	230	0.1	0.1	4.396	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	921	230	249	1755	0.525	921	721	1.1	1.1	4.320	A
B - Eagle Way West	88	22	881	869	0.101	88	21	0.1	0.1	4.606	A
C - A12 South	889	222	14	2426	0.366	889	1006	0.6	0.6	2.341	A
D - Barrack Square East	80	20	940	898	0.089	80	230	0.1	0.1	4.400	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	752	188	203	1781	0.422	754	589	1.1	0.7	3.508	A
B - Eagle Way West	72	18	720	953	0.075	72	17	0.1	0.1	4.088	A
C - A12 South	726	181	11	2428	0.299	726	823	0.6	0.4	2.115	A
D - Barrack Square East	65	16	769	983	0.066	65	188	0.1	0.1	3.920	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	630	158	170	1801	0.350	631	493	0.7	0.5	3.081	A
B - Eagle Way West	60	15	603	1013	0.059	60	15	0.1	0.1	3.777	A
C - A12 South	608	152	10	2429	0.250	608	689	0.4	0.3	1.976	A
D - Barrack Square East	54	14	644	1046	0.052	54	157	0.1	0.1	3.628	A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	58.18	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1348	100.000
B - Eagle Way West		ONE HOUR	✓	209	100.000
C - A12 South		ONE HOUR	✓	1970	100.000
D - Barrack Square East		ONE HOUR	✓	305	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1287	60
	B - Eagle Way West	48	0	133	28
	C - A12 South	1424	31	0	515
	D - Barrack Square East	141	10	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	7	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	62.86	25.8	F	1237	1855
B - Eagle Way West	1.44	485.59	35.4	F	192	288
C - A12 South	0.92	18.09	10.3	C	1808	2712
D - Barrack Square East	0.54	12.40	1.1	B	280	419

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1015	254	507	1599	0.635	1008	1209	0.0	1.7	6.027	A
B - Eagle Way West	158	39	1559	531	0.297	156	32	0.0	0.4	9.563	A
C - A12 South	1483	371	114	2390	0.620	1477	1176	0.0	1.6	3.913	A
D - Barrack Square East	229	57	1062	843	0.272	228	452	0.0	0.4	5.842	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1212	303	606	1540	0.787	1204	1446	1.7	3.5	10.513	B

B - Eagle Way West	188	47	1865	375	0.502	186	38	0.4	1.0	18.842	C
C - A12 South	1771	443	137	2376	0.745	1766	1405	1.6	2.9	5.851	A
D - Barrack Square East	274	68	1269	738	0.371	273	541	0.4	0.6	7.726	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1484	371	688	1490	0.996	1424	1741	3.5	18.4	37.816	E
B - Eagle Way West	231	58	2264	172	1.343	165	46	1.0	17.5	240.155	F
C - A12 South	2169	542	167	2358	0.920	2143	1632	2.9	9.5	15.175	C
D - Barrack Square East	335	84	1466	638	0.526	333	646	0.6	1.1	11.738	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1484	371	690	1489	0.997	1455	1757	18.4	25.8	62.862	F
B - Eagle Way West	231	58	2287	160	1.444	159	47	17.5	35.4	485.591	F
C - A12 South	2169	542	168	2357	0.920	2166	1658	9.5	10.3	18.086	C
D - Barrack Square East	335	84	1491	625	0.537	335	653	1.1	1.1	12.405	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1212	303	721	1473	0.823	1294	1503	25.8	5.1	26.703	D
B - Eagle Way West	188	47	1900	357	0.527	324	39	35.4	1.3	179.062	F
C - A12 South	1771	443	138	2375	0.746	1800	1580	10.3	3.0	6.563	A
D - Barrack Square East	274	68	1443	653	0.420	276	572	1.1	0.7	9.582	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1015	254	514	1594	0.636	1028	1220	5.1	1.8	6.499	A
B - Eagle Way West	158	39	1572	524	0.301	161	32	1.3	0.4	10.015	B
C - A12 South	1483	371	116	2389	0.621	1489	1200	3.0	1.7	4.021	A
D - Barrack Square East	229	57	1085	831	0.276	231	457	0.7	0.4	6.008	A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	396.87	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1363	100.000
B - Eagle Way West		ONE HOUR	✓	234	100.000
C - A12 South		ONE HOUR	✓	2313	100.000
D - Barrack Square East		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	21	1273	70
	B - Eagle Way West	61	0	149	24
	C - A12 South	1472	75	1	765
	D - Barrack Square East	301	21	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	7	3
	B - Eagle Way West	4	0	0	5
	C - A12 South	9	5	0	2
	D - Barrack Square East	0	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	111.31	50.1	F	1251	1876
B - Eagle Way West	4.14	4686.04	157.3	F	214	322
C - A12 South	1.14	228.88	162.6	F	2123	3184
D - Barrack Square East	1.02	108.26	21.3	F	582	873

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1026	257	701	1485	0.691	1018	1370	0.0	2.2	7.560	A
B - Eagle Way West	176	44	1898	365	0.482	172	87	0.0	0.9	18.362	C
C - A12 South	1741	435	256	2307	0.755	1729	1293	0.0	3.0	6.113	A
D - Barrack Square East	478	119	1076	850	0.562	473	643	0.0	1.3	9.423	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1225	306	806	1424	0.861	1212	1620	2.2	5.5	16.064	C

B - Eagle Way West	210	53	2258	180	1.168	168	103	0.9	11.5	210.103	F
C - A12 South	2079	520	305	2277	0.913	2056	1517	3.0	8.8	14.909	B
D - Barrack Square East	570	143	1258	756	0.755	564	761	1.3	2.9	18.205	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1501	375	792	1432	1.048	1400	1751	5.5	30.8	57.689	F
B - Eagle Way West	257	64	2475	68	3.757	68	115	11.5	58.7	1838.430	F
C - A12 South	2547	637	354	2248	1.133	2236	1673	8.8	86.5	84.113	F
D - Barrack Square East	699	175	1372	694	1.006	655	819	2.9	13.7	61.088	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1501	375	790	1433	1.047	1423	1760	30.8	50.1	111.305	F
B - Eagle Way West	257	64	2488	62	4.145	62	116	58.7	107.5	3382.660	F
C - A12 South	2547	637	361	2244	1.135	2243	1698	86.5	162.6	204.558	F
D - Barrack Square East	699	175	1391	685	1.021	668	822	13.7	21.3	108.256	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1225	306	796	1429	0.857	1392	1745	50.1	8.4	78.855	F
B - Eagle Way West	210	53	2470	71	2.957	71	114	107.5	142.3	4261.722	F
C - A12 South	2079	520	343	2255	0.922	2241	1657	162.6	122.2	228.881	F
D - Barrack Square East	570	143	1367	697	0.818	634	821	21.3	5.5	67.736	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1026	257	820	1415	0.725	1049	1675	8.4	2.7	10.392	B
B - Eagle Way West	176	44	2379	116	1.518	116	104	142.3	157.3	4686.036	F
C - A12 South	1741	435	267	2300	0.757	2216	1297	122.2	3.6	91.283	F
D - Barrack Square East	478	119	1070	852	0.561	495	800	5.5	1.3	10.529	B

2034 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	96.54	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1493	100.000
B - Eagle Way West		ONE HOUR	✓	203	100.000
C - A12 South		ONE HOUR	✓	2091	100.000
D - Barrack Square East		ONE HOUR	✓	668	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	58	1244	189
	B - Eagle Way West	63	0	101	39
	C - A12 South	1677	108	0	305
	D - Barrack Square East	204	33	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	6	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	5	2	0	2
	D - Barrack Square East	2	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.99	53.77	24.0	F	1370	2055
B - Eagle Way West	1.56	574.77	38.2	F	186	280
C - A12 South	0.99	44.86	28.2	E	1918	2878
D - Barrack Square East	1.13	213.01	47.3	F	613	919

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1124	281	333	1722	0.653	1117	1456	0.0	1.8	5.879	A
B - Eagle Way West	153	38	1639	501	0.305	151	149	0.0	0.4	10.254	B
C - A12 South	1574	393	222	2371	0.664	1566	1326	0.0	1.9	4.430	A
D - Barrack Square East	503	126	1050	878	0.572	498	400	0.0	1.3	9.329	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1342	336	398	1684	0.797	1335	1740	1.8	3.7	10.095	B

B - Eagle Way West	183	46	1958	342	0.534	180	178	0.4	1.1	21.919	C
C - A12 South	1879	470	264	2345	0.802	1872	1583	1.9	3.9	7.486	A
D - Barrack Square East	600	150	1255	772	0.778	593	478	1.3	3.2	19.316	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1644	411	434	1662	0.989	1587	2039	3.7	18.0	33.949	D
B - Eagle Way West	224	56	2317	162	1.378	156	209	1.1	18.0	264.953	F
C - A12 South	2302	575	293	2327	0.989	2234	1816	3.9	20.9	27.756	D
D - Barrack Square East	735	184	1463	663	1.108	646	558	3.2	25.6	96.970	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1644	411	431	1664	0.988	1620	2067	18.0	24.0	53.770	F
B - Eagle Way West	224	56	2355	143	1.560	143	213	18.0	38.2	574.773	F
C - A12 South	2302	575	295	2326	0.990	2273	1838	20.9	28.2	44.865	E
D - Barrack Square East	735	184	1485	652	1.129	648	566	25.6	47.3	213.010	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1342	336	475	1638	0.819	1418	1882	24.0	4.9	20.897	C
B - Eagle Way West	183	46	2087	278	0.658	271	192	38.2	16.2	352.717	F
C - A12 South	1879	470	304	2320	0.810	1974	1765	28.2	4.5	13.108	B
D - Barrack Square East	600	150	1373	711	0.844	696	521	47.3	23.2	184.793	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1124	281	381	1694	0.663	1136	1519	4.9	2.0	6.577	A
B - Eagle Way West	153	38	1684	479	0.320	216	155	16.2	0.5	17.448	C
C - A12 South	1574	393	255	2350	0.670	1584	1433	4.5	2.1	4.753	A
D - Barrack Square East	503	126	1099	854	0.589	590	417	23.2	1.5	18.720	C

2034 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	57.53	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1447	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	1995	100.000
D - Barrack Square East		ONE HOUR	✓	688	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	73	1213	161
	B - Eagle Way West	46	0	97	19
	C - A12 South	1601	151	1	243
	D - Barrack Square East	217	47	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	2	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	23.67	9.9	C	1328	1992
B - Eagle Way West	0.78	63.76	2.9	F	150	224
C - A12 South	0.94	21.89	12.6	C	1831	2747
D - Barrack Square East	1.15	231.44	53.6	F	632	948

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1089	272	270	1809	0.602	1083	1396	0.0	1.5	4.920	A
B - Eagle Way West	123	31	1544	574	0.214	122	203	0.0	0.3	7.933	A
C - A12 South	1502	376	252	2396	0.627	1496	1297	0.0	1.7	3.971	A
D - Barrack Square East	518	130	1036	904	0.573	513	317	0.0	1.3	9.093	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1301	325	323	1777	0.732	1296	1669	1.5	2.7	7.419	A

B - Eagle Way West	147	37	1846	424	0.346	146	243	0.3	0.5	12.900	B
C - A12 South	1794	448	300	2365	0.758	1788	1551	1.7	3.1	6.179	A
D - Barrack Square East	619	155	1240	801	0.772	612	380	1.3	3.1	18.311	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1593	398	388	1737	0.917	1569	1992	2.7	8.8	19.143	C
B - Eagle Way West	179	45	2208	243	0.739	172	288	0.5	2.3	46.940	E
C - A12 South	2197	549	331	2346	0.936	2165	1822	3.1	11.2	17.372	C
D - Barrack Square East	758	189	1498	671	1.129	656	459	3.1	28.7	103.812	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1593	398	395	1732	0.920	1589	2016	8.8	9.9	23.673	C
B - Eagle Way West	179	45	2233	230	0.780	177	291	2.3	2.9	63.763	F
C - A12 South	2197	549	333	2345	0.937	2192	1844	11.2	12.6	21.895	C
D - Barrack Square East	758	189	1519	661	1.147	658	465	28.7	53.6	231.442	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1301	325	335	1769	0.735	1329	1755	9.9	2.9	8.663	A
B - Eagle Way West	147	37	1934	380	0.386	156	258	2.9	0.6	16.663	C
C - A12 South	1794	448	363	2326	0.771	1830	1681	12.6	3.5	7.758	A
D - Barrack Square East	619	155	1275	784	0.790	769	390	53.6	16.0	168.043	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1089	272	273	1807	0.603	1095	1428	2.9	1.5	5.089	A
B - Eagle Way West	123	31	1577	558	0.220	124	209	0.6	0.3	8.325	A
C - A12 South	1502	376	277	2380	0.631	1509	1348	3.5	1.7	4.168	A
D - Barrack Square East	518	130	1048	898	0.577	577	321	16.0	1.4	13.321	B

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	3.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	838	100.000
B - Eagle Way West		ONE HOUR	✓	80	100.000
C - A12 South		ONE HOUR	✓	808	100.000
D - Barrack Square East		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	796	40
	B - Eagle Way West	17	0	57	6
	C - A12 South	636	10	0	163
	D - Barrack Square East	3	7	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	0	6	5
	B - Eagle Way West	7	0	2	0
	C - A12 South	9	13	0	2
	D - Barrack Square East	0	33	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.53	4.33	1.1	A	769	1153
B - Eagle Way West	0.10	4.61	0.1	A	73	110
C - A12 South	0.37	2.34	0.6	A	742	1113
D - Barrack Square East	0.09	4.40	0.1	A	66	99

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	631	158	170	1801	0.350	629	492	0.0	0.5	3.066	A
B - Eagle Way West	60	15	602	1013	0.059	60	15	0.0	0.1	3.775	A
C - A12 South	609	152	10	2429	0.250	607	686	0.0	0.3	1.975	A
D - Barrack Square East	54	14	642	1048	0.052	54	157	0.0	0.1	3.624	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	753	188	203	1781	0.423	752	589	0.5	0.7	3.497	A

B - Eagle Way West	72	18	720	953	0.075	72	17	0.1	0.1	4.087	A
C - A12 South	727	182	11	2428	0.299	726	821	0.3	0.4	2.115	A
D - Barrack Square East	65	16	768	984	0.066	65	188	0.1	0.1	3.916	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	923	231	249	1755	0.526	921	721	0.7	1.1	4.310	A
B - Eagle Way West	88	22	882	869	0.101	88	21	0.1	0.1	4.607	A
C - A12 South	890	222	14	2426	0.367	889	1005	0.4	0.6	2.340	A
D - Barrack Square East	80	20	940	898	0.089	79	230	0.1	0.1	4.399	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	923	231	249	1755	0.526	922	722	1.1	1.1	4.325	A
B - Eagle Way West	88	22	883	869	0.101	88	21	0.1	0.1	4.609	A
C - A12 South	890	222	14	2426	0.367	890	1007	0.6	0.6	2.342	A
D - Barrack Square East	80	20	941	897	0.089	80	230	0.1	0.1	4.403	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	753	188	203	1781	0.423	755	590	1.1	0.7	3.513	A
B - Eagle Way West	72	18	721	952	0.075	72	17	0.1	0.1	4.090	A
C - A12 South	727	182	11	2428	0.299	727	824	0.6	0.4	2.116	A
D - Barrack Square East	65	16	770	983	0.066	65	188	0.1	0.1	3.923	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	631	158	170	1801	0.350	632	494	0.7	0.5	3.083	A
B - Eagle Way West	60	15	604	1013	0.059	60	15	0.1	0.1	3.779	A
C - A12 South	609	152	10	2429	0.250	609	689	0.4	0.3	1.979	A
D - Barrack Square East	54	14	645	1046	0.052	54	157	0.1	0.1	3.632	A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	61.39	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1370	100.000
B - Eagle Way West		ONE HOUR	✓	209	100.000
C - A12 South		ONE HOUR	✓	1960	100.000
D - Barrack Square East		ONE HOUR	✓	305	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	1	1309	60
	B - Eagle Way West	48	0	133	28
	C - A12 South	1414	31	0	515
	D - Barrack Square East	141	10	153	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	100	6	0
	B - Eagle Way West	10	0	0	4
	C - A12 South	7	8	0	5
	D - Barrack Square East	1	38	7	100

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	76.60	33.0	F	1257	1886
B - Eagle Way West	1.40	458.03	33.4	F	192	288
C - A12 South	0.92	17.38	9.9	C	1799	2698
D - Barrack Square East	0.54	12.69	1.2	B	280	419

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1031	258	507	1599	0.645	1024	1201	0.0	1.8	6.193	A
B - Eagle Way West	158	39	1552	534	0.295	156	32	0.0	0.4	9.484	A
C - A12 South	1476	369	114	2388	0.618	1469	1192	0.0	1.6	3.891	A
D - Barrack Square East	229	57	1078	834	0.275	228	452	0.0	0.4	5.921	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1231	308	606	1540	0.800	1224	1437	1.8	3.8	11.112	B

B - Eagle Way West	188	47	1856	379	0.497	186	38	0.4	1.0	18.517	C
C - A12 South	1762	441	137	2374	0.742	1757	1424	1.6	2.8	5.787	A
D - Barrack Square East	274	68	1288	729	0.376	273	541	0.4	0.6	7.887	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1508	377	691	1488	1.013	1435	1731	3.8	22.1	42.918	E
B - Eagle Way West	231	58	2254	176	1.312	168	46	1.0	16.6	225.490	F
C - A12 South	2158	540	167	2356	0.916	2133	1645	2.8	9.1	14.738	B
D - Barrack Square East	335	84	1479	632	0.531	333	647	0.6	1.1	11.995	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1508	377	693	1487	1.014	1464	1747	22.1	33.0	76.596	F
B - Eagle Way West	231	58	2277	164	1.404	164	47	16.6	33.4	458.030	F
C - A12 South	2158	540	168	2355	0.916	2155	1671	9.1	9.9	17.381	C
D - Barrack Square East	335	84	1504	619	0.542	335	653	1.1	1.2	12.685	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1231	308	715	1477	0.834	1341	1491	33.0	5.7	37.485	E
B - Eagle Way West	188	47	1889	362	0.520	317	39	33.4	1.3	155.215	F
C - A12 South	1762	441	138	2373	0.742	1790	1620	9.9	3.0	6.448	A
D - Barrack Square East	274	68	1483	632	0.433	275	572	1.2	0.8	10.134	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1031	258	514	1595	0.647	1047	1212	5.7	1.9	6.747	A
B - Eagle Way West	158	39	1565	527	0.299	161	32	1.3	0.4	9.907	A
C - A12 South	1476	369	116	2387	0.618	1481	1218	3.0	1.6	3.995	A
D - Barrack Square East	229	57	1103	822	0.279	231	457	0.8	0.4	6.108	A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	563.96	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1413	100.000
B - Eagle Way West		ONE HOUR	✓	234	100.000
C - A12 South		ONE HOUR	✓	2368	100.000
D - Barrack Square East		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	21	1321	72
	B - Eagle Way West	61	0	149	24
	C - A12 South	1527	75	1	765
	D - Barrack Square East	301	21	312	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	6	8	3
	B - Eagle Way West	4	0	0	5
	C - A12 South	9	5	0	2
	D - Barrack Square East	0	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.09	157.38	75.2	F	1297	1945
B - Eagle Way West	4.21	7287.98	172.6	F	214	322
C - A12 South	1.16	291.57	195.1	F	2173	3260
D - Barrack Square East	1.03	121.74	24.2	F	582	873

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1064	266	701	1473	0.722	1054	1410	0.0	2.5	8.394	A
B - Eagle Way West	176	44	1938	343	0.513	172	87	0.0	1.0	20.625	C
C - A12 South	1783	446	256	2303	0.774	1770	1327	0.0	3.3	6.597	A
D - Barrack Square East	478	119	1111	827	0.577	472	644	0.0	1.3	9.999	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1270	318	790	1421	0.894	1252	1659	2.5	7.0	19.527	C

B - Eagle Way West	210	53	2299	156	1.342	149	103	1.0	16.2	326.388	F
C - A12 South	2129	532	305	2274	0.936	2098	1544	3.3	11.1	17.931	C
D - Barrack Square East	570	143	1285	736	0.775	563	758	1.3	3.1	20.062	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1556	389	774	1430	1.088	1411	1768	7.0	43.2	74.826	F
B - Eagle Way West	257	64	2476	66	3.907	66	113	16.2	64.0	2192.466	F
C - A12 South	2607	652	351	2246	1.161	2238	1681	11.1	103.5	99.134	F
D - Barrack Square East	699	175	1382	683	1.023	650	803	3.1	15.4	67.482	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1556	389	771	1432	1.087	1428	1776	43.2	75.2	157.385	F
B - Eagle Way West	257	64	2486	61	4.211	61	113	64.0	113.1	4384.875	F
C - A12 South	2607	652	358	2242	1.163	2241	1700	103.5	195.1	244.034	F
D - Barrack Square East	699	175	1395	676	1.033	663	804	15.4	24.2	121.744	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1270	318	775	1429	0.889	1410	1764	75.2	40.2	149.579	F
B - Eagle Way West	210	53	2471	68	3.078	68	112	113.1	148.5	6077.823	F
C - A12 South	2129	532	346	2249	0.947	2237	1678	195.1	168.0	291.566	F
D - Barrack Square East	570	143	1383	683	0.836	640	803	24.2	6.7	86.596	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1064	266	797	1416	0.751	1212	1727	40.2	3.2	30.356	D
B - Eagle Way West	176	44	2445	80	2.204	80	106	148.5	172.6	7287.976	F
C - A12 South	1783	446	271	2294	0.777	2280	1429	168.0	43.7	169.187	F
D - Barrack Square East	478	119	1202	777	0.614	498	807	6.7	1.6	13.752	B

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	99.50	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1499	100.000
B - Eagle Way West		ONE HOUR	✓	203	100.000
C - A12 South		ONE HOUR	✓	2093	100.000
D - Barrack Square East		ONE HOUR	✓	667	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	1	58	1248	191
	B - Eagle Way West	63	0	101	39
	C - A12 South	1679	108	0	305
	D - Barrack Square East	203	33	430	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	100	0	7	1
	B - Eagle Way West	8	0	2	0
	C - A12 South	5	2	0	2
	D - Barrack Square East	2	7	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	60.12	27.4	F	1375	2063
B - Eagle Way West	1.56	574.79	38.2	F	186	280
C - A12 South	0.99	45.09	28.4	E	1920	2880
D - Barrack Square East	1.13	218.99	48.4	F	612	918

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1129	282	333	1713	0.659	1121	1457	0.0	1.9	6.004	A
B - Eagle Way West	153	38	1639	500	0.306	151	149	0.0	0.4	10.264	B
C - A12 South	1575	394	221	2372	0.664	1568	1329	0.0	1.9	4.435	A
D - Barrack Square East	502	126	1053	874	0.574	497	401	0.0	1.3	9.420	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1348	337	398	1675	0.804	1340	1741	1.9	3.9	10.475	B

B - Eagle Way West	183	46	1958	341	0.535	180	178	0.4	1.1	21.969	C
C - A12 South	1881	470	263	2346	0.802	1873	1587	1.9	3.9	7.502	A
D - Barrack Square East	599	150	1258	767	0.782	592	479	1.3	3.3	19.741	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1650	413	434	1654	0.998	1587	2039	3.9	19.8	36.493	E
B - Eagle Way West	224	56	2318	162	1.379	156	209	1.1	18.0	265.355	F
C - A12 South	2304	576	291	2328	0.990	2235	1813	3.9	21.0	27.852	D
D - Barrack Square East	734	184	1462	660	1.113	643	559	3.3	26.1	99.044	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1650	413	431	1656	0.997	1620	2067	19.8	27.4	60.121	F
B - Eagle Way West	224	56	2355	143	1.561	143	213	18.0	38.2	574.794	F
C - A12 South	2304	576	293	2327	0.990	2275	1836	21.0	28.4	45.089	E
D - Barrack Square East	734	184	1485	648	1.134	645	567	26.1	48.4	218.994	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1348	337	476	1630	0.827	1436	1881	27.4	5.3	24.834	C
B - Eagle Way West	183	46	2085	278	0.656	271	192	38.2	16.1	351.533	F
C - A12 South	1881	470	300	2323	0.810	1977	1773	28.4	4.5	13.134	B
D - Barrack Square East	599	150	1388	700	0.857	686	524	48.4	26.9	199.053	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1129	282	380	1686	0.669	1141	1524	5.3	2.1	6.760	A
B - Eagle Way West	153	38	1689	476	0.321	215	156	16.1	0.5	17.554	C
C - A12 South	1575	394	260	2348	0.671	1585	1447	4.5	2.1	4.780	A
D - Barrack Square East	502	126	1103	849	0.592	604	419	26.9	1.5	21.881	C

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J23	A12 / Eagle Way / Barrack Square	Standard Roundabout		A, D, C, B	56.28	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1450	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	1962	100.000
D - Barrack Square East		ONE HOUR	✓	688	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	73	1215	162
	B - Eagle Way West	46	0	97	19
	C - A12 South	1568	151	1	243
	D - Barrack Square East	217	47	424	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Barrack Square East
From	A - A12 North	0	2	2	1
	B - Eagle Way West	3	0	1	0
	C - A12 South	2	2	0	5
	D - Barrack Square East	0	10	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	24.21	10.1	C	1331	1996
B - Eagle Way West	0.73	50.14	2.3	F	150	224
C - A12 South	0.92	18.38	10.4	C	1801	2701
D - Barrack Square East	1.15	234.24	54.3	F	632	948

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1092	273	270	1809	0.603	1086	1371	0.0	1.5	4.936	A
B - Eagle Way West	123	31	1520	586	0.209	122	203	0.0	0.3	7.732	A
C - A12 South	1477	369	252	2396	0.617	1471	1299	0.0	1.6	3.868	A
D - Barrack Square East	518	130	1038	903	0.574	513	318	0.0	1.3	9.111	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1304	326	323	1777	0.734	1299	1639	1.5	2.7	7.460	A

B - Eagle Way West	147	37	1817	438	0.334	146	243	0.3	0.5	12.265	B
C - A12 South	1764	441	300	2365	0.746	1759	1553	1.6	2.9	5.891	A
D - Barrack Square East	619	155	1242	800	0.773	612	380	1.3	3.1	18.401	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1597	399	390	1736	0.920	1571	1960	2.7	9.0	19.476	C
B - Eagle Way West	179	45	2176	259	0.694	174	288	0.5	2.0	39.960	E
C - A12 South	2161	540	330	2346	0.921	2134	1824	2.9	9.5	15.340	C
D - Barrack Square East	758	189	1500	670	1.132	654	461	3.1	29.0	104.816	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1597	399	396	1732	0.922	1592	1981	9.0	10.1	24.209	C
B - Eagle Way West	179	45	2198	247	0.725	178	291	2.0	2.3	50.145	F
C - A12 South	2161	540	332	2345	0.921	2157	1846	9.5	10.4	18.379	C
D - Barrack Square East	758	189	1522	659	1.150	657	466	29.0	54.3	234.242	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1304	326	333	1771	0.736	1332	1718	10.1	2.9	8.723	A
B - Eagle Way West	147	37	1898	398	0.368	153	258	2.3	0.6	15.093	C
C - A12 South	1764	441	362	2326	0.758	1793	1683	10.4	3.2	7.096	A
D - Barrack Square East	619	155	1276	783	0.790	769	389	54.3	16.8	171.339	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1092	273	273	1807	0.604	1097	1403	2.9	1.5	5.107	A
B - Eagle Way West	123	31	1553	570	0.215	124	209	0.6	0.3	8.090	A
C - A12 South	1477	369	278	2379	0.621	1484	1351	3.2	1.7	4.049	A
D - Barrack Square East	518	130	1049	897	0.578	580	321	16.8	1.4	13.655	B

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	2019.10.23 J23_Model_v11.lsg3x
Author:	
Company:	
Address:	

Basic Results Summary

Network Results

Scenario 1: '28RC 06:00-07:00' (FG1: '28RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	42.1%	
A12 / Eagle Way / Barrack Square	-	-	-	42.1%	
1/1	A12 (North) Left Ahead	2.9	5.6	32.3%	
1/2	A12 (North) Left Ahead	3.3	5.6	34.4%	
1/3	A12 (North) Ahead	-	-	-	
2/1	Barrack Square Left	0.0	2.7	2.8%	
2/2+2/3	Barrack Square Left Ahead	0.1	2.7	7.8 : 7.8%	
3/2+3/1	A12 (South) Left Ahead	2.5	4.4	42.1 : 42.1%	
3/3	A12 (South) Ahead	0.6	3.7	8.3%	
4/2+4/1	Eagle Way Left Ahead	0.1	2.2	8.7 : 8.7%	
9/1	Ahead Right	1.9	30.8	37.8%	
9/2	Ahead Right	2.0	30.4	39.8%	
11/1	Ahead Right	0.2	30.7	5.5%	
11/2	Right	0.1	30.8	1.7%	
C1	Stream: 1 PRC for Signalled Lanes (%)	126.2	Total Delay for Signalled Lanes (pcuHr):	3.31	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	113.7	Total Delay for Signalled Lanes (pcuHr):	1.20	Cycle Time (s): 60
	PRC Over All Lanes (%)	113.7	Total Delay Over All Lanes (pcuHr):	4.62	

Basic Results Summary

Scenario 2: '28RC 07:00-08:00' (FG2: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	92.2%		
A12 / Eagle Way / Barrack Square	-	-	-	92.2%		
1/1	A12 (North) Left Ahead	9.4	14.7	68.6%		
1/2	A12 (North) Left Ahead	10.5	14.7	70.0%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	0.5	6.4	14.4%		
2/2+2/3	Barrack Square Left Ahead	1.1	6.1	26.8 : 26.8%		
3/2+3/1	A12 (South) Left Ahead	12.3	15.7	92.2 : 92.2%		
3/3	A12 (South) Ahead	2.5	4.7	30.9%		
4/2+4/1	Eagle Way Left Ahead	1.7	10.1	42.6 : 42.6%		
9/1	Ahead Right	4.2	21.1	53.5%		
9/2	Ahead Right	8.0	31.6	78.2%		
11/1	Ahead Right	0.9	30.5	23.0%		
11/2	Right	1.0	31.1	23.4%		
C1	Stream: 1 PRC for Signalled Lanes (%)	15.0	Total Delay for Signalled Lanes (pcuHr):	11.39	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-2.4	Total Delay for Signalled Lanes (pcuHr):	8.80	Cycle Time (s):	60
	PRC Over All Lanes (%)	-2.4	Total Delay Over All Lanes(pcuHr):	21.23		

Basic Results Summary

Scenario 3: '28RC 08:00-09:00' (FG3: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	177.6%		
A12 / Eagle Way / Barrack Square	-	-	-	177.6%		
1/1	A12 (North) Left Ahead	184.3	855.8	176.7%		
1/2	A12 (North) Left Ahead	199.7	861.2	177.6%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	1.0	5.2	26.3%		
2/2+2/3	Barrack Square Left Ahead	1.6	4.5	35.1 : 35.1%		
3/2+3/1	A12 (South) Left Ahead	67.5	79.6	102.0 : 102.0%		
3/3	A12 (South) Ahead	11.4	20.0	77.4%		
4/2+4/1	Eagle Way Left Ahead	2.3	15.9	42.4 : 42.4%		
9/1	Ahead Right	1.7	7.8	20.0%		
9/2	Ahead Right	11.4	6.9	65.4%		
11/1	Ahead Right	1.3	15.7	16.9%		
11/2	Right	1.4	15.8	19.0%		
C1	Stream: 1 PRC for Signalled Lanes (%)	-97.4	Total Delay for Signalled Lanes (pcuHr):	376.33	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-13.4	Total Delay for Signalled Lanes (pcuHr):	46.27	Cycle Time (s):	60
	PRC Over All Lanes (%)	-97.4	Total Delay Over All Lanes (pcuHr):	424.32		

Basic Results Summary

Scenario 4: '28RC 15:00-16:00' (FG4: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	97.6%		
A12 / Eagle Way / Barrack Square	-	-	-	97.6%		
1/1	A12 (North) Left Ahead	7.1	10.1	58.6%		
1/2	A12 (North) Left Ahead	8.1	10.1	60.2%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	1.6	7.5	39.4%		
2/2+2/3	Barrack Square Left Ahead	2.6	7.1	52.1 : 52.1%		
3/2+3/1	A12 (South) Left Ahead	20.5	30.0	97.6 : 97.6%		
3/3	A12 (South) Ahead	1.8	4.3	23.3%		
4/2+4/1	Eagle Way Left Ahead	1.4	9.3	39.3 : 39.3%		
9/1	Ahead Right	2.1	22.0	33.5%		
9/2	Ahead Right	6.3	36.5	75.8%		
11/1	Ahead Right	2.6	38.2	53.6%		
11/2	Right	2.6	39.4	54.4%		
C1	Stream: 1 PRC for Signalled Lanes (%)	18.7	Total Delay for Signalled Lanes (pcuHr):	8.04	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-8.4	Total Delay for Signalled Lanes (pcuHr):	17.99	Cycle Time (s):	60
	PRC Over All Lanes (%)	-8.4	Total Delay Over All Lanes (pcuHr):	27.82		

Basic Results Summary

Scenario 5: '28RC 17:00-18:00' (FG5: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	97.3%		
A12 / Eagle Way / Barrack Square	-	-	-	97.3%		
1/1	A12 (North) Left Ahead	7.0	9.5	57.9%		
1/2	A12 (North) Left Ahead	7.9	9.5	59.5%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	1.6	7.5	39.6%		
2/2+2/3	Barrack Square Left Ahead	2.8	7.1	53.6 : 53.6%		
3/2+3/1	A12 (South) Left Ahead	20.3	29.3	97.3 : 97.3%		
3/3	A12 (South) Ahead	1.5	4.5	19.7%		
4/2+4/1	Eagle Way Left Ahead	1.0	8.5	31.0 : 31.0%		
9/1	Ahead Right	1.8	22.8	29.8%		
9/2	Ahead Right	5.0	33.1	67.5%		
11/1	Ahead Right	2.9	36.6	55.2%		
11/2	Right	2.9	37.4	55.9%		
C1	Stream: 1 PRC for Signalled Lanes (%)	33.3	Total Delay for Signalled Lanes (pcuHr):	6.92	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-8.1	Total Delay for Signalled Lanes (pcuHr):	17.80	Cycle Time (s):	60
	PRC Over All Lanes (%)	-8.1	Total Delay Over All Lanes(pcuHr):	26.41		

Basic Results Summary

Scenario 6: '28PC 06:00-07:00' (FG6: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	51.3%	
A12 / Eagle Way / Barrack Square	-	-	-	51.3%	
1/1	A12 (North) Left Ahead	2.9	5.6	32.4%	
1/2	A12 (North) Left Ahead	3.3	5.6	34.5%	
1/3	A12 (North) Ahead	-	-	-	
2/1	Barrack Square Left	0.0	2.7	2.8%	
2/2+2/3	Barrack Square Left Ahead	0.1	2.7	7.8 : 7.8%	
3/2+3/1	A12 (South) Left Ahead	3.3	4.9	51.3 : 51.3%	
3/3	A12 (South) Ahead	0.6	3.8	8.8%	
4/2+4/1	Eagle Way Left Ahead	0.1	2.6	9.4 : 9.4%	
9/1	Ahead Right	1.8	30.8	37.1%	
9/2	Ahead Right	2.1	30.4	40.5%	
11/1	Ahead Right	0.2	30.7	5.5%	
11/2	Right	0.1	30.8	1.7%	
C1	Stream: 1 PRC for Signalled Lanes (%)	122.4	Total Delay for Signalled Lanes (pcuHr):	3.31	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	75.4	Total Delay for Signalled Lanes (pcuHr):	1.54	Cycle Time (s): 60
	PRC Over All Lanes (%)	75.4	Total Delay Over All Lanes(pcuHr):	4.97	

Basic Results Summary

Scenario 7: '28PC 07:00-08:00' (FG7: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	96.3%	
A12 / Eagle Way / Barrack Square	-	-	-	96.3%	
1/1	A12 (North) Left Ahead	10.5	17.6	73.4%	
1/2	A12 (North) Left Ahead	11.5	17.6	74.7%	
1/3	A12 (North) Ahead	-	-	-	
2/1	Barrack Square Left	0.5	6.9	14.7%	
2/2+2/3	Barrack Square Left Ahead	1.1	6.6	26.3 : 26.3%	
3/2+3/1	A12 (South) Left Ahead	17.3	24.6	96.3 : 96.3%	
3/3	A12 (South) Ahead	3.4	5.1	37.3%	
4/2+4/1	Eagle Way Left Ahead	2.3	12.9	46.7 : 46.7%	
9/1	Ahead Right	2.1	17.2	33.5%	
9/2	Ahead Right	10.3	35.0	85.0%	
11/1	Ahead Right	0.9	29.9	23.0%	
11/2	Right	1.0	30.6	23.4%	
C1	Stream: 1 PRC for Signalled Lanes (%)	5.8	Total Delay for Signalled Lanes (pcuHr):	13.13	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	-7.0	Total Delay for Signalled Lanes (pcuHr):	13.63	Cycle Time (s): 60
	PRC Over All Lanes (%)	-7.0	Total Delay Over All Lanes(pcuHr):	28.01	

Basic Results Summary

Scenario 8: '28PC 08:00-09:00' (FG8: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	251.1%		
A12 / Eagle Way / Barrack Square	-	-	-	251.1%		
1/1	A12 (North) Left Ahead	254.6	1176.3	250.9%		
1/2	A12 (North) Left Ahead	272.9	1176.6	251.1%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	0.5	3.5	18.1%		
2/2+2/3	Barrack Square Left Ahead	1.3	3.4	36.4 : 36.4%		
3/2+3/1	A12 (South) Left Ahead	306.9	572.7	140.5 : 140.8%		
3/3	A12 (South) Ahead	76.6	315.7	117.4%		
4/2+4/1	Eagle Way Left Ahead	1.7	9.3	31.8 : 31.8%		
9/1	Ahead Right	0.3	3.0	13.7%		
9/2	Ahead Right	11.8	17.7	54.3%		
11/1	Ahead Right	0.8	9.4	10.1%		
11/2	Right	1.2	10.5	14.5%		
C1 Stream: 1 PRC for Signalled Lanes (%):		-179.0	Total Delay for Signalled Lanes (pcuHr):	522.71	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		-56.5	Total Delay for Signalled Lanes (pcuHr):	369.62	Cycle Time (s):	60
PRC Over All Lanes (%):		-179.0	Total Delay Over All Lanes(pcuHr):	893.45		

Basic Results Summary

Scenario 9: '28PC 15:00-16:00' (FG9: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																					
Network	-	-	-	100.2%																					
A12 / Eagle Way / Barrack Square	-	-	-	100.2%																					
1/1	A12 (North) Left Ahead	8.0	10.6	61.6%																					
1/2	A12 (North) Left Ahead	8.7	10.6	63.0%																					
1/3	A12 (North) Ahead	-	-	-																					
2/1	Barrack Square Left	1.8	8.4	41.6%																					
2/2+2/3	Barrack Square Left Ahead	2.9	7.9	53.3 : 53.3%																					
3/2+3/1	A12 (South) Left Ahead	62.0	48.0	100.2 : 100.2%																					
3/3	A12 (South) Ahead	1.8	4.3	23.3%																					
4/2+4/1	Eagle Way Left Ahead	1.5	10.1	40.6 : 40.6%																					
9/1	Ahead Right	2.0	21.5	33.5%																					
9/2	Ahead Right	6.3	36.5	75.8%																					
11/1	Ahead Right	2.6	37.8	53.6%																					
11/2	Right	2.6	39.1	54.4%																					
<table border="0" style="width: 100%;"> <tr> <td style="width: 15%;">C1</td> <td style="width: 35%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 15%;">18.7</td> <td style="width: 20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 15%;">8.42</td> <td style="width: 5%;">Cycle Time (s):</td> <td style="width: 10%;">60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>-11.3</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>27.52</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>-11.3</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>37.93</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	18.7	Total Delay for Signalled Lanes (pcuHr):	8.42	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%):	-11.3	Total Delay for Signalled Lanes (pcuHr):	27.52	Cycle Time (s):	60		PRC Over All Lanes (%):	-11.3	Total Delay Over All Lanes(pcuHr):	37.93		
C1	Stream: 1 PRC for Signalled Lanes (%):	18.7	Total Delay for Signalled Lanes (pcuHr):	8.42	Cycle Time (s):	60																			
C1	Stream: 2 PRC for Signalled Lanes (%):	-11.3	Total Delay for Signalled Lanes (pcuHr):	27.52	Cycle Time (s):	60																			
	PRC Over All Lanes (%):	-11.3	Total Delay Over All Lanes(pcuHr):	37.93																					

Basic Results Summary

Scenario 10: '28PC 17:00-18:00' (FG10: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	95.0%		
A12 / Eagle Way / Barrack Square	-	-	-	95.0%		
1/1	A12 (North) Left Ahead	7.4	9.6	59.0%		
1/2	A12 (North) Left Ahead	8.1	9.6	60.6%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	1.7	7.8	40.3%		
2/2+2/3	Barrack Square Left Ahead	2.8	7.4	54.1 : 54.1%		
3/2+3/1	A12 (South) Left Ahead	15.8	21.4	95.0 : 95.0%		
3/3	A12 (South) Ahead	1.5	4.5	19.7%		
4/2+4/1	Eagle Way Left Ahead	0.9	7.9	30.1 : 30.1%		
9/1	Ahead Right	1.8	23.1	29.8%		
9/2	Ahead Right	5.0	33.1	67.5%		
11/1	Ahead Right	2.9	36.4	55.2%		
11/2	Right	2.9	37.3	55.9%		
C1	Stream: 1 PRC for Signalled Lanes (%)	33.3	Total Delay for Signalled Lanes (pcuHr):	7.06	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-5.6	Total Delay for Signalled Lanes (pcuHr):	13.65	Cycle Time (s):	60
	PRC Over All Lanes (%)	-5.6	Total Delay Over All Lanes(pcuHr):	22.43		

Basic Results Summary

Scenario 11: '34RC 06:00-07:00' (FG11: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																		
Network	-	-	-	44.9%																		
A12 / Eagle Way / Barrack Square	-	-	-	44.9%																		
1/1	A12 (North) Left Ahead	3.2	6.1	34.7%																		
1/2	A12 (North) Left Ahead	3.7	6.1	36.7%																		
1/3	A12 (North) Ahead	-	-	-																		
2/1	Barrack Square Left	0.0	2.8	3.0%																		
2/2+2/3	Barrack Square Left Ahead	0.1	2.8	7.8 : 7.8%																		
3/2+3/1	A12 (South) Left Ahead	2.7	4.5	44.9 : 44.9%																		
3/3	A12 (South) Ahead	0.6	3.7	8.3%																		
4/2+4/1	Eagle Way Left Ahead	0.1	2.3	9.2 : 9.2%																		
9/1	Ahead Right	1.8	28.7	34.0%																		
9/2	Ahead Right	2.0	28.4	37.1%																		
11/1	Ahead Right	0.2	30.5	5.5%																		
11/2	Right	0.1	30.7	1.7%																		
<table border="0" style="width: 100%;"> <tr> <td style="width: 15%;">C1</td> <td style="width: 25%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 15%;">142.5</td> <td style="width: 15%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 10%;">3.41</td> <td style="width: 20%;">Cycle Time (s): 60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>100.4</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>1.30</td> <td>Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>100.4</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>4.81</td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	142.5	Total Delay for Signalled Lanes (pcuHr):	3.41	Cycle Time (s): 60	C1	Stream: 2 PRC for Signalled Lanes (%):	100.4	Total Delay for Signalled Lanes (pcuHr):	1.30	Cycle Time (s): 60		PRC Over All Lanes (%):	100.4	Total Delay Over All Lanes(pcuHr):	4.81	
C1	Stream: 1 PRC for Signalled Lanes (%):	142.5	Total Delay for Signalled Lanes (pcuHr):	3.41	Cycle Time (s): 60																	
C1	Stream: 2 PRC for Signalled Lanes (%):	100.4	Total Delay for Signalled Lanes (pcuHr):	1.30	Cycle Time (s): 60																	
	PRC Over All Lanes (%):	100.4	Total Delay Over All Lanes(pcuHr):	4.81																		

Basic Results Summary

Scenario 12: '34RC 07:00-08:00' (FG12: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	94.9%	
A12 / Eagle Way / Barrack Square	-	-	-	94.9%	
1/1	A12 (North) Left Ahead	10.6	16.8	73.2%	
1/2	A12 (North) Left Ahead	11.5	16.8	74.7%	
1/3	A12 (North) Ahead	-	-	-	
2/1	Barrack Square Left	0.6	7.3	17.1%	
2/2+2/3	Barrack Square Left Ahead	1.4	7.0	31.4 : 31.4%	
3/2+3/1	A12 (South) Left Ahead	15.1	20.5	94.9 : 94.9%	
3/3	A12 (South) Ahead	2.9	4.9	34.2%	
4/2+4/1	Eagle Way Left Ahead	2.2	12.8	49.4 : 49.4%	
9/1	Ahead Right	3.1	18.3	43.7%	
9/2	Ahead Right	9.2	33.2	82.0%	
11/1	Ahead Right	1.6	31.9	36.6%	
11/2	Right	1.6	32.8	37.0%	
C1	Stream: 1 PRC for Signalled Lanes (%)	9.8	Total Delay for Signalled Lanes (pcuHr):	12.67	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	-5.4	Total Delay for Signalled Lanes (pcuHr):	12.03	Cycle Time (s): 60
	PRC Over All Lanes (%)	-5.4	Total Delay Over All Lanes(pcuHr):	26.12	

Basic Results Summary

Scenario 13: '34RC 08:00-09:00' (FG13: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	111.6%		
A12 / Eagle Way / Barrack Square	-	-	-	111.6%		
1/1	A12 (North) Left Ahead	61.1	231.6	111.4%		
1/2	A12 (North) Left Ahead	66.2	234.1	111.6%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	2.2	11.5	39.5%		
2/2+2/3	Barrack Square Left Ahead	3.3	10.6	52.1 : 52.1%		
3/2+3/1	A12 (South) Left Ahead	71.1	88.6	102.6 : 102.6%		
3/3	A12 (South) Ahead	12.3	22.6	80.7%		
4/2+4/1	Eagle Way Left Ahead	2.6	17.8	47.7 : 47.7%		
9/1	Ahead Right	2.9	10.3	27.1%		
9/2	Ahead Right	10.6	36.1	89.7%		
11/1	Ahead Right	2.5	18.2	26.1%		
11/2	Right	2.8	19.5	27.4%		
C1 Stream: 1 PRC for Signalled Lanes (%):		-24.0	Total Delay for Signalled Lanes (pcuHr):	117.64	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		-14.0	Total Delay for Signalled Lanes (pcuHr):	52.61	Cycle Time (s):	60
PRC Over All Lanes (%):		-24.0	Total Delay Over All Lanes(pcuHr):	173.42		

Basic Results Summary

Scenario 14: '34RC 15:00-16:00' (FG14: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																					
Network	-	-	-	106.2%																					
A12 / Eagle Way / Barrack Square	-	-	-	106.2%																					
1/1	A12 (North) Left Ahead	9.8	12.1	68.8%																					
1/2	A12 (North) Left Ahead	10.7	12.1	70.2%																					
1/3	A12 (North) Ahead	-	-	-																					
2/1	Barrack Square Left	2.5	11.0	47.5%																					
2/2+2/3	Barrack Square Left Ahead	3.7	10.2	58.6 : 58.6%																					
3/2+3/1	A12 (South) Left Ahead	102.2	141.6	106.2 : 106.2%																					
3/3	A12 (South) Ahead	3.4	12.0	34.1%																					
4/2+4/1	Eagle Way Left Ahead	1.8	14.0	35.6 : 35.6%																					
9/1	Ahead Right	1.3	22.0	35.0%																					
9/2	Ahead Right	6.7	40.0	75.8%																					
11/1	Ahead Right	1.6	13.5	23.0%																					
11/2	Right	1.7	14.0	23.7%																					
<table border="0" style="width: 100%;"> <tr> <td style="width: 10%;"></td> <td style="width: 30%;">C1 Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 10%;">18.7</td> <td style="width: 20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 10%;">9.99</td> <td style="width: 10%;">Cycle Time (s):</td> <td style="width: 10%;">60</td> </tr> <tr> <td></td> <td>C1 Stream: 2 PRC for Signalled Lanes (%):</td> <td>-18.0</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>78.60</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>-18.0</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>91.38</td> <td></td> <td></td> </tr> </table>						C1 Stream: 1 PRC for Signalled Lanes (%):	18.7	Total Delay for Signalled Lanes (pcuHr):	9.99	Cycle Time (s):	60		C1 Stream: 2 PRC for Signalled Lanes (%):	-18.0	Total Delay for Signalled Lanes (pcuHr):	78.60	Cycle Time (s):	60		PRC Over All Lanes (%):	-18.0	Total Delay Over All Lanes(pcuHr):	91.38		
	C1 Stream: 1 PRC for Signalled Lanes (%):	18.7	Total Delay for Signalled Lanes (pcuHr):	9.99	Cycle Time (s):	60																			
	C1 Stream: 2 PRC for Signalled Lanes (%):	-18.0	Total Delay for Signalled Lanes (pcuHr):	78.60	Cycle Time (s):	60																			
	PRC Over All Lanes (%):	-18.0	Total Delay Over All Lanes(pcuHr):	91.38																					

Basic Results Summary

Scenario 15: '34RC 17:00-18:00' (FG15: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																					
Network	-	-	-	101.9%																					
A12 / Eagle Way / Barrack Square	-	-	-	101.9%																					
1/1	A12 (North) Left Ahead	8.3	9.8	63.8%																					
1/2	A12 (North) Left Ahead	9.3	9.8	65.3%																					
1/3	A12 (North) Ahead	-	-	-																					
2/1	Barrack Square Left	2.1	9.7	46.1%																					
2/2+2/3	Barrack Square Left Ahead	3.6	9.1	59.7 : 59.7%																					
3/2+3/1	A12 (South) Left Ahead	65.6	78.1	101.8 : 101.9%																					
3/3	A12 (South) Ahead	2.6	11.5	28.2%																					
4/2+4/1	Eagle Way Left Ahead	1.4	13.3	29.5 : 29.5%																					
9/1	Ahead Right	1.1	23.4	33.4%																					
9/2	Ahead Right	5.6	41.3	73.1%																					
11/1	Ahead Right	2.0	14.2	26.7%																					
11/2	Right	2.2	14.8	26.7%																					
<table border="0" style="width: 100%;"> <tr> <td style="width: 10%;">C1</td> <td style="width: 30%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 10%;">23.1</td> <td style="width: 20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 10%;">8.22</td> <td style="width: 10%;">Cycle Time (s):</td> <td style="width: 10%;">60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>-13.2</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>42.59</td> <td>Cycle Time (s):</td> <td>60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>-13.2</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>53.23</td> <td></td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	23.1	Total Delay for Signalled Lanes (pcuHr):	8.22	Cycle Time (s):	60	C1	Stream: 2 PRC for Signalled Lanes (%):	-13.2	Total Delay for Signalled Lanes (pcuHr):	42.59	Cycle Time (s):	60		PRC Over All Lanes (%):	-13.2	Total Delay Over All Lanes(pcuHr):	53.23		
C1	Stream: 1 PRC for Signalled Lanes (%):	23.1	Total Delay for Signalled Lanes (pcuHr):	8.22	Cycle Time (s):	60																			
C1	Stream: 2 PRC for Signalled Lanes (%):	-13.2	Total Delay for Signalled Lanes (pcuHr):	42.59	Cycle Time (s):	60																			
	PRC Over All Lanes (%):	-13.2	Total Delay Over All Lanes(pcuHr):	53.23																					

Basic Results Summary

Scenario 16: '34OP 06:00-07:00' (FG16: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	44.9%	
A12 / Eagle Way / Barrack Square	-	-	-	44.9%	
1/1	A12 (North) Left Ahead	3.2	6.1	34.7%	
1/2	A12 (North) Left Ahead	3.7	6.1	36.7%	
1/3	A12 (North) Ahead	-	-	-	
2/1	Barrack Square Left	0.0	2.8	3.0%	
2/2+2/3	Barrack Square Left Ahead	0.1	2.8	7.8 : 7.8%	
3/2+3/1	A12 (South) Left Ahead	2.7	4.5	44.9 : 44.9%	
3/3	A12 (South) Ahead	0.6	3.7	8.3%	
4/2+4/1	Eagle Way Left Ahead	0.1	2.3	9.2 : 9.2%	
9/1	Ahead Right	1.8	28.7	34.0%	
9/2	Ahead Right	2.0	28.4	37.1%	
11/1	Ahead Right	0.2	30.5	5.5%	
11/2	Right	0.1	30.7	1.7%	
C1 Stream: 1 PRC for Signalled Lanes (%):		142.5	Total Delay for Signalled Lanes (pcuHr):	3.41	Cycle Time (s): 60
C1 Stream: 2 PRC for Signalled Lanes (%):		100.4	Total Delay for Signalled Lanes (pcuHr):	1.30	Cycle Time (s): 60
PRC Over All Lanes (%):		100.4	Total Delay Over All Lanes(pcuHr):	4.81	

Basic Results Summary

Scenario 17: '34OP 07:00-08:00' (FG17: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	94.6%		
A12 / Eagle Way / Barrack Square	-	-	-	94.6%		
1/1	A12 (North) Left Ahead	10.6	16.8	73.2%		
1/2	A12 (North) Left Ahead	11.5	16.8	74.7%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	0.6	7.3	17.3%		
2/2+2/3	Barrack Square Left Ahead	1.5	7.0	32.0 : 32.0%		
3/2+3/1	A12 (South) Left Ahead	14.8	19.9	94.6 : 94.6%		
3/3	A12 (South) Ahead	2.9	4.9	34.0%		
4/2+4/1	Eagle Way Left Ahead	2.1	12.8	49.5 : 49.5%		
9/1	Ahead Right	3.1	18.3	44.0%		
9/2	Ahead Right	9.1	32.9	81.6%		
11/1	Ahead Right	1.7	32.2	38.3%		
11/2	Right	1.6	32.9	37.4%		
C1	Stream: 1 PRC for Signalled Lanes (%)	10.3	Total Delay for Signalled Lanes (pcuHr):	12.62	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-5.2	Total Delay for Signalled Lanes (pcuHr):	11.81	Cycle Time (s):	60
	PRC Over All Lanes (%)	-5.2	Total Delay Over All Lanes(pcuHr):	25.86		

Basic Results Summary

Scenario 18: '34OP 08:00-09:00' (FG18: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	169.7%		
A12 / Eagle Way / Barrack Square	-	-	-	169.7%		
1/1	A12 (North) Left Ahead	189.9	805.9	169.1%		
1/2	A12 (North) Left Ahead	205.2	809.8	169.7%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	1.4	6.4	31.4%		
2/2+2/3	Barrack Square Left Ahead	2.2	5.5	41.8 : 41.8%		
3/2+3/1	A12 (South) Left Ahead	80.9	101.4	103.7 : 103.7%		
3/3	A12 (South) Ahead	10.5	17.7	73.5%		
4/2+4/1	Eagle Way Left Ahead	2.7	18.6	50.0 : 50.0%		
9/1	Ahead Right	2.4	10.8	22.9%		
9/2	Ahead Right	11.0	7.5	67.7%		
11/1	Ahead Right	2.2	16.7	27.5%		
11/2	Right	2.4	17.0	30.1%		
C1 Stream: 1 PRC for Signalled Lanes (%):		-88.6	Total Delay for Signalled Lanes (pcuHr):	387.34	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		-15.2	Total Delay for Signalled Lanes (pcuHr):	58.46	Cycle Time (s):	60
PRC Over All Lanes (%):		-88.6	Total Delay Over All Lanes(pcuHr):	448.09		

Basic Results Summary

Scenario 19: '34OP 15:00-16:00' (FG19: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	106.0%		
A12 / Eagle Way / Barrack Square	-	-	-	106.0%		
1/1	A12 (North) Left Ahead	9.5	12.0	68.5%		
1/2	A12 (North) Left Ahead	10.6	12.0	69.9%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	2.5	10.8	47.2%		
2/2+2/3	Barrack Square Left Ahead	3.7	10.0	58.3 : 58.3%		
3/2+3/1	A12 (South) Left Ahead	99.9	137.9	106.0 : 106.0%		
3/3	A12 (South) Ahead	3.4	12.0	34.1%		
4/2+4/1	Eagle Way Left Ahead	1.8	14.0	35.6 : 35.6%		
9/1	Ahead Right	1.3	22.0	35.0%		
9/2	Ahead Right	6.7	40.0	75.8%		
11/1	Ahead Right	1.6	13.6	23.0%		
11/2	Right	1.7	14.1	23.7%		
C1 Stream: 1 PRC for Signalled Lanes (%):		18.7	Total Delay for Signalled Lanes (pcuHr):	9.92	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		-17.8	Total Delay for Signalled Lanes (pcuHr):	76.39	Cycle Time (s):	60
PRC Over All Lanes (%):		-17.8	Total Delay Over All Lanes(pcuHr):	89.07		

Basic Results Summary

Scenario 20: '34OP 17:00-18:00' (FG20: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	101.5%		
A12 / Eagle Way / Barrack Square	-	-	-	101.5%		
1/1	A12 (North) Left Ahead	8.3	9.9	63.9%		
1/2	A12 (North) Left Ahead	9.3	9.9	65.4%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	2.2	9.7	46.2%		
2/2+2/3	Barrack Square Left Ahead	3.6	9.0	59.4 : 59.4%		
3/2+3/1	A12 (South) Left Ahead	69.2	64.9	101.5 : 101.5%		
3/3	A12 (South) Ahead	1.6	4.9	20.2%		
4/2+4/1	Eagle Way Left Ahead	1.2	10.0	34.2 : 34.2%		
9/1	Ahead Right	1.9	23.7	33.4%		
9/2	Ahead Right	5.3	37.9	73.1%		
11/1	Ahead Right	3.4	34.7	58.2%		
11/2	Right	3.4	35.6	59.2%		
C1	Stream: 1 PRC for Signalled Lanes (%)	23.1	Total Delay for Signalled Lanes (pcuHr):	8.00	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-12.8	Total Delay for Signalled Lanes (pcuHr):	37.16	Cycle Time (s):	60
	PRC Over All Lanes (%)	-12.8	Total Delay Over All Lanes(pcuHr):	47.42		

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	2019.10.23 J23_Model_v12.lsg3x
Author:	
Company:	
Address:	

Basic Results Summary

Network Results

Scenario 1: '28RC 06:00-07:00' (FG1: '28RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	41.5%	
A12 / Eagle Way / Barrack Square	-	-	-	41.5%	
1/1	A12 (North) Left Ahead	2.9	6.0	32.4%	
1/2	A12 (North) Left Ahead	3.4	6.0	34.5%	
1/3	A12 (North) Ahead	-	-	-	
2/1	Barrack Square Left	0.0	2.7	3.1%	
2/2+2/3	Barrack Square Left Ahead	0.1	2.7	7.5 : 7.5%	
3/2+3/1	A12 (South) Left Ahead	2.5	4.4	41.5 : 41.5%	
3/3	A12 (South) Ahead	0.5	3.7	8.0%	
4/2+4/1	Eagle Way Left Ahead	0.1	2.2	8.6 : 8.6%	
9/1	Ahead Right	1.8	28.6	34.0%	
9/2	Ahead Right	1.9	28.4	36.5%	
11/1	Ahead Right	0.2	30.5	5.5%	
11/2	Right	0.0	30.7	1.3%	
C1	Stream: 1 PRC for Signalled Lanes (%)	146.7	Total Delay for Signalled Lanes (pcuHr):	3.25	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	116.8	Total Delay for Signalled Lanes (pcuHr):	1.17	Cycle Time (s): 60
	PRC Over All Lanes (%)	116.8	Total Delay Over All Lanes (pcuHr):	4.53	

Basic Results Summary

Scenario 2: '28RC 07:00-08:00' (FG2: '28RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	90.6%	
A12 / Eagle Way / Barrack Square	-	-	-	90.6%	
1/1	A12 (North) Left Ahead	8.9	14.3	66.9%	
1/2	A12 (North) Left Ahead	9.9	14.3	68.2%	
1/3	A12 (North) Ahead	-	-	-	
2/1	Barrack Square Left	0.4	6.1	13.7%	
2/2+2/3	Barrack Square Left Ahead	1.1	5.9	26.7 : 26.7%	
3/2+3/1	A12 (South) Left Ahead	11.2	13.8	90.6 : 90.6%	
3/3	A12 (South) Ahead	2.5	4.7	30.1%	
4/2+4/1	Eagle Way Left Ahead	1.6	9.5	41.6 : 41.6%	
9/1	Ahead Right	4.4	21.7	55.4%	
9/2	Ahead Right	7.6	30.4	76.3%	
11/1	Ahead Right	0.9	30.8	23.0%	
11/2	Right	1.0	31.3	23.4%	
C1	Stream: 1 PRC for Signalled Lanes (%)	17.9	Total Delay for Signalled Lanes (pcuHr):	10.93	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	-0.7	Total Delay for Signalled Lanes (pcuHr):	7.83	Cycle Time (s): 60
	PRC Over All Lanes (%)	-0.7	Total Delay Over All Lanes(pcuHr):	19.75	

Basic Results Summary

Scenario 3: '28RC 08:00-09:00' (FG3: '28RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	119.6%
A12 / Eagle Way / Barrack Square	-	-	-	119.6%
1/1	A12 (North) Left Ahead	76.4	343.9	119.4%
1/2	A12 (North) Left Ahead	82.3	345.4	119.6%
1/3	A12 (North) Ahead	-	-	-
2/1	Barrack Square Left	1.4	8.0	29.7%
2/2+2/3	Barrack Square Left Ahead	2.3	7.6	41.7 : 41.7%
3/2+3/1	A12 (South) Left Ahead	17.3	24.6	96.3 : 96.3%
3/3	A12 (South) Ahead	6.8	7.0	58.7%
4/2+4/1	Eagle Way Left Ahead	3.1	22.4	63.3 : 63.3%
9/1	Ahead Right	1.9	15.4	18.0%
9/2	Ahead Right	13.4	19.4	83.7%
11/1	Ahead Right	2.1	35.1	46.1%
11/2	Right	2.1	35.2	46.8%
C1	Stream: 1 PRC for Signalled Lanes (%)	-32.9	Total Delay for Signalled Lanes (pcuHr): 149.82	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	-7.0	Total Delay for Signalled Lanes (pcuHr): 15.67	Cycle Time (s): 60
	PRC Over All Lanes (%)	-32.9	Total Delay Over All Lanes(pcuHr): 168.06	

Basic Results Summary

Scenario 4: '28RC 15:00-16:00' (FG4: '28RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	96.7%
A12 / Eagle Way / Barrack Square	-	-	-	96.7%
1/1	A12 (North) Left Ahead	7.6	11.1	60.6%
1/2	A12 (North) Left Ahead	8.6	11.1	62.2%
1/3	A12 (North) Ahead	-	-	-
2/1	Barrack Square Left	1.7	7.8	39.7%
2/2+2/3	Barrack Square Left Ahead	2.8	7.4	52.1 : 52.1%
3/2+3/1	A12 (South) Left Ahead	18.2	26.2	96.7 : 96.7%
3/3	A12 (South) Ahead	1.8	4.3	23.3%
4/2+4/1	Eagle Way Left Ahead	1.3	9.1	38.9 : 38.9%
9/1	Ahead Right	2.0	20.7	31.3%
9/2	Ahead Right	5.9	31.7	70.7%
11/1	Ahead Right	2.6	38.2	53.6%
11/2	Right	2.6	39.1	54.0%
C1	Stream: 1 PRC for Signalled Lanes (%)	27.2	Total Delay for Signalled Lanes (pcuHr): 7.97	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	-7.5	Total Delay for Signalled Lanes (pcuHr): 15.94	Cycle Time (s): 60
	PRC Over All Lanes (%)	-7.5	Total Delay Over All Lanes(pcuHr): 25.75	

Basic Results Summary

Scenario 5: '28RC 17:00-18:00' (FG5: '28RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	95.6%
A12 / Eagle Way / Barrack Square	-	-	-	95.6%
1/1	A12 (North) Left Ahead	6.5	9.1	55.1%
1/2	A12 (North) Left Ahead	7.3	9.1	56.9%
1/3	A12 (North) Ahead	-	-	-
2/1	Barrack Square Left	1.4	6.8	37.6%
2/2+2/3	Barrack Square Left Ahead	2.5	6.4	52.6 : 52.6%
3/2+3/1	A12 (South) Left Ahead	16.7	23.0	95.6 : 95.6%
3/3	A12 (South) Ahead	1.5	4.5	19.7%
4/2+4/1	Eagle Way Left Ahead	1.0	8.0	30.3 : 30.3%
9/1	Ahead Right	1.8	23.1	29.8%
9/2	Ahead Right	5.0	33.1	67.5%
11/1	Ahead Right	2.9	36.9	55.2%
11/2	Right	2.9	37.7	55.9%
C1	Stream: 1 PRC for Signalled Lanes (%)	33.3	Total Delay for Signalled Lanes (pcuHr): 6.60	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	-6.2	Total Delay for Signalled Lanes (pcuHr): 14.54	Cycle Time (s): 60
	PRC Over All Lanes (%)	-6.2	Total Delay Over All Lanes(pcuHr): 22.69	

Basic Results Summary

Scenario 6: '28PC 06:00-07:00' (FG6: '28PC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	50.5%	
A12 / Eagle Way / Barrack Square	-	-	-	50.5%	
1/1	A12 (North) Left Ahead	3.0	6.0	32.5%	
1/2	A12 (North) Left Ahead	3.4	6.0	34.7%	
1/3	A12 (North) Ahead	-	-	-	
2/1	Barrack Square Left	0.0	2.7	3.1%	
2/2+2/3	Barrack Square Left Ahead	0.1	2.7	7.5 : 7.5%	
3/2+3/1	A12 (South) Left Ahead	3.2	4.8	50.5 : 50.5%	
3/3	A12 (South) Ahead	0.6	3.8	8.7%	
4/2+4/1	Eagle Way Left Ahead	0.1	2.5	9.4 : 9.4%	
9/1	Ahead Right	1.7	28.5	33.1%	
9/2	Ahead Right	2.0	28.3	37.4%	
11/1	Ahead Right	0.2	30.6	5.5%	
11/2	Right	0.0	30.8	1.3%	
C1	Stream: 1 PRC for Signalled Lanes (%)	140.5	Total Delay for Signalled Lanes (pcuHr):	3.26	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	78.1	Total Delay for Signalled Lanes (pcuHr):	1.50	Cycle Time (s): 60
	PRC Over All Lanes (%)	78.1	Total Delay Over All Lanes(pcuHr):	4.87	

Basic Results Summary

Scenario 7: '28PC 07:00-08:00' (FG7: '28PC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	95.1%	
A12 / Eagle Way / Barrack Square	-	-	-	95.1%	
1/1	A12 (North) Left Ahead	9.9	16.8	71.0%	
1/2	A12 (North) Left Ahead	10.8	16.8	72.4%	
1/3	A12 (North) Ahead	-	-	-	
2/1	Barrack Square Left	0.5	6.4	14.0%	
2/2+2/3	Barrack Square Left Ahead	1.1	6.2	26.1 : 26.1%	
3/2+3/1	A12 (South) Left Ahead	15.5	21.1	95.1 : 95.1%	
3/3	A12 (South) Ahead	3.1	5.0	36.0%	
4/2+4/1	Eagle Way Left Ahead	2.1	12.1	45.7 : 45.7%	
9/1	Ahead Right	2.4	16.6	36.4%	
9/2	Ahead Right	9.6	31.9	82.1%	
11/1	Ahead Right	0.9	30.3	23.0%	
11/2	Right	1.0	30.9	23.4%	
C1	Stream: 1 PRC for Signalled Lanes (%)	9.6	Total Delay for Signalled Lanes (pcuHr):	12.05	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	-5.7	Total Delay for Signalled Lanes (pcuHr):	11.81	Cycle Time (s): 60
	PRC Over All Lanes (%)	-5.7	Total Delay Over All Lanes(pcuHr):	25.02	

Basic Results Summary

Scenario 8: '28PC 08:00-09:00' (FG8: '28PC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																		
Network	-	-	-	122.2%																		
A12 / Eagle Way / Barrack Square	-	-	-	122.2%																		
1/1	A12 (North) Left Ahead	84.8	374.4	122.1%																		
1/2	A12 (North) Left Ahead	91.1	374.8	122.2%																		
1/3	A12 (North) Ahead	-	-	-																		
2/1	Barrack Square Left	1.5	8.0	29.9%																		
2/2+2/3	Barrack Square Left Ahead	2.3	7.6	41.2 : 41.2%																		
3/2+3/1	A12 (South) Left Ahead	71.7	65.8	101.7 : 101.7%																		
3/3	A12 (South) Ahead	6.8	7.0	58.7%																		
4/2+4/1	Eagle Way Left Ahead	3.4	26.0	66.7 : 66.7%																		
9/1	Ahead Right	2.4	10.4	18.0%																		
9/2	Ahead Right	8.9	19.6	83.7%																		
11/1	Ahead Right	2.0	37.1	45.1%																		
11/2	Right	2.2	35.8	47.6%																		
<table border="0" style="width: 100%;"> <tr> <td style="width: 15%;">C1</td> <td style="width: 25%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 15%;">-35.8</td> <td style="width: 20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 15%;">165.66</td> <td style="width: 20%;">Cycle Time (s): 60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>-13.0</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>37.72</td> <td>Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>-35.8</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>206.18</td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	-35.8	Total Delay for Signalled Lanes (pcuHr):	165.66	Cycle Time (s): 60	C1	Stream: 2 PRC for Signalled Lanes (%):	-13.0	Total Delay for Signalled Lanes (pcuHr):	37.72	Cycle Time (s): 60		PRC Over All Lanes (%):	-35.8	Total Delay Over All Lanes(pcuHr):	206.18	
C1	Stream: 1 PRC for Signalled Lanes (%):	-35.8	Total Delay for Signalled Lanes (pcuHr):	165.66	Cycle Time (s): 60																	
C1	Stream: 2 PRC for Signalled Lanes (%):	-13.0	Total Delay for Signalled Lanes (pcuHr):	37.72	Cycle Time (s): 60																	
	PRC Over All Lanes (%):	-35.8	Total Delay Over All Lanes(pcuHr):	206.18																		

Basic Results Summary

Scenario 9: '28PC 15:00-16:00' (FG9: '28PC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	117.9%
A12 / Eagle Way / Barrack Square	-	-	-	117.9%
1/1	A12 (North) Left Ahead	5.9	6.9	54.1%
1/2	A12 (North) Left Ahead	6.7	6.9	55.5%
1/3	A12 (North) Ahead	-	-	-
2/1	Barrack Square Left	1.5	7.4	42.0%
2/2+2/3	Barrack Square Left Ahead	2.3	6.8	54.2 : 54.2%
3/2+3/1	A12 (South) Left Ahead	24.8	38.1	99.0 : 99.0%
3/3	A12 (South) Ahead	1.8	4.3	23.3%
4/2+4/1	Eagle Way Left Ahead	1.4	9.8	40.1 : 40.1%
9/1	Ahead Right	2.6	33.6	52.2%
9/2	Ahead Right	33.2	348.8	117.9%
11/1	Ahead Right	2.5	38.1	53.6%
11/2	Right	2.6	39.8	54.0%
C1	Stream: 1 PRC for Signalled Lanes (%)	-31.0	Total Delay for Signalled Lanes (pcuHr): 34.38	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	-10.0	Total Delay for Signalled Lanes (pcuHr): 22.28	Cycle Time (s): 60
	PRC Over All Lanes (%)	-31.0	Total Delay Over All Lanes(pcuHr): 58.43	

Basic Results Summary

Scenario 10: '28PC 17:00-18:00' (FG10: '28PC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	95.7%
A12 / Eagle Way / Barrack Square	-	-	-	95.7%
1/1	A12 (North) Left Ahead	6.5	9.1	55.1%
1/2	A12 (North) Left Ahead	7.3	9.1	56.9%
1/3	A12 (North) Ahead	-	-	-
2/1	Barrack Square Left	1.4	6.8	37.7%
2/2+2/3	Barrack Square Left Ahead	2.5	6.5	52.7 : 52.7%
3/2+3/1	A12 (South) Left Ahead	16.9	23.3	95.7 : 95.7%
3/3	A12 (South) Ahead	1.5	4.5	19.7%
4/2+4/1	Eagle Way Left Ahead	1.0	8.0	30.3 : 30.3%
9/1	Ahead Right	1.8	23.0	29.8%
9/2	Ahead Right	5.0	33.1	67.5%
11/1	Ahead Right	2.9	36.9	55.2%
11/2	Right	2.8	37.4	55.2%
C1	Stream: 1 PRC for Signalled Lanes (%)	33.3	Total Delay for Signalled Lanes (pcuHr): 6.60	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	-6.4	Total Delay for Signalled Lanes (pcuHr): 14.68	Cycle Time (s): 60
	PRC Over All Lanes (%)	-6.4	Total Delay Over All Lanes(pcuHr): 22.83	

Basic Results Summary

Scenario 11: '34RC 06:00-07:00' (FG11: '34RC 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	43.1%		
A12 / Eagle Way / Barrack Square	-	-	-	43.1%		
1/1	A12 (North) Left Ahead	2.9	5.6	32.7%		
1/2	A12 (North) Left Ahead	3.3	5.6	34.9%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	0.0	2.7	3.2%		
2/2+2/3	Barrack Square Left Ahead	0.1	2.7	7.6 : 7.6%		
3/2+3/1	A12 (South) Left Ahead	2.6	4.5	43.1 : 43.1%		
3/3	A12 (South) Ahead	0.6	3.7	8.4%		
4/2+4/1	Eagle Way Left Ahead	0.1	2.3	9.1 : 9.1%		
9/1	Ahead Right	1.9	31.0	38.4%		
9/2	Ahead Right	2.0	30.4	39.8%		
11/1	Ahead Right	0.2	30.7	5.5%		
11/2	Right	0.0	30.7	1.3%		
C1	Stream: 1 PRC for Signalled Lanes (%)	126.2	Total Delay for Signalled Lanes (pcuHr):	3.36	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	109.0	Total Delay for Signalled Lanes (pcuHr):	1.23	Cycle Time (s):	60
	PRC Over All Lanes (%)	109.0	Total Delay Over All Lanes(pcuHr):	4.70		

Basic Results Summary

Scenario 12: '34RC 07:00-08:00' (FG12: '34RC 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	92.9%	
A12 / Eagle Way / Barrack Square	-	-	-	92.9%	
1/1	A12 (North) Left Ahead	9.4	15.5	69.1%	
1/2	A12 (North) Left Ahead	10.5	15.6	70.6%	
1/3	A12 (North) Ahead	-	-	-	
2/1	Barrack Square Left	0.5	6.4	15.2%	
2/2+2/3	Barrack Square Left Ahead	1.3	6.2	30.5 : 30.5%	
3/2+3/1	A12 (South) Left Ahead	12.8	16.7	92.9 : 92.9%	
3/3	A12 (South) Ahead	2.8	4.8	32.7%	
4/2+4/1	Eagle Way Left Ahead	2.0	11.5	47.2 : 47.2%	
9/1	Ahead Right	3.6	18.8	47.3%	
9/2	Ahead Right	8.3	30.3	78.4%	
11/1	Ahead Right	1.5	32.3	34.9%	
11/2	Right	1.5	32.9	34.4%	
C1	Stream: 1 PRC for Signalled Lanes (%)	14.8	Total Delay for Signalled Lanes (pcuHr):	11.38	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	-3.2	Total Delay for Signalled Lanes (pcuHr):	9.92	Cycle Time (s): 60
	PRC Over All Lanes (%)	-3.2	Total Delay Over All Lanes(pcuHr):	22.54	

Basic Results Summary

Scenario 13: '34RC 08:00-09:00' (FG13: '34RC 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	124.5%		
A12 / Eagle Way / Barrack Square	-	-	-	124.5%		
1/1	A12 (North) Left Ahead	88.0	405.9	124.5%		
1/2	A12 (North) Left Ahead	94.3	405.8	124.5%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	1.6	7.8	32.3%		
2/2+2/3	Barrack Square Left Ahead	2.8	7.4	47.5 : 47.5%		
3/2+3/1	A12 (South) Left Ahead	15.9	21.1	94.7 : 94.7%		
3/3	A12 (South) Ahead	7.6	8.4	61.5%		
4/2+4/1	Eagle Way Left Ahead	3.6	25.9	69.2 : 69.2%		
9/1	Ahead Right	1.3	11.0	18.0%		
9/2	Ahead Right	14.0	19.0	81.1%		
11/1	Ahead Right	3.3	33.6	58.0%		
11/2	Right	3.3	34.6	58.8%		
C1 Stream: 1 PRC for Signalled Lanes (%):		-38.4	Total Delay for Signalled Lanes (pcuHr):	173.58	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		-5.2	Total Delay for Signalled Lanes (pcuHr):	15.25	Cycle Time (s):	60
PRC Over All Lanes (%):		-38.4	Total Delay Over All Lanes(pcuHr):	191.92		

Basic Results Summary

Scenario 14: '34RC 15:00-16:00' (FG14: '34RC 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)																		
Network	-	-	-	104.0%																		
A12 / Eagle Way / Barrack Square	-	-	-	104.0%																		
1/1	A12 (North) Left Ahead	8.7	11.2	65.0%																		
1/2	A12 (North) Left Ahead	9.5	11.2	66.4%																		
1/3	A12 (North) Ahead	-	-	-																		
2/1	Barrack Square Left	1.8	8.7	40.4%																		
2/2+2/3	Barrack Square Left Ahead	3.2	8.1	55.3 : 55.3%																		
3/2+3/1	A12 (South) Left Ahead	82.7	108.4	104.0 : 104.0%																		
3/3	A12 (South) Ahead	3.4	12.0	34.1%																		
4/2+4/1	Eagle Way Left Ahead	1.8	13.9	35.7 : 35.7%																		
9/1	Ahead Right	1.2	22.0	35.0%																		
9/2	Ahead Right	6.7	40.0	75.8%																		
11/1	Ahead Right	1.4	13.5	18.7%																		
11/2	Right	2.3	14.8	28.6%																		
<table border="0" style="width: 100%;"> <tr> <td style="width: 15%;">C1</td> <td style="width: 25%;">Stream: 1 PRC for Signalled Lanes (%):</td> <td style="width: 15%;">18.7</td> <td style="width: 20%;">Total Delay for Signalled Lanes (pcuHr):</td> <td style="width: 15%;">9.30</td> <td style="width: 20%;">Cycle Time (s): 60</td> </tr> <tr> <td>C1</td> <td>Stream: 2 PRC for Signalled Lanes (%):</td> <td>-15.6</td> <td>Total Delay for Signalled Lanes (pcuHr):</td> <td>59.49</td> <td>Cycle Time (s): 60</td> </tr> <tr> <td></td> <td>PRC Over All Lanes (%):</td> <td>-15.6</td> <td>Total Delay Over All Lanes(pcuHr):</td> <td>71.18</td> <td></td> </tr> </table>					C1	Stream: 1 PRC for Signalled Lanes (%):	18.7	Total Delay for Signalled Lanes (pcuHr):	9.30	Cycle Time (s): 60	C1	Stream: 2 PRC for Signalled Lanes (%):	-15.6	Total Delay for Signalled Lanes (pcuHr):	59.49	Cycle Time (s): 60		PRC Over All Lanes (%):	-15.6	Total Delay Over All Lanes(pcuHr):	71.18	
C1	Stream: 1 PRC for Signalled Lanes (%):	18.7	Total Delay for Signalled Lanes (pcuHr):	9.30	Cycle Time (s): 60																	
C1	Stream: 2 PRC for Signalled Lanes (%):	-15.6	Total Delay for Signalled Lanes (pcuHr):	59.49	Cycle Time (s): 60																	
	PRC Over All Lanes (%):	-15.6	Total Delay Over All Lanes(pcuHr):	71.18																		

Basic Results Summary

Scenario 15: '34RC 17:00-18:00' (FG15: '34RC 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	98.6%
A12 / Eagle Way / Barrack Square	-	-	-	98.6%
1/1	A12 (North) Left Ahead	6.9	8.8	57.2%
1/2	A12 (North) Left Ahead	7.6	8.8	59.0%
1/3	A12 (North) Ahead	-	-	-
2/1	Barrack Square Left	1.6	7.4	41.0%
2/2+2/3	Barrack Square Left Ahead	2.9	7.0	56.1 : 56.1%
3/2+3/1	A12 (South) Left Ahead	24.5	36.7	98.6 : 98.6%
3/3	A12 (South) Ahead	1.6	4.9	20.2%
4/2+4/1	Eagle Way Left Ahead	1.2	9.5	33.5 : 33.5%
9/1	Ahead Right	1.9	24.0	33.4%
9/2	Ahead Right	5.3	37.9	73.1%
11/1	Ahead Right	3.4	35.7	58.2%
11/2	Right	3.4	36.5	59.2%
C1	Stream: 1 PRC for Signalled Lanes (%)	23.1	Total Delay for Signalled Lanes (pcuHr): 7.13	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	-9.5	Total Delay for Signalled Lanes (pcuHr): 22.17	Cycle Time (s): 60
	PRC Over All Lanes (%)	-9.5	Total Delay Over All Lanes(pcuHr): 31.13	

Basic Results Summary

Scenario 16: '34OP 06:00-07:00' (FG16: '34OP 06:00-07:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	43.1%	
A12 / Eagle Way / Barrack Square	-	-	-	43.1%	
1/1	A12 (North) Left Ahead	2.9	5.6	32.8%	
1/2	A12 (North) Left Ahead	3.3	5.6	34.9%	
1/3	A12 (North) Ahead	-	-	-	
2/1	Barrack Square Left	0.0	2.8	3.2%	
2/2+2/3	Barrack Square Left Ahead	0.1	2.7	7.6 : 7.6%	
3/2+3/1	A12 (South) Left Ahead	2.6	4.5	43.1 : 43.1%	
3/3	A12 (South) Ahead	0.6	3.7	8.4%	
4/2+4/1	Eagle Way Left Ahead	0.1	2.3	9.1 : 9.1%	
9/1	Ahead Right	1.9	31.0	38.4%	
9/2	Ahead Right	2.0	30.4	39.8%	
11/1	Ahead Right	0.2	30.7	5.5%	
11/2	Right	0.0	30.7	1.3%	
C1	Stream: 1 PRC for Signalled Lanes (%)	126.2	Total Delay for Signalled Lanes (pcuHr):	3.36	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	108.8	Total Delay for Signalled Lanes (pcuHr):	1.23	Cycle Time (s): 60
	PRC Over All Lanes (%)	108.8	Total Delay Over All Lanes(pcuHr):	4.70	

Basic Results Summary

Scenario 17: '34OP 07:00-08:00' (FG17: '34OP 07:00-08:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	92.6%		
A12 / Eagle Way / Barrack Square	-	-	-	92.6%		
1/1	A12 (North) Left Ahead	9.8	15.9	70.3%		
1/2	A12 (North) Left Ahead	10.7	15.9	71.7%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	0.5	6.6	15.6%		
2/2+2/3	Barrack Square Left Ahead	1.3	6.4	30.7 : 30.7%		
3/2+3/1	A12 (South) Left Ahead	12.6	16.3	92.6 : 92.6%		
3/3	A12 (South) Ahead	2.7	4.8	32.4%		
4/2+4/1	Eagle Way Left Ahead	1.9	11.3	46.9 : 46.9%		
9/1	Ahead Right	3.6	18.9	47.8%		
9/2	Ahead Right	8.2	30.0	77.9%		
11/1	Ahead Right	1.5	32.1	34.9%		
11/2	Right	1.5	32.7	34.4%		
C1	Stream: 1 PRC for Signalled Lanes (%)	15.6	Total Delay for Signalled Lanes (pcuHr):	11.56	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-2.9	Total Delay for Signalled Lanes (pcuHr):	9.69	Cycle Time (s):	60
	PRC Over All Lanes (%)	-2.9	Total Delay Over All Lanes(pcuHr):	22.51		

Basic Results Summary

Scenario 18: '34OP 08:00-09:00' (FG18: '34OP 08:00-09:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)	
Network	-	-	-	117.0%	
A12 / Eagle Way / Barrack Square	-	-	-	117.0%	
1/1	A12 (North) Left Ahead	71.6	309.5	116.8%	
1/2	A12 (North) Left Ahead	77.2	311.2	117.0%	
1/3	A12 (North) Ahead	-	-	-	
2/1	Barrack Square Left	1.9	9.2	35.1%	
2/2+2/3	Barrack Square Left Ahead	3.1	8.7	49.0 : 49.0%	
3/2+3/1	A12 (South) Left Ahead	22.9	33.4	97.9 : 97.9%	
3/3	A12 (South) Ahead	8.1	9.2	63.0%	
4/2+4/1	Eagle Way Left Ahead	3.6	27.5	69.1 : 69.1%	
9/1	Ahead Right	2.7	12.6	19.2%	
9/2	Ahead Right	10.4	21.4	86.4%	
11/1	Ahead Right	3.1	30.9	52.5%	
11/2	Right	3.2	30.3	54.1%	
C1	Stream: 1 PRC for Signalled Lanes (%)	-30.1	Total Delay for Signalled Lanes (pcuHr):	139.36	Cycle Time (s): 60
C1	Stream: 2 PRC for Signalled Lanes (%)	-8.8	Total Delay for Signalled Lanes (pcuHr):	21.56	Cycle Time (s): 60
	PRC Over All Lanes (%)	-30.1	Total Delay Over All Lanes(pcuHr):	164.35	

Basic Results Summary

Scenario 19: '34OP 15:00-16:00' (FG19: '34OP 15:00-16:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	104.1%		
A12 / Eagle Way / Barrack Square	-	-	-	104.1%		
1/1	A12 (North) Left Ahead	8.8	11.3	65.4%		
1/2	A12 (North) Left Ahead	9.8	11.3	66.8%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	2.2	9.5	45.1%		
2/2+2/3	Barrack Square Left Ahead	3.4	8.8	56.8 : 56.8%		
3/2+3/1	A12 (South) Left Ahead	89.1	99.8	104.1 : 104.1%		
3/3	A12 (South) Ahead	1.9	4.7	23.8%		
4/2+4/1	Eagle Way Left Ahead	1.7	11.3	43.7 : 43.7%		
9/1	Ahead Right	2.0	21.3	35.0%		
9/2	Ahead Right	6.3	36.2	75.8%		
11/1	Ahead Right	3.0	36.3	57.1%		
11/2	Right	3.0	37.5	58.2%		
C1 Stream: 1 PRC for Signalled Lanes (%):		18.7	Total Delay for Signalled Lanes (pcuHr):	9.01	Cycle Time (s):	60
C1 Stream: 2 PRC for Signalled Lanes (%):		-15.7	Total Delay for Signalled Lanes (pcuHr):	56.30	Cycle Time (s):	60
PRC Over All Lanes (%):		-15.7	Total Delay Over All Lanes(pcuHr):	67.68		

Basic Results Summary

Scenario 20: '34OP 17:00-18:00' (FG20: '34OP 17:00-18:00', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)		
Network	-	-	-	96.8%		
A12 / Eagle Way / Barrack Square	-	-	-	96.8%		
1/1	A12 (North) Left Ahead	6.9	8.8	57.4%		
1/2	A12 (North) Left Ahead	7.6	8.8	59.0%		
1/3	A12 (North) Ahead	-	-	-		
2/1	Barrack Square Left	1.6	7.5	41.1%		
2/2+2/3	Barrack Square Left Ahead	2.9	7.0	56.2 : 56.2%		
3/2+3/1	A12 (South) Left Ahead	19.3	27.5	96.8 : 96.8%		
3/3	A12 (South) Ahead	1.6	4.9	20.2%		
4/2+4/1	Eagle Way Left Ahead	1.1	9.0	32.7 : 32.7%		
9/1	Ahead Right	1.9	24.3	33.4%		
9/2	Ahead Right	5.3	37.9	73.1%		
11/1	Ahead Right	3.4	35.7	58.2%		
11/2	Right	3.4	36.5	59.2%		
C1	Stream: 1 PRC for Signalled Lanes (%)	23.1	Total Delay for Signalled Lanes (pcuHr):	7.15	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-7.5	Total Delay for Signalled Lanes (pcuHr):	17.32	Cycle Time (s):	60
	PRC Over All Lanes (%)	-7.5	Total Delay Over All Lanes(pcuHr):	26.27		

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: 2019.10.23_J24_Model_CV_v11.j9
Path: \\ser01cam1uk.uk.wspgroup.com/projects\50400326 - Sizewell C transport planning\Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\FOR Issue\Scoped Inv\11J24\Model
Report generation date: 13/03/2020 14:35:53

- »2019 Base Year, 6-7 AM
- »2019 Base Year, 7-8 AM
- »2019 Base Year, 8-9 AM
- »2019 Base Year, 3-4 PM
- »2019 Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
- »2023 Reference Case, 8-9 AM
- »2023 Reference Case, 3-4 PM
- »2023 Reference Case, 5-6 PM
- »2023 Early Years, 6-7 AM
- »2023 Early Years, 7-8 AM
- »2023 Early Years, 8-9 AM
- »2023 Early Years, 3-4 PM
- »2023 Early Years, 5-6 PM
- »2028 Reference Case, 6-7 AM
- »2028 Reference Case, 7-8 AM
- »2028 Reference Case, 8-9 AM
- »2028 Reference Case, 3-4 PM
- »2028 Reference Case, 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case, 6-7 AM
- »2034 Reference Case, 7-8 AM
- »2034 Reference Case, 8-9 AM
- »2034 Reference Case, 3-4 PM
- »2034 Reference Case, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

		6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM								
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
2019 Base Year																														
A - A12 North	D1	0.6	2.35	0.38	A	78 %	D2	8.2	17.03	0.91	C	0 %	D3	15.4	25.67	0.96	D	0 %	D4	4.2	8.08	0.81	A	-7 %	D5	2.7	5.47	0.1		
B - Eagle Way West		0.1	4.05	0.06	A			1.0	22.66	0.51	C	[B - Eagle Way West]		2.0	34.04	0.68	D			4.4	75.85	0.86	F			1.5	35.90	0.1		
C - A12 South		0.4	2.55	0.29	A	[A - A12 North]		2.3	6.18	0.70	A			7.4	17.30	0.89	C	[A - A12 North]		28.7	61.77	1.00	F			17.6	39.59	0.1		
D - Anson Rd East		0.2	3.54	0.13	A			1.6	18.55	0.63	C			1.8	18.03	0.66	C			17.4	69.52	0.98	F			27.0	92.89	1.1		
2023 Reference Case																														
A - A12 North	D6	0.7	2.46	0.41	A	64 %	D7	113.8	193.33	1.13	F	-10 %	D8	165.2	256.54	1.16	F	-12 %	D9	141.6	243.32	1.14	F	-15 %	D10	117.6	202.33	1.1		
B - Eagle Way West		0.1	4.28	0.07	A			7.5	159.42	0.98	F			15.9	235.38	1.11	F			15.8	229.03	1.07	F			11.5	239.87	1.1		
C - A12 South		0.5	2.63	0.33	A	[A - A12 North]		3.4	8.26	0.78	A	[A - A12 North]		29.0	57.35	1.00	F			219.1	522.68	1.29	F			21.5	45.81	0.1		
D - Anson Rd East		0.2	3.68	0.15	A			11.2	117.12	0.99	F			11.3	97.84	0.97	F			123.9	558.90	1.34	F			165.7	649.83	1.1		
2023 Early Years																														
A - A12 North	D11	0.7	2.48	0.42	A	61 %	D12	166.6	337.95	1.20	F	-15 %	D13	166.9	262.54	1.16	F	-13 %	D14	155.8	279.15	1.16	F	-16 %	D15	145.0	274.10	1.1		
B - Eagle Way West		0.1	4.55	0.07	A			11.1	228.60	1.06	F			18.6	275.86	1.15	F			16.8	242.79	1.09	F			14.5	297.19	1.1		
C - A12 South		0.6	2.90	0.38	A	[B - Eagle Way West]		7.0	15.70	0.88	C	[B - Eagle Way West]		59.9	106.16	1.05	F			242.5	589.07	1.32	F			34.7	68.75	1.1		
D - Anson Rd East		0.2	3.71	0.15	A			12.4	134.82	1.00	F			11.8	99.55	0.98	F			132.8	613.31	1.36	F			233.5	954.97	1.1		
2028 Reference Case																														
A - A12 North	D16	0.8	2.59	0.44	A	66 %	D17	75.2	105.12	1.07	F	-6 %	D18	89.0	115.78	1.07	F	-14 %	D19	9.0	15.77	0.91	C	-19 %	D20	4.4	8.09	0.1		
B - Eagle Way West		0.1	4.37	0.07	A			5.7	111.54	0.93	F			18.5	256.21	1.14	F			12.9	183.60	1.03	F			5.0	105.23	0.1		
C - A12 South		0.5	2.69	0.34	A	[A - A12 North]		6.9	15.70	0.88	C	[B - Eagle Way West]		115.2	192.59	1.12	F			169.4	365.93	1.20	F			175.6	394.68	1.1		
D - Anson Rd East		0.2	3.68	0.16	A			8.3	69.78	0.94	F			7.5	61.59	0.92	F			45.7	147.40	1.08	F			141.7	433.59	1.1		
2028 Peak Construction																														
A - A12 North	D21	0.7	2.46	0.41	A	65 %	D22	63.9	107.25	1.07	F	-6 %	D23	94.3	126.28	1.08	F	-13 %	D24	22.6	40.55	0.99	E	-20 %	D25	3.1	6.10	0.1		
B - Eagle Way West		0.1	4.88	0.08	A			8.2	155.53	1.01	F			17.3	241.19	1.12	F			23.8	323.65	1.18	F			4.3	90.36	0.1		
C - A12 South		0.7	3.11	0.42	A	[A - A12 North]		10.8	23.37	0.93	C	[B - Eagle Way West]		111.3	184.03	1.11	F			179.1	402.18	1.21	F			137.9	296.66	1.1		
D - Anson Rd East		0.2	3.68	0.16	A			7.7	85.54	0.94	F			6.4	65.76	0.91	F			53.6	173.23	1.11	F			103.9	300.14	1.1		
2034 Reference Case																														
A - A12 North	D26	0.9	2.69	0.46	A	59 %	D27	112.7	160.74	1.11	F	-9 %	D28	192.2	296.78	1.17	F	-20 %	D29	154.9	245.06	1.14	F	-25 %	D30	67.1	103.77	1.1		
B - Eagle Way West		0.1	4.53	0.08	A			11.8	217.55	1.08	F			35.1	505.30	1.34	F			38.5	577.56	1.33	F			30.7	587.18	1.1		
C - A12 South		0.6	2.78	0.37	A	[A - A12 North]		19.5	39.71	0.97	E	[B - Eagle Way West]		195.9	383.94	1.21	F			387.7	867.33	1.40	F			258.4	548.67	1.1		
D - Anson Rd East		0.2	3.76	0.16	A			11.8	95.05	0.98	F			14.1	100.32	0.99	F			137.5	596.88	1.34	F			336.5	1158.97	1.1		
2034 Operational Led																														
A - A12 North	D31	0.7	2.54	0.43	A	58 %	D32	98.6	159.21	1.11	F	-9 %	D33	199.6	324.20	1.19	F	-20 %	D34	142.5	234.91	1.14	F	-25 %	D35	69.6	109.24	1.1		
B - Eagle Way West		0.1	4.53	0.08	A			11.6	214.36	1.07	F			37.1	573.72	1.37	F			38.4	578.80	1.33	F			30.2	577.17	1.1		
C - A12 South		0.6	2.79	0.37	A	[D - Anson Rd East]		12.7	26.45	0.94	D	[B - Eagle Way West]		192.8	378.25	1.20	F			404.4	903.06	1.43	F			248.0	524.80	1.1		
D - Anson Rd East		0.2	3.77	0.16	A			10.3	106.85	0.98	F			16.5	115.49	1.01	F			132.8	594.76	1.35	F			326.7	1141.70	1.1		

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	A12 / Eagle Way / Anson Rd
Location	52° 3'56.12"N, 1°16'29.45"E
Site number	24
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.58	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	78	A - A12 North

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Eagle Way West	
C	A12 South	
D	Anson Rd East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	F - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.20	10.40	9.5	38.7	77.6	35.0	
B - Eagle Way West	3.50	6.90	12.7	15.3	77.6	11.0	
C - A12 South	7.50	10.70	34.5	40.2	77.6	33.0	
D - Anson Rd East	4.50	9.80	10.9	40.4	77.6	45.0	

Exit Restrictions

Arm	Exit restriction present	Linked exit restriction present	Maximum capacity (PCU/hr)
A - A12 North			
B - Eagle Way West			
C - A12 South	✓		1570
D - Anson Rd East			

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	50
B - Eagle Way West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-340
C - A12 South	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-780
D - Anson Rd East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-260

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.623	2715
B - Eagle Way West	0.489	1358
C - A12 South	0.684	2283
D - Anson Rd East	0.507	1677

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	869	100.000
B - Eagle Way West		ONE HOUR	✓	51	100.000
C - A12 South		ONE HOUR	✓	530	100.000
D - Anson Rd East		ONE HOUR	✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	4	671	194
	B - Eagle Way West	27	0	16	8
	C - A12 South	451	1	0	78
	D - Anson Rd East	66	0	77	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North		0	25	7	2

	B - Eagle Way West	7	0	6	0
From	C - A12 South	11	0	0	15
	D - Anson Rd East	12	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.38	2.35	0.6	A	797	1196
B - Eagle Way West	0.06	4.05	0.1	A	47	70
C - A12 South	0.29	2.55	0.4	A	486	730
D - Anson Rd East	0.13	3.54	0.2	A	131	197

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	654	164	77	2511	0.261	653	408	0.0	0.4	1.936	A
B - Eagle Way West	38	10	447	1052	0.037	38	4	0.0	0.0	3.550	A
C - A12 South	399	100	53	2014	0.198	398	574	0.0	0.2	2.226	A
D - Anson Rd East	108	27	519	1296	0.083	107	210	0.0	0.1	3.029	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	781	195	92	2501	0.312	781	489	0.4	0.5	2.092	A
B - Eagle Way West	46	11	535	1007	0.046	46	4	0.0	0.0	3.745	A
C - A12 South	476	119	63	2007	0.237	476	686	0.2	0.3	2.351	A
D - Anson Rd East	129	32	621	1244	0.103	128	252	0.1	0.1	3.226	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	957	239	112	2488	0.385	956	599	0.5	0.6	2.349	A
B - Eagle Way West	56	14	655	945	0.059	56	6	0.0	0.1	4.050	A
C - A12 South	584	146	77	1997	0.292	583	841	0.3	0.4	2.546	A
D - Anson Rd East	157	39	760	1174	0.134	157	308	0.1	0.2	3.541	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	957	239	112	2488	0.385	957	599	0.6	0.6	2.351	A
B - Eagle Way West	56	14	655	945	0.059	56	6	0.1	0.1	4.051	A
C - A12 South	584	146	77	1997	0.292	584	841	0.4	0.4	2.546	A
D - Anson Rd East	157	39	761	1174	0.134	157	308	0.2	0.2	3.542	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	781	195	92	2501	0.312	782	489	0.6	0.5	2.096	A
B - Eagle Way West	46	11	535	1006	0.046	46	4	0.1	0.0	3.747	A
C - A12 South	476	119	63	2007	0.237	477	687	0.4	0.3	2.354	A
D - Anson Rd East	129	32	622	1244	0.103	129	252	0.2	0.1	3.230	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	654	164	77	2511	0.261	655	410	0.5	0.4	1.940	A
B - Eagle Way West	38	10	448	1051	0.037	38	4	0.0	0.0	3.556	A
C - A12 South	399	100	53	2014	0.198	399	576	0.3	0.2	2.231	A
D - Anson Rd East	108	27	521	1295	0.083	108	211	0.1	0.1	3.034	A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	13.29	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	0	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1621	100.000
B - Eagle Way West		ONE HOUR	✓	147	100.000
C - A12 South		ONE HOUR	✓	1226	100.000
D - Anson Rd East		ONE HOUR	✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	1	52	1187	381
B - Eagle Way West	81	0	49	17
C - A12 South	1051	6	0	169
D - Anson Rd East	177	2	118	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	2	6	2
B - Eagle Way West	5	0	2	6
C - A12 South	9	0	0	5
D - Anson Rd East	6	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	17.03	8.2	C	1487	2231
B - Eagle Way West	0.51	22.66	1.0	C	135	202
C - A12 South	0.70	6.18	2.3	A	1125	1687
D - Anson Rd East	0.63	18.55	1.6	C	273	409

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1220	305	176	2477	0.493	1217	982	0.0	1.0	2.849	A
B - Eagle Way West	111	28	1048	770	0.144	110	45	0.0	0.2	5.451	A
C - A12 South	923	231	174	1984	0.465	920	1016	0.0	0.9	3.369	A
D - Anson Rd East	224	56	967	1079	0.207	223	425	0.0	0.3	4.199	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1457	364	211	2455	0.594	1455	1176	1.0	1.4	3.595	A
B - Eagle Way West	132	33	1255	664	0.199	132	54	0.2	0.2	6.755	A
C - A12 South	1102	276	208	1962	0.562	1101	1216	0.9	1.3	4.173	A
D - Anson Rd East	267	67	1157	984	0.271	267	509	0.3	0.4	5.015	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1785	446	257	2131	0.838	1771	1436	1.4	4.8	9.666	A
B - Eagle Way West	162	40	1534	411	0.394	160	66	0.2	0.6	14.298	B
C - A12 South	1350	337	253	1932	0.699	1346	1479	1.3	2.3	6.103	A

D - Anson Rd East	327	82	1408	640	0.511	324	620	0.4	1.0	11.305	B
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07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1785	446	258	1968	0.907	1771	1440	4.8	8.2	17.028	C
B - Eagle Way West	162	40	1538	318	0.509	160	66	0.6	1.0	22.664	C
C - A12 South	1350	337	253	1932	0.699	1350	1479	2.3	2.3	6.183	A
D - Anson Rd East	327	82	1408	516	0.634	324	621	1.0	1.6	18.552	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1457	364	213	2454	0.594	1484	1186	8.2	1.5	3.818	A
B - Eagle Way West	132	33	1264	660	0.200	135	55	1.0	0.3	6.899	A
C - A12 South	1102	276	212	1959	0.563	1106	1240	2.3	1.3	4.242	A
D - Anson Rd East	267	67	1180	972	0.275	272	517	1.6	0.4	5.179	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1220	305	177	2476	0.493	1222	988	1.5	1.0	2.878	A
B - Eagle Way West	111	28	1054	767	0.144	111	45	0.3	0.2	5.493	A
C - A12 South	923	231	175	1984	0.465	925	1021	1.3	0.9	3.403	A
D - Anson Rd East	224	56	972	1076	0.208	224	428	0.4	0.3	4.227	A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	22.31	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	0	A - A12 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2002	100.000
B - Eagle Way West		ONE HOUR	✓	196	100.000
C - A12 South		ONE HOUR	✓	1459	100.000
D - Anson Rd East		ONE HOUR	✓	333	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	150	1193	659
B - Eagle Way West	128	0	29	39
C - A12 South	1286	20	0	153
D - Anson Rd East	206	19	107	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	3	9	3
B - Eagle Way West	4	0	0	8
C - A12 South	10	5	0	5
D - Anson Rd East	10	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.96	25.67	15.4	D	1837	2756
B - Eagle Way West	0.68	34.04	2.0	D	180	270
C - A12 South	0.89	17.30	7.4	C	1339	2008
D - Anson Rd East	0.66	18.03	1.8	C	306	458

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1507	377	166	2448	0.616	1501	1213	0.0	1.6	3.778	A
B - Eagle Way West	148	37	1233	668	0.221	146	142	0.0	0.3	6.892	A
C - A12 South	1098	275	282	1894	0.580	1093	996	0.0	1.4	4.466	A
D - Anson Rd East	251	63	1028	1029	0.244	249	639	0.0	0.3	4.608	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1800	450	199	2428	0.741	1795	1452	1.6	2.8	5.645	A
B - Eagle Way West	176	44	1475	543	0.325	175	169	0.3	0.5	9.784	A
C - A12 South	1312	328	337	1857	0.706	1308	1192	1.4	2.4	6.511	A
D - Anson Rd East	299	75	1230	927	0.323	299	764	0.3	0.5	5.724	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2204	551	241	2401	0.918	2178	1765	2.8	9.3	14.683	B
B - Eagle Way West	216	54	1793	379	0.570	213	206	0.5	1.3	21.319	C
C - A12 South	1606	402	411	1807	0.889	1588	1447	2.4	6.9	15.282	C

D - Anson Rd East	367	92	1493	794	0.462	365	927	0.5	0.8	8.374	A
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08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2204	551	243	2296	0.960	2180	1778	9.3	15.4	25.666	D
B - Eagle Way West	216	54	1808	316	0.684	213	206	1.3	2.0	34.045	D
C - A12 South	1606	402	410	1808	0.888	1605	1447	6.9	7.4	17.299	C
D - Anson Rd East	367	92	1494	559	0.656	363	929	0.8	1.8	18.033	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1800	450	204	2425	0.742	1850	1481	15.4	3.0	6.793	A
B - Eagle Way West	176	44	1502	529	0.333	182	174	2.0	0.5	10.545	B
C - A12 South	1312	328	345	1851	0.708	1331	1227	7.4	2.5	7.166	A
D - Anson Rd East	299	75	1268	908	0.330	305	786	1.8	0.5	6.017	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1507	377	168	2447	0.616	1513	1224	3.0	1.6	3.876	A
B - Eagle Way West	148	37	1244	662	0.223	148	143	0.5	0.3	7.018	A
C - A12 South	1098	275	284	1892	0.580	1103	1004	2.5	1.4	4.586	A
D - Anson Rd East	251	63	1037	1025	0.245	251	644	0.5	0.3	4.656	A

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	41.94	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1743	100.000
B - Eagle Way West		ONE HOUR	✓	204	100.000
C - A12 South		ONE HOUR	✓	1497	100.000
D - Anson Rd East		ONE HOUR	✓	837	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	144	1042	557
B - Eagle Way West	120	0	24	60
C - A12 South	1213	38	1	245
D - Anson Rd East	506	65	266	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	1	8	2
B - Eagle Way West	4	0	0	2
C - A12 South	7	0	100	3
D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	8.08	4.2	A	1599	2399
B - Eagle Way West	0.86	75.85	4.4	F	187	281
C - A12 South	1.00	61.77	28.7	F	1374	2061
D - Anson Rd East	0.98	69.52	17.4	F	768	1152

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1312	328	247	2429	0.540	1308	1376	0.0	1.2	3.197	A
B - Eagle Way West	154	38	1470	584	0.263	152	185	0.0	0.4	8.314	A
C - A12 South	1127	282	535	1801	0.626	1120	999	0.0	1.6	5.243	A
D - Anson Rd East	630	158	908	1163	0.542	625	646	0.0	1.2	6.643	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1567	392	295	2400	0.653	1564	1644	1.2	1.9	4.293	A
B - Eagle Way West	183	46	1757	440	0.416	182	221	0.4	0.7	13.861	B
C - A12 South	1346	336	639	1732	0.777	1339	1195	1.6	3.3	9.006	A
D - Anson Rd East	752	188	1087	1068	0.704	748	773	1.2	2.3	11.088	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1919	480	349	2367	0.811	1910	1942	1.9	4.1	7.730	A
B - Eagle Way West	225	56	2076	281	0.799	215	266	0.7	3.1	48.986	E
C - A12 South	1648	412	758	1654	0.996	1584	1448	3.3	19.4	35.406	E

D - Anson Rd East	922	230	1326	941	0.980	880	933	2.3	12.7	43.230	E
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15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1919	480	355	2363	0.812	1919	1980	4.1	4.2	8.076	A
B - Eagle Way West	225	56	2116	261	0.861	219	270	3.1	4.4	75.845	F
C - A12 South	1648	412	775	1644	1.003	1611	1461	19.4	28.7	61.765	F
D - Anson Rd East	922	230	1332	937	0.983	903	941	12.7	17.4	69.523	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1567	392	318	2386	0.657	1576	1777	4.2	1.9	4.495	A
B - Eagle Way West	183	46	1898	370	0.496	197	230	4.4	1.0	22.281	C
C - A12 South	1346	336	684	1703	0.790	1444	1224	28.7	4.0	18.840	C
D - Anson Rd East	752	188	1097	1063	0.708	812	796	17.4	2.5	17.559	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1312	328	251	2427	0.541	1315	1397	1.9	1.2	3.250	A
B - Eagle Way West	154	38	1492	573	0.268	156	187	1.0	0.4	8.686	A
C - A12 South	1127	282	542	1796	0.628	1136	1007	4.0	1.7	5.532	A
D - Anson Rd East	630	158	914	1160	0.543	635	652	2.5	1.2	6.932	A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	37.78	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	D - Anson Rd East

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1626	100.000
B - Eagle Way West		ONE HOUR	✓	144	100.000
C - A12 South		ONE HOUR	✓	1523	100.000
D - Anson Rd East		ONE HOUR	✓	923	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	82	1061	483
B - Eagle Way West	86	0	26	32
C - A12 South	1244	37	0	242
D - Anson Rd East	543	69	310	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	0	3	2
B - Eagle Way West	3	0	0	0
C - A12 South	3	0	0	1
D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	5.47	2.7	A	1492	2238
B - Eagle Way West	0.62	35.90	1.5	E	132	198
C - A12 South	0.97	39.59	17.6	E	1398	2096
D - Anson Rd East	1.02	92.89	27.0	F	847	1270

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1224	306	225	2512	0.487	1220	1401	0.0	0.9	2.780	A
B - Eagle Way West	108	27	1519	587	0.185	108	141	0.0	0.2	7.492	A
C - A12 South	1147	287	520	1881	0.609	1140	1047	0.0	1.5	4.819	A
D - Anson Rd East	695	174	877	1210	0.574	690	568	0.0	1.3	6.853	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1462	365	269	2485	0.588	1460	1675	0.9	1.4	3.507	A
B - Eagle Way West	129	32	1816	442	0.293	129	168	0.2	0.4	11.474	B
C - A12 South	1369	342	621	1813	0.755	1363	1253	1.5	3.0	7.904	A
D - Anson Rd East	830	207	1049	1121	0.740	824	680	1.3	2.7	11.913	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1790	448	323	2452	0.730	1785	1990	1.4	2.6	5.364	A
B - Eagle Way West	159	40	2158	275	0.577	155	201	0.4	1.3	29.298	D
C - A12 South	1677	419	725	1743	0.962	1634	1514	3.0	13.6	26.340	D

D - Anson Rd East	1016	254	1283	1000	1.016	956	826	2.7	17.9	51.827	F
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17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1790	448	328	2448	0.731	1790	2027	2.6	2.7	5.465	A
B - Eagle Way West	159	40	2198	255	0.622	158	204	1.3	1.5	35.899	E
C - A12 South	1677	419	741	1732	0.968	1661	1526	13.6	17.6	39.593	E
D - Anson Rd East	1016	254	1287	998	1.018	980	832	17.9	27.0	92.886	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1462	365	281	2477	0.590	1467	1788	2.7	1.5	3.581	A
B - Eagle Way West	129	32	1936	384	0.337	133	178	1.5	0.5	14.612	B
C - A12 South	1369	342	688	1768	0.775	1425	1292	17.6	3.6	12.109	B
D - Anson Rd East	830	207	1055	1118	0.742	925	693	27.0	3.1	27.241	D

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1224	306	228	2510	0.488	1226	1421	1.5	1.0	2.810	A
B - Eagle Way West	108	27	1540	577	0.188	110	142	0.5	0.2	7.721	A
C - A12 South	1147	287	528	1876	0.611	1155	1056	3.6	1.6	5.046	A
D - Anson Rd East	695	174	882	1208	0.575	702	573	3.1	1.4	7.211	A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.69	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	64	A - A12 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	936	100.000
B - Eagle Way West		ONE HOUR	✓	57	100.000
C - A12 South		ONE HOUR	✓	604	100.000
D - Anson Rd East		ONE HOUR	✓	159	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East	
A - A12 North	0	4	737	194	
B - Eagle Way West	30	0	18	9	
C - A12 South	506	1	0	97	
D - Anson Rd East	79	0	80	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To				
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East	
A - A12 North	0	25	6	2	
B - Eagle Way West	7	0	6	0	
C - A12 South	8	0	0	12	
D - Anson Rd East	9	0	4	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.41	2.46	0.7	A	859	1288
B - Eagle Way West	0.07	4.28	0.1	A	52	78
C - A12 South	0.33	2.63	0.5	A	554	831
D - Anson Rd East	0.15	3.68	0.2	A	146	219

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	705	176	93	2520	0.280	703	462	0.0	0.4	1.979	A
B - Eagle Way West	43	11	512	1024	0.042	42	4	0.0	0.0	3.666	A
C - A12 South	454	114	63	2052	0.222	453	627	0.0	0.3	2.251	A
D - Anson Rd East	120	30	571	1287	0.093	119	225	0.0	0.1	3.083	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	841	210	111	2508	0.335	841	552	0.4	0.5	2.159	A
B - Eagle Way West	51	13	613	973	0.052	51	5	0.0	0.1	3.901	A
C - A12 South	543	136	75	2043	0.266	542	750	0.3	0.4	2.399	A
D - Anson Rd East	143	36	682	1230	0.116	143	269	0.1	0.1	3.310	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1030	258	136	2491	0.414	1030	677	0.5	0.7	2.461	A
B - Eagle Way West	62	16	750	904	0.069	62	6	0.1	0.1	4.276	A
C - A12 South	665	166	92	2031	0.327	664	918	0.4	0.5	2.633	A

D - Anson Rd East	175	44	836	1153	0.152	175	330	0.1	0.2	3.681	A
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06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1030	258	136	2491	0.414	1030	677	0.7	0.7	2.463	A
B - Eagle Way West	62	16	751	904	0.069	62	6	0.1	0.1	4.277	A
C - A12 South	665	166	92	2031	0.327	665	919	0.5	0.5	2.633	A
D - Anson Rd East	175	44	836	1153	0.152	175	330	0.2	0.2	3.682	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	841	210	111	2508	0.336	842	553	0.7	0.5	2.163	A
B - Eagle Way West	51	13	614	973	0.052	51	5	0.1	0.1	3.906	A
C - A12 South	543	136	76	2043	0.266	543	751	0.5	0.4	2.402	A
D - Anson Rd East	143	36	684	1230	0.116	143	270	0.2	0.1	3.312	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	705	176	93	2520	0.280	705	463	0.5	0.4	1.985	A
B - Eagle Way West	43	11	514	1023	0.042	43	4	0.1	0.0	3.673	A
C - A12 South	454	114	63	2051	0.222	455	629	0.4	0.3	2.254	A
D - Anson Rd East	120	30	572	1286	0.093	120	226	0.1	0.1	3.086	A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	114.05	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-10	A - A12 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1771	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	1363	100.000
D - Anson Rd East		ONE HOUR	✓	324	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	1	58	1331	381
B - Eagle Way West	90	0	54	19
C - A12 South	1135	7	0	221
D - Anson Rd East	200	2	122	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	2	6	2
B - Eagle Way West	5	0	2	6
C - A12 South	9	0	0	4
D - Anson Rd East	0	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.13	193.33	113.8	F	1625	2438
B - Eagle Way West	0.98	159.42	7.5	F	150	225
C - A12 South	0.78	8.26	3.4	A	1251	1876
D - Anson Rd East	0.99	117.12	11.2	F	297	446

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1334	333	221	2448	0.545	1329	1068	0.0	1.2	3.203	A
B - Eagle Way West	123	31	1167	715	0.172	122	50	0.0	0.2	6.061	A
C - A12 South	1026	257	195	1982	0.518	1022	1131	0.0	1.1	3.732	A
D - Anson Rd East	244	61	1084	1059	0.230	243	466	0.0	0.3	4.404	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1592	398	264	2421	0.658	1590	1279	1.2	1.9	4.313	A
B - Eagle Way West	147	37	1397	599	0.245	146	60	0.2	0.3	7.942	A
C - A12 South	1225	306	234	1958	0.626	1223	1353	1.1	1.6	4.883	A
D - Anson Rd East	291	73	1296	949	0.307	291	558	0.3	0.4	5.465	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1950	488	315	1756	1.111	1731	1537	1.9	56.7	69.204	F
B - Eagle Way West	180	45	1691	195	0.921	162	66	0.3	4.7	85.824	F
C - A12 South	1501	375	262	1940	0.774	1494	1479	1.6	3.3	7.964	A

D - Anson Rd East	357	89	1413	372	0.958	329	634	0.4	7.3	63.526	F
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07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1950	488	319	1724	1.131	1722	1553	56.7	113.8	184.110	F
B - Eagle Way West	180	45	1704	183	0.983	168	66	4.7	7.5	159.422	F
C - A12 South	1501	375	270	1935	0.776	1500	1479	3.3	3.4	8.264	A
D - Anson Rd East	357	89	1408	360	0.989	341	634	7.3	11.2	117.117	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1592	398	272	1757	0.906	1742	1306	113.8	76.4	193.331	F
B - Eagle Way West	147	37	1418	192	0.765	160	65	7.5	4.1	123.188	F
C - A12 South	1225	306	251	1947	0.629	1232	1480	3.4	1.7	5.081	A
D - Anson Rd East	291	73	1420	348	0.837	310	593	11.2	6.6	99.607	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1334	333	229	2443	0.546	1634	1099	76.4	1.2	6.829	A
B - Eagle Way West	123	31	1190	704	0.175	139	60	4.1	0.2	6.542	A
C - A12 South	1026	257	222	1966	0.522	1029	1376	1.7	1.1	3.854	A
D - Anson Rd East	244	61	1329	932	0.262	269	535	6.6	0.4	5.634	A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	166.60	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-12	A - A12 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2174	100.000
B - Eagle Way West		ONE HOUR	✓	218	100.000
C - A12 South		ONE HOUR	✓	1646	100.000
D - Anson Rd East		ONE HOUR	✓	397	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	167	1348	659
B - Eagle Way West	142	0	32	43
C - A12 South	1430	22	0	194
D - Anson Rd East	243	21	132	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	3	9	3
B - Eagle Way West	4	0	0	8
C - A12 South	9	5	0	4
D - Anson Rd East	3	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.16	256.54	165.2	F	1995	2992
B - Eagle Way West	1.11	235.38	15.9	F	200	300
C - A12 South	1.00	57.35	29.0	F	1510	2265
D - Anson Rd East	0.97	97.84	11.3	F	364	546

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1636	409	202	2428	0.674	1628	1358	0.0	2.0	4.460	A
B - Eagle Way West	164	41	1398	594	0.276	162	157	0.0	0.4	8.305	A
C - A12 South	1239	310	323	1890	0.656	1232	1132	0.0	1.9	5.408	A
D - Anson Rd East	299	75	1159	1010	0.296	297	672	0.0	0.4	5.040	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1954	489	242	2404	0.813	1946	1623	2.0	4.2	7.719	A
B - Eagle Way West	196	49	1671	456	0.429	194	188	0.4	0.7	13.699	B
C - A12 South	1480	370	387	1849	0.800	1472	1353	1.9	3.8	9.357	A
D - Anson Rd East	357	89	1384	890	0.401	356	803	0.4	0.7	6.725	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2393	588	279	2091	1.144	2076	1903	4.2	83.6	83.283	F
B - Eagle Way West	240	60	1973	229	1.045	208	204	0.7	8.7	111.604	F
C - A12 South	1812	453	431	1820	0.996	1746	1453	3.8	20.2	33.864	D

D - Anson Rd East	437	109	1477	456	0.958	408	877	0.7	8.0	56.757	F
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08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2393	598	283	2068	1.157	2067	1941	83.6	165.2	221.018	F
B - Eagle Way West	240	60	2014	216	1.108	211	205	8.7	15.9	235.380	F
C - A12 South	1812	453	441	1814	0.999	1777	1453	20.2	29.0	57.352	F
D - Anson Rd East	437	109	1471	448	0.974	423	879	8.0	11.3	97.844	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1954	489	267	2098	0.931	2086	1754	165.2	132.3	256.543	F
B - Eagle Way West	196	49	1788	245	0.798	233	201	15.9	6.6	189.473	F
C - A12 South	1480	370	412	1833	0.807	1578	1453	29.0	4.5	18.927	C
D - Anson Rd East	357	89	1488	428	0.834	377	865	11.3	6.2	77.699	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1636	409	212	2144	0.763	2128	1400	132.3	9.5	123.493	F
B - Eagle Way West	164	41	1426	302	0.543	185	197	6.6	1.3	35.731	E
C - A12 South	1239	310	374	1857	0.667	1249	1451	4.5	2.0	6.011	A
D - Anson Rd East	299	75	1510	468	0.638	316	830	6.2	1.9	25.961	D

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	398.54	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-15	D - Anson Rd East

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1974	100.000
B - Eagle Way West		ONE HOUR	✓	227	100.000
C - A12 South		ONE HOUR	✓	1667	100.000
D - Anson Rd East		ONE HOUR	✓	869	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East	
A - A12 North	0	160	1256	557	
B - Eagle Way West	134	0	27	67	
C - A12 South	1350	42	1	275	
D - Anson Rd East	506	72	291	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To				
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East	
A - A12 North	0	1	7	2	
B - Eagle Way West	4	0	0	2	
C - A12 South	7	0	100	2	
D - Anson Rd East	2	2	2	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.14	243.32	141.6	F	1811	2717
B - Eagle Way West	1.07	229.03	15.8	F	208	312
C - A12 South	1.29	522.66	219.1	F	1530	2295
D - Anson Rd East	1.34	558.90	123.9	F	797	1196

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1486	371	275	2417	0.615	1480	1486	0.0	1.6	3.815	A
B - Eagle Way West	171	43	1592	523	0.327	169	206	0.0	0.5	10.126	B
C - A12 South	1255	314	552	1791	0.701	1246	1179	0.0	2.3	6.505	A
D - Anson Rd East	654	164	1083	1074	0.609	648	672	0.0	1.5	8.342	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1774	444	328	2385	0.744	1769	1769	1.6	2.8	5.798	A
B - Eagle Way West	204	51	1896	371	0.551	201	246	0.5	1.2	20.925	C
C - A12 South	1499	375	657	1722	0.871	1484	1409	2.3	6.0	14.330	B
D - Anson Rd East	781	195	1294	962	0.812	772	803	1.5	3.9	18.093	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2173	543	331	1904	1.141	1886	1757	2.8	74.6	81.225	F
B - Eagle Way West	250	62	1873	233	1.071	215	253	1.2	9.9	122.069	F
C - A12 South	1836	459	657	1476	1.243	1470	1480	6.0	97.5	135.771	F

D - Anson Rd East	957	239	1380	765	1.251	757	838	3.9	53.8	152.217	F
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15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2173	543	328	1906	1.140	1905	1701	74.6	141.6	209.854	F
B - Eagle Way West	250	62	1803	233	1.075	226	250	9.9	15.8	229.032	F
C - A12 South	1836	459	631	1422	1.291	1422	1480	97.5	201.1	382.986	F
D - Anson Rd East	957	239	1395	717	1.335	716	838	53.8	114.0	426.616	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1774	444	334	1903	0.932	1890	1727	141.6	112.7	243.321	F
B - Eagle Way West	204	51	1822	250	0.815	238	251	15.8	7.3	192.735	F
C - A12 South	1499	375	647	1427	1.050	1427	1480	201.1	219.1	522.665	F
D - Anson Rd East	781	195	1385	742	1.052	742	838	114.0	123.9	558.898	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1486	371	329	1861	0.798	1845	1842	112.7	22.9	135.505	F
B - Eagle Way West	171	43	1986	226	0.758	185	259	7.3	3.8	97.301	F
C - A12 South	1255	314	715	1537	0.817	1530	1481	219.1	150.4	435.361	F
D - Anson Rd East	654	164	1347	857	0.764	850	827	123.9	75.1	423.164	F

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	243.00	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-16	D - Anson Rd East

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1839	100.000
B - Eagle Way West		ONE HOUR	✓	160	100.000
C - A12 South		ONE HOUR	✓	1615	100.000
D - Anson Rd East		ONE HOUR	✓	982	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East	
A - A12 North	0	91	1265	483	
B - Eagle Way West	96	0	29	36	
C - A12 South	1315	41	0	259	
D - Anson Rd East	573	77	331	1	

Vehicle Mix

Heavy Vehicle Percentages

From	To				
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East	
A - A12 North	0	0	3	2	
B - Eagle Way West	3	0	0	0	
C - A12 South	3	0	0	1	
D - Anson Rd East	1	0	1	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.12	202.33	117.6	F	1687	2531
B - Eagle Way West	1.07	239.87	11.5	F	147	221
C - A12 South	0.99	45.81	21.5	E	1482	2223
D - Anson Rd East	1.39	649.83	165.7	F	901	1352

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1384	346	243	2500	0.554	1379	1483	0.0	1.2	3.197	A
B - Eagle Way West	121	30	1606	545	0.221	120	156	0.0	0.3	8.443	A
C - A12 South	1216	304	554	1859	0.654	1209	1217	0.0	1.9	5.478	A
D - Anson Rd East	739	185	1039	1126	0.656	732	583	0.0	1.9	8.964	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1653	413	290	2471	0.669	1650	1767	1.2	2.0	4.367	A
B - Eagle Way West	144	36	1914	394	0.366	143	187	0.3	0.6	14.277	B
C - A12 South	1452	363	658	1789	0.812	1443	1453	1.9	4.1	10.166	B
D - Anson Rd East	883	221	1242	1021	0.864	869	697	1.9	5.4	21.812	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2025	506	338	1805	1.121	1782	1975	2.0	62.5	72.921	F
B - Eagle Way West	176	44	2161	172	1.025	152	197	0.6	6.8	122.060	F
C - A12 South	1778	445	636	1803	0.986	1722	1531	4.1	18.1	31.971	D

D - Anson Rd East	1081	270	1342	831	1.302	826	779	5.4	69.3	177.413	F
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17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2025	506	347	1806	1.121	1804	1985	62.5	117.6	185.871	F
B - Eagle Way West	176	44	2174	164	1.074	158	195	6.8	11.5	239.870	F
C - A12 South	1778	445	605	1824	0.975	1765	1531	18.1	21.5	45.806	E
D - Anson Rd East	1081	270	1359	777	1.391	777	792	69.3	145.3	500.051	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1653	413	312	1806	0.916	1790	1806	117.6	83.3	202.335	F
B - Eagle Way West	144	36	1951	181	0.794	167	190	11.5	5.7	193.641	F
C - A12 South	1452	363	620	1814	0.800	1521	1531	21.5	4.3	14.894	B
D - Anson Rd East	883	221	1350	801	1.102	801	752	145.3	165.7	649.834	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1384	346	254	1866	0.742	1705	1660	83.3	3.1	60.748	F
B - Eagle Way West	121	30	1772	361	0.334	141	193	5.7	0.5	17.921	C
C - A12 South	1216	304	742	1732	0.702	1223	1532	4.3	2.4	7.185	A
D - Anson Rd East	739	185	1283	998	0.741	992	676	165.7	102.5	488.108	F

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.81	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	61	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	948	100.000
B - Eagle Way West		ONE HOUR	✓	57	100.000
C - A12 South		ONE HOUR	✓	679	100.000
D - Anson Rd East		ONE HOUR	✓	159	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	4	750	194
B - Eagle Way West	30	0	16	9
C - A12 South	581	1	0	97
D - Anson Rd East	79	0	80	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	25	6	2
B - Eagle Way West	7	0	6	0
C - A12 South	11	0	0	12
D - Anson Rd East	9	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.48	0.7	A	870	1305
B - Eagle Way West	0.07	4.55	0.1	A	52	78
C - A12 South	0.38	2.90	0.6	A	623	935
D - Anson Rd East	0.15	3.71	0.2	A	146	219

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	714	178	93	2521	0.283	712	518	0.0	0.4	1.988	A
B - Eagle Way West	43	11	569	990	0.043	42	4	0.0	0.0	3.798	A
C - A12 South	511	128	63	2007	0.255	510	636	0.0	0.3	2.401	A
D - Anson Rd East	120	30	580	1283	0.094	120	225	0.0	0.1	3.095	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	852	213	111	2509	0.340	852	620	0.4	0.5	2.172	A
B - Eagle Way West	51	13	680	933	0.055	51	5	0.0	0.1	4.082	A
C - A12 South	611	153	75	1999	0.305	610	761	0.3	0.4	2.592	A
D - Anson Rd East	143	36	693	1225	0.117	143	269	0.1	0.1	3.326	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1044	261	136	2493	0.419	1043	759	0.5	0.7	2.481	A
B - Eagle Way West	62	16	833	854	0.073	62	6	0.1	0.1	4.546	A
C - A12 South	748	187	92	1988	0.376	747	932	0.4	0.6	2.900	A

D - Anson Rd East	176	44	849	1147	0.153	175	330	0.1	0.2	3.706	A
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06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1044	261	136	2493	0.419	1044	760	0.7	0.7	2.483	A
B - Eagle Way West	62	16	834	854	0.073	62	6	0.1	0.1	4.548	A
C - A12 South	748	187	92	1988	0.376	748	933	0.6	0.6	2.902	A
D - Anson Rd East	176	44	850	1146	0.153	176	330	0.2	0.2	3.707	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	852	213	111	2509	0.340	853	621	0.7	0.5	2.176	A
B - Eagle Way West	51	13	682	932	0.055	51	5	0.1	0.1	4.088	A
C - A12 South	611	153	76	1999	0.305	611	762	0.6	0.4	2.594	A
D - Anson Rd East	143	36	694	1225	0.117	144	270	0.2	0.1	3.329	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	714	178	93	2521	0.283	714	520	0.5	0.4	1.992	A
B - Eagle Way West	43	11	571	989	0.043	43	4	0.1	0.0	3.806	A
C - A12 South	511	128	63	2007	0.255	512	638	0.4	0.3	2.409	A
D - Anson Rd East	120	30	581	1282	0.094	120	226	0.1	0.1	3.100	A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	185.43	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-15	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1837	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	1523	100.000
D - Anson Rd East		ONE HOUR	✓	311	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	1	58	1397	381
B - Eagle Way West	90	0	54	19
C - A12 South	1252	7	0	264
D - Anson Rd East	184	2	125	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	2	7	2
B - Eagle Way West	5	0	2	6
C - A12 South	13	0	0	3
D - Anson Rd East	0	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.20	337.95	166.6	F	1686	2528
B - Eagle Way West	1.06	228.60	11.1	F	150	225
C - A12 South	0.88	15.70	7.0	C	1398	2097
D - Anson Rd East	1.00	134.82	12.4	F	285	427

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1383	346	253	2414	0.573	1378	1143	0.0	1.3	3.458	A
B - Eagle Way West	123	31	1274	645	0.190	122	50	0.0	0.2	6.865	A
C - A12 South	1147	287	183	1941	0.591	1141	1182	0.0	1.4	4.472	A
D - Anson Rd East	234	58	1132	1027	0.228	233	498	0.0	0.3	4.526	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1651	413	303	2384	0.693	1648	1368	1.3	2.2	4.870	A
B - Eagle Way West	147	37	1625	516	0.285	146	60	0.2	0.4	9.723	A
C - A12 South	1369	342	219	1918	0.714	1365	1414	1.4	2.4	6.462	A
D - Anson Rd East	279	70	1355	911	0.306	279	596	0.3	0.4	5.686	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2023	506	358	1715	1.180	1700	1635	2.2	82.9	97.502	F
B - Eagle Way West	180	45	1838	176	1.019	155	63	0.4	6.7	116.682	F
C - A12 South	1677	419	240	1905	0.880	1661	1469	2.4	6.5	13.862	B

D - Anson Rd East	342	85	1399	346	0.988	310	659	0.4	8.3	73.500	F
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07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2023	506	364	1689	1.198	1688	1660	82.9	166.6	270.623	F
B - Eagle Way West	180	45	1861	170	1.060	162	63	6.7	11.1	228.603	F
C - A12 South	1677	419	249	1900	0.883	1675	1469	6.5	7.0	15.703	C
D - Anson Rd East	342	85	1392	341	1.001	326	660	8.3	12.4	134.825	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1651	413	316	1712	0.965	1701	1409	166.6	154.1	337.954	F
B - Eagle Way West	147	37	1557	183	0.803	167	62	11.1	5.9	195.033	F
C - A12 South	1369	342	232	1910	0.717	1387	1469	7.0	2.6	7.096	A
D - Anson Rd East	279	70	1404	326	0.855	297	613	12.4	7.8	123.223	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1383	346	260	1754	0.788	1743	1167	154.1	64.1	227.106	F
B - Eagle Way West	123	31	1292	173	0.712	134	62	5.9	3.0	104.192	F
C - A12 South	1147	287	203	1928	0.595	1151	1469	2.6	1.5	4.659	A
D - Anson Rd East	234	58	1426	294	0.797	246	577	7.8	4.8	83.033	F

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	188.37	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-13	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2163	100.000
B - Eagle Way West		ONE HOUR	✓	218	100.000
C - A12 South		ONE HOUR	✓	1669	100.000
D - Anson Rd East		ONE HOUR	✓	406	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	167	1337	659
B - Eagle Way West	142	0	32	43
C - A12 South	1438	22	0	209
D - Anson Rd East	251	21	132	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	3	10	3
B - Eagle Way West	4	0	0	8
C - A12 South	14	5	0	4
D - Anson Rd East	3	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.16	262.54	166.9	F	1985	2977
B - Eagle Way West	1.15	275.86	18.6	F	200	300
C - A12 South	1.05	106.16	59.9	F	1532	2297
D - Anson Rd East	0.98	99.55	11.8	F	372	558

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1628	407	213	2405	0.677	1620	1369	0.0	2.1	4.538	A
B - Eagle Way West	164	41	1420	561	0.292	162	157	0.0	0.4	8.999	A
C - A12 South	1257	314	329	1822	0.690	1248	1125	0.0	2.2	6.181	A
D - Anson Rd East	305	76	1150	1009	0.303	304	683	0.0	0.4	5.090	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1945	486	255	2380	0.817	1936	1635	2.1	4.3	7.943	A
B - Eagle Way West	196	49	1696	416	0.470	194	188	0.4	0.9	16.050	C
C - A12 South	1501	375	394	1782	0.842	1490	1344	2.2	4.9	11.891	B
D - Anson Rd East	365	91	1375	889	0.410	364	816	0.4	0.7	6.835	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2382	585	287	2076	1.147	2061	1870	4.3	84.5	84.757	F
B - Eagle Way West	240	60	1953	221	1.085	203	203	0.9	10.0	127.371	F
C - A12 South	1838	459	439	1753	1.048	1718	1440	4.9	35.0	51.702	F

D - Anson Rd East	447	112	1463	464	0.963	416	885	0.7	8.3	57.421	F
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08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2382	595	290	2053	1.160	2052	1899	84.5	166.9	224.898	F
B - Eagle Way West	240	60	1984	209	1.147	205	204	10.0	18.6	275.861	F
C - A12 South	1838	459	449	1747	1.052	1738	1440	35.0	59.9	106.157	F
D - Anson Rd East	447	112	1457	457	0.978	433	885	8.3	11.8	99.548	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1945	486	293	2083	0.933	2071	1859	166.9	135.3	262.537	F
B - Eagle Way West	196	49	1928	235	0.831	223	202	18.6	11.7	249.268	F
C - A12 South	1501	375	420	1765	0.850	1711	1440	59.9	7.4	69.770	F
D - Anson Rd East	365	91	1473	437	0.835	387	891	11.8	6.3	78.856	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1628	407	231	2125	0.766	2109	1430	135.3	15.2	131.740	F
B - Eagle Way West	164	41	1458	260	0.630	203	196	11.7	2.0	83.566	F
C - A12 South	1257	314	378	1792	0.701	1276	1438	7.4	2.4	7.242	A
D - Anson Rd East	305	76	1496	430	0.710	320	844	6.3	2.7	35.745	E

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	447.08	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-16	D - Anson Rd East

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1980	100.000
B - Eagle Way West		ONE HOUR	✓	227	100.000
C - A12 South		ONE HOUR	✓	1662	100.000
D - Anson Rd East		ONE HOUR	✓	862	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East	
A - A12 North	0	160	1263	557	
B - Eagle Way West	134	0	27	67	
C - A12 South	1345	42	1	275	
D - Anson Rd East	506	72	284	0	

Vehicle Mix

Heavy Vehicle Percentages

From	To				
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East	
A - A12 North	0	1	9	2	
B - Eagle Way West	4	0	0	2	
C - A12 South	9	0	100	2	
D - Anson Rd East	2	2	2	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.16	279.15	155.8	F	1817	2726
B - Eagle Way West	1.09	242.79	16.8	F	208	312
C - A12 South	1.32	589.07	242.5	F	1525	2288
D - Anson Rd East	1.36	613.31	132.8	F	791	1186

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1491	373	275	2391	0.624	1484	1481	0.0	1.6	3.945	A
B - Eagle Way West	171	43	1588	513	0.333	169	206	0.0	0.5	10.404	B
C - A12 South	1252	313	551	1758	0.712	1242	1179	0.0	2.4	6.855	A
D - Anson Rd East	649	162	1087	1063	0.611	643	672	0.0	1.5	8.445	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1780	445	328	2359	0.755	1775	1762	1.6	3.0	6.104	A
B - Eagle Way West	204	51	1869	360	0.567	201	245	0.5	1.2	22.234	C
C - A12 South	1494	374	657	1690	0.884	1478	1408	2.4	6.6	15.806	C
D - Anson Rd East	775	194	1300	948	0.817	765	802	1.5	4.0	18.695	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2180	545	326	1881	1.159	1865	1722	3.0	81.8	88.970	F
B - Eagle Way West	250	62	1835	230	1.087	213	250	1.2	10.4	128.906	F
C - A12 South	1830	458	648	1442	1.269	1437	1459	6.6	105.0	148.978	F

D - Anson Rd East	949	237	1366	748	1.269	741	825	4.0	56.0	161.332	F
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15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2180	545	322	1885	1.157	1884	1663	81.8	155.8	232.364	F
B - Eagle Way West	250	62	1761	230	1.088	224	246	10.4	16.8	242.793	F
C - A12 South	1830	458	620	1387	1.319	1387	1458	105.0	215.8	421.507	F
D - Anson Rd East	949	237	1381	698	1.360	697	825	56.0	119.0	456.502	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1780	445	330	1882	0.946	1870	1688	155.8	133.3	279.149	F
B - Eagle Way West	204	51	1775	255	0.800	243	247	16.8	7.2	195.715	F
C - A12 South	1494	374	634	1388	1.077	1388	1459	215.8	242.5	589.070	F
D - Anson Rd East	775	194	1374	720	1.076	720	827	119.0	132.8	613.310	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1491	373	316	1857	0.803	1843	1748	133.3	45.3	176.690	F
B - Eagle Way West	171	43	1881	222	0.771	183	253	7.2	4.2	101.548	F
C - A12 South	1252	313	684	1456	0.860	1450	1460	242.5	192.9	540.889	F
D - Anson Rd East	649	162	1347	803	0.808	797	812	132.8	95.7	516.844	F

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	350.91	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-21	D - Anson Rd East

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1860	100.000
B - Eagle Way West		ONE HOUR	✓	160	100.000
C - A12 South		ONE HOUR	✓	1644	100.000
D - Anson Rd East		ONE HOUR	✓	1047	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To				
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East	
A - A12 North	0	91	1286	483	
B - Eagle Way West	96	0	29	36	
C - A12 South	1342	41	0	261	
D - Anson Rd East	636	77	334	1	

Vehicle Mix

Heavy Vehicle Percentages

From	To				
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East	
A - A12 North	0	0	6	2	
B - Eagle Way West	3	0	0	0	
C - A12 South	4	0	0	1	
D - Anson Rd East	1	0	1	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.16	274.10	145.0	F	1707	2561
B - Eagle Way West	1.13	297.19	14.5	F	147	221
C - A12 South	1.02	68.75	34.7	F	1509	2263
D - Anson Rd East	1.51	954.97	233.5	F	961	1442

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1401	350	244	2452	0.571	1395	1548	0.0	1.3	3.392	A
B - Eagle Way West	121	30	1672	506	0.239	119	156	0.0	0.3	9.292	A
C - A12 South	1238	310	599	1807	0.685	1229	1235	0.0	2.1	6.145	A
D - Anson Rd East	789	197	1055	1104	0.714	779	585	0.0	2.4	10.777	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1672	418	291	2423	0.690	1669	1835	1.3	2.2	4.751	A
B - Eagle Way West	144	36	1963	352	0.409	143	185	0.3	0.7	17.067	C
C - A12 South	1478	370	703	1738	0.850	1466	1470	2.1	5.2	12.682	B
D - Anson Rd East	942	235	1261	995	0.947	911	699	2.4	9.9	34.936	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2048	512	334	1769	1.158	1752	1992	2.2	76.3	87.903	F
B - Eagle Way West	176	44	2180	162	1.089	146	189	0.7	8.2	146.723	F
C - A12 South	1811	453	641	1779	1.017	1728	1497	5.2	25.9	42.034	E

D - Anson Rd East	1153	288	1323	817	1.412	815	762	9.9	94.5	246.684	F
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17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2048	512	344	1775	1.154	1774	2002	76.3	145.0	230.180	F
B - Eagle Way West	176	44	2194	156	1.134	151	187	8.2	14.5	297.192	F
C - A12 South	1811	453	606	1803	1.004	1775	1497	25.9	34.7	68.746	F
D - Anson Rd East	1153	288	1341	762	1.513	762	777	94.5	192.4	679.479	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1672	418	323	1774	0.943	1762	1877	145.0	122.5	274.104	F
B - Eagle Way West	144	36	2029	183	0.787	171	183	14.5	7.7	245.452	F
C - A12 South	1478	370	616	1796	0.823	1597	1497	34.7	5.1	26.272	D
D - Anson Rd East	942	235	1336	777	1.212	777	750	192.4	233.5	943.958	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1401	350	255	1752	0.800	1738	1619	122.5	38.3	169.118	F
B - Eagle Way West	121	30	1735	171	0.705	139	179	7.7	3.0	125.044	F
C - A12 South	1238	310	665	1763	0.702	1249	1498	5.1	2.4	7.132	A
D - Anson Rd East	789	197	1312	855	0.923	851	681	233.5	217.9	954.967	F

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.78	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	66	A - A12 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1001	100.000
B - Eagle Way West		ONE HOUR	✓	60	100.000
C - A12 South		ONE HOUR	✓	630	100.000
D - Anson Rd East		ONE HOUR	✓	164	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	726	270
	B - Eagle Way West	32	0	19	9
	C - A12 South	523	1	0	105
	D - Anson Rd East	83	0	82	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	8	0	0	11
	D - Anson Rd East	9	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.44	2.59	0.8	A	919	1378
B - Eagle Way West	0.07	4.37	0.1	A	55	82
C - A12 South	0.34	2.69	0.5	A	578	867
D - Anson Rd East	0.16	3.68	0.2	A	151	226

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	754	188	100	2520	0.299	752	479	0.0	0.4	2.034	A
B - Eagle Way West	45	11	534	1014	0.044	45	4	0.0	0.0	3.714	A
C - A12 South	474	119	65	2054	0.231	473	621	0.0	0.3	2.276	A
D - Anson Rd East	124	31	563	1292	0.096	123	289	0.0	0.1	3.079	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	900	225	120	2507	0.359	899	573	0.4	0.6	2.239	A
B - Eagle Way West	53	13	639	961	0.056	53	5	0.0	0.1	3.967	A
C - A12 South	566	142	78	2045	0.277	566	742	0.3	0.4	2.433	A
D - Anson Rd East	148	37	673	1236	0.119	148	346	0.1	0.1	3.305	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1102	276	147	2490	0.443	1101	701	0.6	0.8	2.591	A
B - Eagle Way West	66	16	783	889	0.074	65	6	0.1	0.1	4.372	A
C - A12 South	694	173	96	2033	0.341	693	909	0.4	0.5	2.684	A

D - Anson Rd East	181	45	824	1160	0.156	181	424	0.1	0.2	3.676	A
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06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1102	276	147	2490	0.443	1102	702	0.8	0.8	2.594	A
B - Eagle Way West	66	16	783	888	0.074	66	6	0.1	0.1	4.374	A
C - A12 South	694	173	96	2033	0.341	694	910	0.5	0.5	2.686	A
D - Anson Rd East	181	45	825	1159	0.156	181	424	0.2	0.2	3.677	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	900	225	120	2507	0.359	901	574	0.8	0.6	2.242	A
B - Eagle Way West	53	13	640	960	0.056	54	5	0.1	0.1	3.971	A
C - A12 South	566	142	79	2045	0.277	567	744	0.5	0.4	2.437	A
D - Anson Rd East	148	37	674	1236	0.119	148	347	0.2	0.1	3.311	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	754	188	101	2520	0.299	754	480	0.6	0.4	2.039	A
B - Eagle Way West	45	11	536	1013	0.044	45	4	0.1	0.0	3.721	A
C - A12 South	474	119	66	2054	0.231	475	623	0.4	0.3	2.281	A
D - Anson Rd East	124	31	565	1291	0.096	124	290	0.1	0.1	3.085	A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	68.35	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-6	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2014	100.000
B - Eagle Way West		ONE HOUR	✓	172	100.000
C - A12 South		ONE HOUR	✓	1512	100.000
D - Anson Rd East		ONE HOUR	✓	406	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	1	61	1245	707
B - Eagle Way West	95	0	57	20
C - A12 South	1271	7	0	233
D - Anson Rd East	279	2	125	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	2	6	1
B - Eagle Way West	5	0	2	6
C - A12 South	8	0	0	4
D - Anson Rd East	0	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.07	105.12	75.2	F	1848	2772
B - Eagle Way West	0.93	111.54	5.7	F	157	236
C - A12 South	0.88	15.70	6.9	C	1387	2081
D - Anson Rd East	0.94	69.78	8.3	F	373	559

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1516	379	232	2455	0.617	1510	1233	0.0	1.6	3.783	A
B - Eagle Way West	129	32	1337	635	0.203	128	52	0.0	0.3	7.089	A
C - A12 South	1138	285	257	1957	0.582	1133	1070	0.0	1.4	4.340	A
D - Anson Rd East	306	76	1022	1096	0.279	304	720	0.0	0.4	4.542	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1810	453	278	2427	0.746	1805	1475	1.6	2.9	5.742	A
B - Eagle Way West	154	39	1600	503	0.306	153	63	0.3	0.4	10.270	B
C - A12 South	1359	340	307	1924	0.706	1355	1280	1.4	2.3	6.278	A
D - Anson Rd East	365	91	1223	991	0.369	365	861	0.4	0.6	5.740	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2217	554	334	2121	1.046	2075	1778	2.9	38.3	44.366	E
B - Eagle Way West	189	47	1935	225	0.838	177	73	0.4	3.5	63.386	F
C - A12 South	1664	416	360	1891	0.860	1648	1474	2.3	6.5	13.930	B

D - Anson Rd East	447	112	1406	505	0.885	428	1004	0.6	5.4	39.931	E
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07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2217	554	338	2077	1.068	2070	1797	38.3	75.2	105.120	F
B - Eagle Way West	189	47	1955	204	0.928	180	73	3.5	5.7	111.537	F
C - A12 South	1664	416	365	1888	0.882	1663	1474	6.5	6.9	15.699	C
D - Anson Rd East	447	112	1403	476	0.940	436	1004	5.4	8.3	69.777	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1810	453	291	2265	0.799	2094	1526	75.2	4.4	46.225	E
B - Eagle Way West	154	39	1642	426	0.362	175	72	5.7	0.6	15.435	C
C - A12 South	1359	340	337	1905	0.713	1376	1474	6.9	2.5	7.024	A
D - Anson Rd East	365	91	1417	782	0.467	395	968	8.3	0.9	9.995	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1516	379	235	2454	0.618	1527	1245	4.4	1.6	3.931	A
B - Eagle Way West	129	32	1349	629	0.205	130	53	0.6	0.3	7.244	A
C - A12 South	1138	285	260	1955	0.582	1143	1083	2.5	1.4	4.458	A
D - Anson Rd East	306	76	1034	1089	0.281	308	728	0.9	0.4	4.618	A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	148.05	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-14	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2176	100.000
B - Eagle Way West		ONE HOUR	✓	229	100.000
C - A12 South		ONE HOUR	✓	1793	100.000
D - Anson Rd East		ONE HOUR	✓	421	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	175	1277	724
B - Eagle Way West	149	0	34	46
C - A12 South	1559	23	0	211
D - Anson Rd East	299	22	99	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	3	9	3
B - Eagle Way West	4	0	0	8
C - A12 South	9	5	0	4
D - Anson Rd East	3	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.07	115.78	89.0	F	1997	2995
B - Eagle Way West	1.14	256.21	18.5	F	210	315
C - A12 South	1.12	192.59	115.2	F	1645	2468
D - Anson Rd East	0.92	61.59	7.5	F	387	580

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1638	410	217	2417	0.678	1630	1500	0.0	2.1	4.529	A
B - Eagle Way West	172	43	1547	522	0.330	170	165	0.0	0.5	10.192	B
C - A12 South	1350	337	372	1864	0.724	1339	1056	0.0	2.6	6.741	A
D - Anson Rd East	317	79	1113	1033	0.307	315	734	0.0	0.4	5.001	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1956	489	259	2392	0.818	1947	1787	2.1	4.3	7.946	A
B - Eagle Way West	206	51	1843	372	0.553	203	197	0.5	1.2	20.977	C
C - A12 South	1612	403	446	1816	0.887	1594	1262	2.6	6.9	15.158	C
D - Anson Rd East	379	95	1330	918	0.412	378	876	0.4	0.7	6.649	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2396	599	283	2264	1.058	2228	1982	4.3	46.2	49.169	E
B - Eagle Way West	252	63	2048	236	1.069	217	226	1.2	9.8	121.838	F
C - A12 South	1974	493	521	1768	1.117	1752	1445	6.9	62.2	79.921	F

D - Anson Rd East	464	116	1519	530	0.875	446	991	0.7	5.1	37.200	E
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08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2396	599	284	2230	1.074	2225	1996	46.2	89.0	115.785	F
B - Eagle Way West	252	63	2063	222	1.137	217	226	9.8	18.5	256.209	F
C - A12 South	1974	493	527	1764	1.119	1762	1445	62.2	115.2	187.007	F
D - Anson Rd East	464	116	1517	502	0.923	454	991	5.1	7.5	61.592	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1956	489	298	2263	0.864	2238	1992	89.0	18.5	90.000	F
B - Eagle Way West	206	51	2036	267	0.770	254	224	18.5	6.3	188.783	F
C - A12 South	1612	403	485	1791	0.900	1776	1445	115.2	74.2	192.591	F
D - Anson Rd East	379	95	1531	533	0.710	398	1005	7.5	2.7	29.629	D

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1638	410	260	2391	0.685	1703	1779	18.5	2.2	5.745	A
B - Eagle Way West	172	43	1846	369	0.466	194	175	6.3	0.9	22.903	C
C - A12 South	1350	337	386	1855	0.728	1635	1105	74.2	2.8	43.437	E
D - Anson Rd East	317	79	1166	1006	0.315	326	798	2.7	0.5	5.363	A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	176.30	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-19	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1952	100.000
B - Eagle Way West		ONE HOUR	✓	239	100.000
C - A12 South		ONE HOUR	✓	1765	100.000
D - Anson Rd East		ONE HOUR	✓	924	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	169	1002	781
B - Eagle Way West	141	0	28	70
C - A12 South	1433	45	1	286
D - Anson Rd East	542	76	305	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	1	8	1
B - Eagle Way West	4	0	0	2
C - A12 South	6	0	100	2
D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	15.77	9.0	C	1791	2686
B - Eagle Way West	1.03	183.60	12.9	F	219	329
C - A12 South	1.20	365.93	169.4	F	1619	2429
D - Anson Rd East	1.08	147.40	45.7	F	848	1272

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1469	367	287	2416	0.608	1463	1579	0.0	1.5	5.632	A
B - Eagle Way West	180	45	1689	477	0.377	177	216	0.0	0.6	11.943	B
C - A12 South	1329	332	588	1773	0.749	1317	1001	0.0	2.9	7.711	A
D - Anson Rd East	696	174	900	1168	0.596	690	851	0.0	1.4	7.445	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1755	439	340	2384	0.736	1750	1871	1.5	2.7	5.632	A
B - Eagle Way West	215	54	2001	321	0.669	210	258	0.6	1.8	31.138	D
C - A12 South	1586	397	703	1698	0.934	1557	1196	2.9	10.2	22.026	C
D - Anson Rd East	831	208	1075	1074	0.773	823	1014	1.4	3.2	13.987	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2149	537	362	2371	0.906	2127	2002	2.7	8.3	13.640	B
B - Eagle Way West	263	66	2127	259	1.017	236	301	1.8	8.5	106.337	F
C - A12 South	1943	486	803	1632	1.191	1625	1427	10.2	89.7	119.050	F

D - Anson Rd East	1017	254	1305	952	1.069	925	1184	3.2	26.2	70.830	F
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15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2149	537	365	2369	0.907	2146	2015	8.3	9.0	15.774	C
B - Eagle Way West	263	66	2134	255	1.031	245	304	8.5	12.9	183.600	F
C - A12 South	1943	486	814	1625	1.196	1624	1442	89.7	169.4	292.731	F
D - Anson Rd East	1017	254	1318	945	1.076	939	1194	26.2	45.7	147.403	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1755	439	356	2374	0.739	1779	2027	9.0	2.9	6.278	A
B - Eagle Way West	215	54	2155	246	0.875	228	276	12.9	9.7	183.285	F
C - A12 South	1586	397	821	1620	0.979	1611	1271	169.4	163.4	365.928	F
D - Anson Rd East	831	208	1095	1064	0.781	996	1040	45.7	4.3	78.812	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1469	367	371	2365	0.621	1474	1962	2.9	1.7	4.065	A
B - Eagle Way West	180	45	2125	257	0.699	208	230	9.7	2.8	86.848	F
C - A12 South	1329	332	600	1765	0.753	1754	1016	163.4	57.0	228.082	F
D - Anson Rd East	696	174	910	1162	0.598	707	935	4.3	1.5	8.081	A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	249.76	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-20	C - A12 South

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1810	100.000
B - Eagle Way West		ONE HOUR	✓	169	100.000
C - A12 South		ONE HOUR	✓	1801	100.000
D - Anson Rd East		ONE HOUR	✓	1116	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	96	1100	613
B - Eagle Way West	101	0	30	37
C - A12 South	1469	43	0	288
D - Anson Rd East	769	81	265	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	0	4	1
B - Eagle Way West	3	0	0	0
C - A12 South	3	0	0	1
D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	8.09	4.4	A	1661	2491
B - Eagle Way West	0.88	105.23	5.0	F	155	232
C - A12 South	1.19	394.68	175.6	F	1653	2479
D - Anson Rd East	1.28	433.59	141.7	F	1024	1536

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1362	341	266	2482	0.549	1358	1743	0.0	1.2	3.191	A
B - Eagle Way West	127	32	1884	409	0.310	125	165	0.0	0.4	12.601	B
C - A12 South	1356	339	706	1756	0.772	1343	1045	0.0	3.3	8.467	A
D - Anson Rd East	840	210	920	1185	0.709	831	704	0.0	2.3	9.913	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1627	407	312	2453	0.663	1624	2047	1.2	1.9	4.325	A
B - Eagle Way West	152	38	2212	249	0.609	148	195	0.4	1.4	34.369	D
C - A12 South	1619	405	834	1670	0.970	1574	1247	3.3	14.6	28.980	D
D - Anson Rd East	1003	251	1100	1092	0.919	980	836	2.3	8.1	27.853	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1993	498	338	2438	0.817	1983	2123	1.9	4.3	7.763	A
B - Eagle Way West	186	46	2285	213	0.872	175	215	1.4	4.1	79.209	F
C - A12 South	1983	496	838	1667	1.190	1662	1466	14.6	94.9	126.773	F

D - Anson Rd East	1229	307	1343	966	1.272	961	978	8.1	75.0	166.716	F
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17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1993	498	341	2436	0.818	1992	2130	4.3	4.4	8.094	A
B - Eagle Way West	186	46	2289	211	0.880	182	215	4.1	5.0	105.232	F
C - A12 South	1983	496	839	1666	1.190	1666	1472	94.9	174.3	298.114	F
D - Anson Rd East	1229	307	1350	962	1.277	962	983	75.0	141.7	398.665	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1627	407	322	2447	0.665	1636	2153	4.4	2.0	4.489	A
B - Eagle Way West	152	38	2320	197	0.771	155	204	5.0	4.1	94.159	F
C - A12 South	1619	405	910	1618	1.000	1614	1279	174.3	175.6	394.677	F
D - Anson Rd East	1003	251	1110	1087	0.923	1079	849	141.7	122.8	433.585	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1362	341	306	2457	0.555	1366	2169	2.0	1.3	3.309	A
B - Eagle Way West	127	32	2342	186	0.683	133	195	4.1	2.5	73.701	F
C - A12 South	1356	339	966	1580	0.858	1571	1133	175.6	121.7	341.369	F
D - Anson Rd East	840	210	927	1182	0.711	1172	745	122.8	39.7	252.345	F

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.90	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	65	A - A12 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	927	100.000
B - Eagle Way West		ONE HOUR	✓	60	100.000
C - A12 South		ONE HOUR	✓	776	100.000
D - Anson Rd East		ONE HOUR	✓	164	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	5	728	194
B - Eagle Way West	32	0	19	9
C - A12 South	670	1	0	105
D - Anson Rd East	83	0	82	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	25	6	2
B - Eagle Way West	7	0	6	0
C - A12 South	10	0	0	11
D - Anson Rd East	9	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.41	2.46	0.7	A	850	1275
B - Eagle Way West	0.08	4.88	0.1	A	55	82
C - A12 South	0.42	3.11	0.7	A	712	1068
D - Anson Rd East	0.16	3.68	0.2	A	151	226

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	698	174	100	2515	0.277	696	588	0.0	0.4	1.978	A
B - Eagle Way West	45	11	644	955	0.047	45	4	0.0	0.0	3.951	A
C - A12 South	584	146	66	2033	0.287	583	622	0.0	0.4	2.480	A
D - Anson Rd East	124	31	564	1292	0.096	123	232	0.0	0.1	3.081	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	833	208	120	2502	0.333	833	704	0.4	0.5	2.157	A
B - Eagle Way West	53	13	770	891	0.060	53	5	0.0	0.1	4.297	A
C - A12 South	698	174	78	2024	0.345	697	744	0.4	0.5	2.713	A
D - Anson Rd East	148	37	675	1236	0.120	148	278	0.1	0.1	3.308	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1020	255	147	2484	0.411	1019	862	0.5	0.7	2.456	A
B - Eagle Way West	66	16	943	803	0.082	65	6	0.1	0.1	4.877	A
C - A12 South	855	214	96	2012	0.425	854	911	0.5	0.7	3.106	A

D - Anson Rd East	181	45	826	1159	0.156	181	340	0.1	0.2	3.680	A
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06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1020	255	147	2484	0.411	1020	863	0.7	0.7	2.458	A
B - Eagle Way West	66	16	944	803	0.082	66	6	0.1	0.1	4.880	A
C - A12 South	855	214	96	2012	0.425	855	912	0.7	0.7	3.109	A
D - Anson Rd East	181	45	827	1159	0.156	181	340	0.2	0.2	3.681	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	833	208	120	2502	0.333	834	705	0.7	0.5	2.159	A
B - Eagle Way West	53	13	772	890	0.060	54	5	0.1	0.1	4.303	A
C - A12 South	698	174	79	2024	0.345	699	745	0.7	0.5	2.719	A
D - Anson Rd East	148	37	676	1235	0.120	148	278	0.2	0.1	3.313	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	698	174	101	2514	0.277	698	591	0.5	0.4	1.983	A
B - Eagle Way West	45	11	646	954	0.047	45	4	0.1	0.0	3.958	A
C - A12 South	584	146	66	2033	0.287	585	624	0.5	0.4	2.486	A
D - Anson Rd East	124	31	566	1291	0.096	124	233	0.1	0.1	3.087	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	71.03	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-6	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1697	100.000
B - Eagle Way West		ONE HOUR	✓	172	100.000
C - A12 South		ONE HOUR	✓	1603	100.000
D - Anson Rd East		ONE HOUR	✓	304	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	1	61	1252	383
B - Eagle Way West	95	0	57	20
C - A12 South	1379	7	0	217
D - Anson Rd East	180	2	122	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	2	7	2
B - Eagle Way West	5	0	2	6
C - A12 South	12	0	0	4
D - Anson Rd East	0	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.07	107.25	63.9	F	1557	2336
B - Eagle Way West	1.01	155.53	8.2	F	157	236
C - A12 South	0.93	23.37	10.8	C	1471	2206
D - Anson Rd East	0.94	85.54	7.7	F	279	419

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1278	319	220	2441	0.523	1273	1239	0.0	1.1	3.072	A
B - Eagle Way West	129	32	1331	619	0.209	128	53	0.0	0.3	7.319	A
C - A12 South	1207	302	183	1951	0.619	1200	1074	0.0	1.6	4.756	A
D - Anson Rd East	229	57	1028	1084	0.211	228	465	0.0	0.3	4.199	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1526	381	263	2414	0.632	1523	1482	1.1	1.7	4.027	A
B - Eagle Way West	154	39	1592	484	0.318	153	63	0.3	0.5	10.850	B
C - A12 South	1441	360	219	1929	0.747	1436	1284	1.6	2.9	7.230	A
D - Anson Rd East	273	68	1230	979	0.279	273	556	0.3	0.4	5.094	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1868	467	313	1795	1.041	1746	1778	1.7	32.2	44.348	E
B - Eagle Way West	189	47	1919	209	0.905	173	72	0.5	4.5	79.856	F
C - A12 South	1765	441	253	1907	0.925	1738	1473	2.9	9.6	18.825	C

D - Anson Rd East	335	84	1409	381	0.879	317	650	0.4	4.8	47.804	E
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07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1868	467	317	1750	1.068	1742	1802	32.2	63.9	107.254	F
B - Eagle Way West	189	47	1945	188	1.005	174	72	4.5	8.2	155.526	F
C - A12 South	1765	441	257	1905	0.926	1760	1473	9.6	10.8	23.368	C
D - Anson Rd East	335	84	1407	355	0.944	323	652	4.8	7.7	85.542	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1526	381	281	1805	0.845	1753	1543	63.9	7.1	72.204	F
B - Eagle Way West	154	39	1643	288	0.536	182	71	8.2	1.2	41.523	E
C - A12 South	1441	360	242	1914	0.753	1472	1473	10.8	3.2	8.662	A
D - Anson Rd East	273	68	1417	476	0.575	299	616	7.7	1.4	22.941	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1278	319	224	2438	0.524	1302	1255	7.1	1.1	3.235	A
B - Eagle Way West	129	32	1346	611	0.211	133	54	1.2	0.3	7.590	A
C - A12 South	1207	302	187	1948	0.619	1213	1098	3.2	1.6	4.932	A
D - Anson Rd East	229	57	1052	1072	0.214	234	474	1.4	0.3	4.317	A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	151.36	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-13	C - A12 South

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2113	100.000
B - Eagle Way West		ONE HOUR	✓	229	100.000
C - A12 South		ONE HOUR	✓	1798	100.000
D - Anson Rd East		ONE HOUR	✓	337	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	175	1279	659
B - Eagle Way West	149	0	34	46
C - A12 South	1567	23	0	207
D - Anson Rd East	215	22	99	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	3	10	3
B - Eagle Way West	4	0	0	8
C - A12 South	12	5	0	4
D - Anson Rd East	4	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.08	126.28	94.3	F	1939	2909
B - Eagle Way West	1.12	241.19	17.3	F	210	315
C - A12 South	1.11	184.03	111.3	F	1650	2475
D - Anson Rd East	0.91	65.76	6.4	F	309	463

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1591	398	215	2406	0.661	1583	1443	0.0	1.9	4.336	A
B - Eagle Way West	172	43	1487	532	0.323	170	165	0.0	0.5	9.893	A
C - A12 South	1353	338	309	1857	0.729	1343	1057	0.0	2.6	6.869	A
D - Anson Rd East	253	63	1114	1022	0.248	252	684	0.0	0.3	4.671	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1900	475	256	2381	0.798	1892	1719	1.9	3.8	7.248	A
B - Eagle Way West	206	51	1771	385	0.534	203	197	0.5	1.1	19.558	C
C - A12 South	1616	404	370	1819	0.889	1599	1264	2.6	6.9	15.298	C
D - Anson Rd East	303	76	1332	906	0.334	302	816	0.3	0.5	5.953	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2327	582	281	2181	1.067	2147	1908	3.8	48.6	52.257	F
B - Eagle Way West	252	63	1970	240	1.051	219	224	1.1	9.2	114.754	F
C - A12 South	1979	495	429	1781	1.111	1765	1436	6.9	60.5	77.787	F

D - Anson Rd East	371	93	1510	434	0.854	355	918	0.5	4.4	40.076	E
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08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2327	582	282	2148	1.083	2144	1923	48.6	94.3	126.285	F
B - Eagle Way West	252	63	1985	225	1.121	220	225	9.2	17.3	241.190	F
C - A12 South	1979	495	434	1778	1.113	1776	1436	60.5	111.3	180.205	F
D - Anson Rd East	371	93	1507	409	0.907	363	919	4.4	6.4	65.758	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1900	475	292	2182	0.871	2159	1917	94.3	29.5	105.921	F
B - Eagle Way West	206	51	1962	260	0.791	248	223	17.3	6.8	188.256	F
C - A12 South	1616	404	402	1798	0.899	1782	1436	111.3	69.9	184.032	F
D - Anson Rd East	303	76	1522	421	0.720	317	929	6.4	2.8	38.050	E

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1591	398	256	2381	0.668	1701	1709	29.5	2.0	6.214	A
B - Eagle Way West	172	43	1769	385	0.447	196	179	6.8	0.8	21.319	C
C - A12 South	1353	338	327	1846	0.733	1621	1136	69.9	2.9	40.114	E
D - Anson Rd East	253	63	1199	977	0.259	263	757	2.8	0.4	5.115	A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	217.90	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-20	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1762	100.000
B - Eagle Way West		ONE HOUR	✓	239	100.000
C - A12 South		ONE HOUR	✓	1755	100.000
D - Anson Rd East		ONE HOUR	✓	907	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	169	1035	558
B - Eagle Way West	141	0	28	70
C - A12 South	1435	45	1	275
D - Anson Rd East	528	76	303	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	1	11	2
B - Eagle Way West	4	0	0	2
C - A12 South	9	0	100	2
D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.99	40.55	22.6	E	1616	2425
B - Eagle Way West	1.18	323.65	23.8	F	219	329
C - A12 South	1.21	402.18	179.1	F	1611	2416
D - Anson Rd East	1.11	173.23	53.6	F	832	1248

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1326	332	279	2370	0.560	1321	1568	0.0	1.3	3.415	A
B - Eagle Way West	180	45	1670	471	0.382	177	216	0.0	0.6	12.170	B
C - A12 South	1322	330	577	1741	0.759	1309	1024	0.0	3.0	8.134	A
D - Anson Rd East	683	171	924	1144	0.597	677	676	0.0	1.4	7.619	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1584	396	329	2340	0.677	1580	1856	1.3	2.1	4.719	A
B - Eagle Way West	215	54	1975	316	0.680	210	258	0.6	1.9	32.404	D
C - A12 South	1578	395	689	1669	0.946	1545	1224	3.0	11.4	24.266	C
D - Anson Rd East	815	204	1105	1045	0.780	808	804	1.4	3.3	14.719	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1939	485	342	2045	0.948	1899	1961	2.1	12.3	20.610	C
B - Eagle Way West	263	66	2085	230	1.142	218	298	1.9	13.1	155.802	F
C - A12 South	1933	483	780	1609	1.201	1603	1442	11.4	93.8	126.573	F

D - Anson Rd East	999	250	1324	921	1.084	898	917	3.3	28.4	77.589	F
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15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1939	485	341	1957	0.991	1898	1953	12.3	22.6	40.551	E
B - Eagle Way West	263	66	2074	223	1.181	220	297	13.1	23.8	323.654	F
C - A12 South	1933	483	779	1593	1.213	1592	1442	93.8	178.9	314.032	F
D - Anson Rd East	999	250	1324	902	1.107	898	916	28.4	53.6	173.230	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1584	396	346	2330	0.680	1665	2007	22.6	2.2	6.106	A
B - Eagle Way West	215	54	2115	247	0.869	237	283	23.8	18.2	321.158	F
C - A12 South	1578	395	821	1584	0.996	1577	1339	178.9	179.1	402.180	F
D - Anson Rd East	815	204	1167	1012	0.806	993	844	53.6	9.1	119.974	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1326	332	368	2317	0.572	1329	1957	2.2	1.4	3.656	A
B - Eagle Way West	180	45	2086	257	0.700	239	231	18.2	3.4	170.779	F
C - A12 South	1322	330	602	1725	0.766	1715	1049	179.1	80.7	274.167	F
D - Anson Rd East	683	171	938	1137	0.601	713	760	9.1	1.5	9.078	A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	183.89	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-17	C - A12 South

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1658	100.000
B - Eagle Way West		ONE HOUR	✓	169	100.000
C - A12 South		ONE HOUR	✓	1743	100.000
D - Anson Rd East		ONE HOUR	✓	1044	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	96	1078	484
B - Eagle Way West	101	0	30	37
C - A12 South	1477	43	0	222
D - Anson Rd East	693	81	269	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	0	7	2
B - Eagle Way West	3	0	0	0
C - A12 South	4	0	0	1
D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	6.10	3.1	A	1522	2282
B - Eagle Way West	0.85	90.36	4.3	F	155	232
C - A12 South	1.15	296.66	137.9	F	1599	2399
D - Anson Rd East	1.20	300.14	103.9	F	958	1436

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1248	312	217	2457	0.508	1244	1694	0.0	1.0		A
B - Eagle Way West	127	32	1786	450	0.282	125	165	0.0	0.4	11.029	B
C - A12 South	1312	328	650	1776	0.739	1301	1032	0.0	2.7	7.426	A
D - Anson Rd East	786	196	904	1181	0.665	778	558	0.0	1.9	8.781	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1491	373	257	2433	0.613	1488	2008	1.0	1.6	3.804	A
B - Eagle Way West	152	38	2117	288	0.527	149	196	0.4	1.1	25.484	D
C - A12 South	1567	392	772	1694	0.925	1540	1233	2.7	9.4	20.611	C
D - Anson Rd East	938	235	1081	1086	0.864	924	665	1.9	5.4	20.659	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1826	456	283	2417	0.755	1820	2142	1.6	3.0	5.968	A
B - Eagle Way West	186	46	2249	222	0.836	176	220	1.1	3.5	67.545	F
C - A12 South	1919	480	810	1668	1.150	1659	1460	9.4	74.3	99.673	F

D - Anson Rd East	1149	287	1321	958	1.199	950	783	5.4	55.3	127.183	F
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17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1826	456	287	2415	0.756	1825	2154	3.0	3.1	6.098	A
B - Eagle Way West	186	46	2258	218	0.853	183	221	3.5	4.3	90.357	F
C - A12 South	1919	480	814	1666	1.152	1665	1466	74.3	137.9	236.576	F
D - Anson Rd East	1149	287	1326	955	1.203	955	786	55.3	103.9	300.139	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1491	373	269	2426	0.614	1496	2168	3.1	1.6	3.897	A
B - Eagle Way West	152	38	2281	207	0.732	156	210	4.3	3.2	75.209	F
C - A12 South	1567	392	883	1620	0.967	1608	1277	137.9	127.4	296.660	F
D - Anson Rd East	938	235	1088	1082	0.867	1072	677	103.9	70.4	291.184	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1248	312	261	2431	0.514	1251	2158	1.6	1.1	3.055	A
B - Eagle Way West	127	32	2287	204	0.622	132	195	3.2	1.8	53.231	F
C - A12 South	1312	328	858	1636	0.802	1623	1110	127.4	49.6	198.427	F
D - Anson Rd East	786	196	910	1178	0.667	1059	602	70.4	2.2	84.838	F

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.88	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	59	A - A12 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1038	100.000
B - Eagle Way West		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	677	100.000
D - Anson Rd East		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	5	759	274
B - Eagle Way West	33	0	19	10
C - A12 South	557	1	0	118
D - Anson Rd East	86	0	85	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	25	6	2
B - Eagle Way West	7	0	6	0
C - A12 South	8	0	0	10
D - Anson Rd East	9	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.46	2.69	0.9	A	952	1428
B - Eagle Way West	0.08	4.53	0.1	A	57	85
C - A12 South	0.37	2.78	0.6	A	621	932
D - Anson Rd East	0.16	3.76	0.2	A	157	235

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	781	195	111	2514	0.311	779	507	0.0	0.4	2.073	A
B - Eagle Way West	46	12	572	996	0.047	46	5	0.0	0.0	3.791	A
C - A12 South	510	127	68	2060	0.247	508	648	0.0	0.3	2.318	A
D - Anson Rd East	128	32	588	1283	0.100	128	302	0.0	0.1	3.117	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	933	233	133	2500	0.373	932	607	0.4	0.6	2.296	A
B - Eagle Way West	56	14	684	939	0.059	55	5	0.0	0.1	4.072	A
C - A12 South	609	152	81	2050	0.297	608	776	0.3	0.4	2.496	A
D - Anson Rd East	153	38	704	1224	0.125	153	361	0.1	0.1	3.360	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1143	286	162	2481	0.461	1142	743	0.6	0.8	2.686	A
B - Eagle Way West	68	17	838	862	0.079	68	7	0.1	0.1	4.531	A
C - A12 South	745	186	100	2038	0.366	745	950	0.4	0.6	2.782	A

D - Anson Rd East	188	47	862	1144	0.164	188	442	0.1	0.2	3.763	A
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06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1143	286	162	2481	0.461	1143	744	0.8	0.9	2.689	A
B - Eagle Way West	68	17	838	862	0.079	68	7	0.1	0.1	4.533	A
C - A12 South	745	186	100	2038	0.366	745	951	0.6	0.6	2.785	A
D - Anson Rd East	188	47	863	1144	0.164	188	442	0.2	0.2	3.765	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	933	233	133	2500	0.373	934	608	0.9	0.6	2.299	A
B - Eagle Way West	56	14	685	939	0.059	56	5	0.1	0.1	4.076	A
C - A12 South	609	152	82	2050	0.297	609	777	0.6	0.4	2.500	A
D - Anson Rd East	153	38	705	1224	0.125	154	362	0.2	0.1	3.366	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	781	195	111	2514	0.311	782	509	0.6	0.5	2.078	A
B - Eagle Way West	46	12	574	995	0.047	47	5	0.1	0.0	3.796	A
C - A12 South	510	127	68	2059	0.247	510	650	0.4	0.3	2.325	A
D - Anson Rd East	128	32	590	1282	0.100	129	303	0.1	0.1	3.121	A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	108.47	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-9	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1994	100.000
B - Eagle Way West		ONE HOUR	✓	178	100.000
C - A12 South		ONE HOUR	✓	1681	100.000
D - Anson Rd East		ONE HOUR	✓	418	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	1	63	1307	623
B - Eagle Way West	98	0	59	21
C - A12 South	1388	7	0	286
D - Anson Rd East	287	2	129	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	2	5	2
B - Eagle Way West	5	0	2	6
C - A12 South	7	0	0	3
D - Anson Rd East	0	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.11	160.74	112.7	F	1830	2745
B - Eagle Way West	1.08	217.55	11.8	F	163	245
C - A12 South	0.97	39.71	19.5	E	1542	2314
D - Anson Rd East	0.98	95.05	11.8	F	384	576

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1501	375	274	2435	0.617	1495	1328	0.0	1.6	3.805	A
B - Eagle Way West	134	33	1469	575	0.233	133	54	0.0	0.3	8.120	A
C - A12 South	1265	316	265	1972	0.642	1258	1121	0.0	1.8	4.998	A
D - Anson Rd East	315	79	1072	1077	0.292	313	696	0.0	0.4	4.702	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1793	448	327	2402	0.746	1787	1588	1.6	2.9	5.813	A
B - Eagle Way West	160	40	1756	432	0.370	159	65	0.3	0.6	13.124	B
C - A12 South	1511	378	317	1938	0.780	1505	1340	1.8	3.4	8.177	A
D - Anson Rd East	376	94	1282	968	0.388	375	832	0.4	0.6	6.060	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2195	549	384	2006	1.095	1979	1881	2.9	57.0	62.546	F
B - Eagle Way West	196	49	2093	198	0.989	173	73	0.6	6.3	103.881	F
C - A12 South	1851	463	362	1909	0.970	1803	1488	3.4	15.3	26.544	D

D - Anson Rd East	460	115	1418	485	0.949	432	945	0.6	7.7	52.561	F
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07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2195	549	390	1975	1.112	1972	1916	57.0	112.7	160.740	F
B - Eagle Way West	196	49	2132	181	1.081	174	73	6.3	11.8	217.554	F
C - A12 South	1851	463	371	1904	0.972	1834	1488	15.3	19.5	39.713	E
D - Anson Rd East	460	115	1414	469	0.981	444	948	7.7	11.8	95.055	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1793	448	352	2005	0.894	1988	1677	112.7	64.0	160.022	F
B - Eagle Way West	160	40	1841	208	0.768	189	72	11.8	4.7	160.895	F
C - A12 South	1511	378	339	1924	0.785	1574	1489	19.5	3.8	12.002	B
D - Anson Rd East	376	94	1430	451	0.834	398	910	11.8	6.2	75.115	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1501	375	284	2428	0.618	1751	1367	64.0	1.6	7.999	A
B - Eagle Way West	134	33	1500	559	0.240	151	63	4.7	0.3	9.196	A
C - A12 South	1265	316	290	1956	0.647	1273	1302	3.8	1.9	5.338	A
D - Anson Rd East	315	79	1254	983	0.320	338	781	6.2	0.5	5.782	A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	322.71	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-20	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2305	100.000
B - Eagle Way West		ONE HOUR	✓	237	100.000
C - A12 South		ONE HOUR	✓	1938	100.000
D - Anson Rd East		ONE HOUR	✓	477	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	182	1401	722
B - Eagle Way West	155	0	35	47
C - A12 South	1615	24	0	298
D - Anson Rd East	339	23	114	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	3	8	3
B - Eagle Way West	4	0	0	8
C - A12 South	8	5	0	3
D - Anson Rd East	2	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.17	296.78	192.2	F	2115	3173
B - Eagle Way West	1.34	605.30	35.1	F	218	327
C - A12 South	1.21	383.94	195.9	F	1778	2667
D - Anson Rd East	0.99	100.32	14.1	F	438	656

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1735	434	284	2396	0.724	1725	1573	0.0	2.6	11.133	A
B - Eagle Way West	179	45	1681	463	0.386	176	171	0.0	0.6	12.435	B
C - A12 South	1459	365	407	1865	0.782	1445	1160	0.0	3.4	8.317	A
D - Anson Rd East	359	90	1211	993	0.362	357	799	0.0	0.6	5.639	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2072	518	335	2366	0.876	2057	1857	2.6	6.4	11.133	B
B - Eagle Way West	213	53	1964	312	0.684	208	204	0.6	1.9	33.122	D
C - A12 South	1742	435	487	1813	0.961	1701	1383	3.4	13.7	25.814	D
D - Anson Rd East	429	107	1443	870	0.493	427	948	0.6	1.0	8.093	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2538	634	341	2181	1.163	2170	1952	6.4	98.3	93.831	F
B - Eagle Way West	261	65	2097	203	1.290	196	217	1.9	18.4	221.207	F
C - A12 South	2133	533	543	1777	1.201	1772	1465	13.7	104.1	127.423	F

D - Anson Rd East	525	131	1519	533	0.984	488	992	1.0	10.1	58.278	F
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08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2538	634	340	2163	1.173	2163	1961	98.3	192.2	245.768	F
B - Eagle Way West	261	65	2107	195	1.337	194	217	18.4	35.1	492.290	F
C - A12 South	2133	533	558	1767	1.208	1766	1465	104.1	195.9	309.541	F
D - Anson Rd East	525	131	1514	532	0.988	509	989	10.1	14.1	100.318	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2072	518	354	2185	0.948	2174	1961	192.2	166.7	296.785	F
B - Eagle Way West	213	53	2087	235	0.906	229	216	35.1	31.2	505.304	F
C - A12 South	1742	435	520	1791	0.972	1782	1465	195.9	185.9	383.943	F
D - Anson Rd East	429	107	1527	509	0.841	458	1002	14.1	6.7	76.903	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1735	434	371	2213	0.784	2200	1954	166.7	50.6	179.739	F
B - Eagle Way West	179	45	2066	268	0.666	260	214	31.2	10.9	301.772	F
C - A12 South	1459	365	458	1832	0.796	1822	1465	185.9	95.0	278.741	F
D - Anson Rd East	359	90	1549	493	0.728	374	1022	6.7	2.9	33.059	D

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	555.02	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-25	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2145	100.000
B - Eagle Way West		ONE HOUR	✓	248	100.000
C - A12 South		ONE HOUR	✓	1977	100.000
D - Anson Rd East		ONE HOUR	✓	916	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	175	1274	686
B - Eagle Way West	146	0	29	73
C - A12 South	1639	46	1	290
D - Anson Rd East	545	79	292	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	1	6	2
B - Eagle Way West	4	0	0	2
C - A12 South	5	0	100	2
D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.14	245.06	154.9	F	1969	2953
B - Eagle Way West	1.33	577.56	38.5	F	228	342
C - A12 South	1.40	867.33	387.7	F	1814	2721
D - Anson Rd East	1.34	596.88	137.5	F	841	1261

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1615	404	292	2429	0.665	1607	1733	0.0	2.0	7.334	A
B - Eagle Way West	187	47	1841	406	0.460	184	224	0.0	0.8	15.967	C
C - A12 South	1488	372	596	1782	0.835	1469	1194	0.0	4.7	10.947	B
D - Anson Rd East	690	172	1108	1066	0.647	683	791	0.0	1.8	9.228	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1929	482	333	2404	0.802	1921	1990	2.0	3.9	7.334	A
B - Eagle Way West	223	56	2111	272	0.819	213	266	0.8	3.4	53.607	F
C - A12 South	1777	444	708	1707	1.041	1668	1425	4.7	31.9	49.671	E
D - Anson Rd East	824	206	1323	953	0.864	810	931	1.8	5.3	23.051	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2362	591	318	2069	1.142	2052	1914	3.9	81.4	81.962	F
B - Eagle Way West	273	68	2032	205	1.333	200	273	3.4	21.6	256.890	F
C - A12 South	2176	544	704	1602	1.358	1601	1494	31.9	175.6	241.211	F

D - Anson Rd East	1009	252	1410	793	1.272	787	960	5.3	60.7	165.464	F
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15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2362	591	314	2069	1.142	2068	1861	81.4	154.9	210.840	F
B - Eagle Way West	273	68	1970	207	1.323	206	270	21.6	38.5	529.483	F
C - A12 South	2176	544	683	1557	1.398	1557	1494	175.6	330.5	590.444	F
D - Anson Rd East	1009	252	1422	755	1.336	755	960	60.7	124.3	447.254	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1929	482	325	2068	0.933	2054	1880	154.9	123.5	245.055	F
B - Eagle Way West	223	56	1971	234	0.953	234	270	38.5	35.7	577.562	F
C - A12 South	1777	444	693	1548	1.148	1548	1494	330.5	387.7	832.487	F
D - Anson Rd East	824	206	1416	772	1.068	771	963	124.3	137.5	596.884	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1615	404	335	2026	0.797	2009	1955	123.5	25.0	135.991	F
B - Eagle Way West	187	47	2037	261	0.716	254	274	35.7	19.0	394.586	F
C - A12 South	1488	372	743	1572	0.947	1568	1495	387.7	367.7	867.327	F
D - Anson Rd East	690	172	1388	857	0.805	850	957	137.5	97.4	498.486	F

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	536.76	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-28	D - Anson Rd East

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1869	100.000
B - Eagle Way West		ONE HOUR	✓	175	100.000
C - A12 South		ONE HOUR	✓	1941	100.000
D - Anson Rd East		ONE HOUR	✓	1263	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	100	1255	514
B - Eagle Way West	105	0	32	39
C - A12 South	1614	45	0	282
D - Anson Rd East	866	84	312	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	0	2	2
B - Eagle Way West	3	0	0	0
C - A12 South	2	0	0	1
D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.06	103.77	67.1	F	1715	2572
B - Eagle Way West	1.41	587.18	30.7	F	161	241
C - A12 South	1.25	548.67	259.4	F	1781	2672
D - Anson Rd East	1.59	1158.97	336.5	F	1159	1738

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1407	352	262	2501	0.563	1402	1914	0.0	1.3	4.473	A
B - Eagle Way West	132	33	2047	331	0.398	129	170	0.0	0.6	17.597	C
C - A12 South	1461	365	777	1712	0.854	1440	1195	0.0	5.3	12.420	B
D - Anson Rd East	951	238	1040	1129	0.842	932	624	0.0	4.7	16.890	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1680	420	299	2478	0.678	1677	2136	1.3	2.1	4.473	A
B - Eagle Way West	157	39	2284	216	0.730	151	194	0.6	2.2	51.546	F
C - A12 South	1745	436	849	1663	1.049	1629	1402	5.3	34.2	53.712	F
D - Anson Rd East	1135	284	1243	1025	1.107	1008	732	4.7	36.6	87.820	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2057	514	303	1967	1.046	1921	2121	2.1	36.1	44.679	E
B - Eagle Way West	193	48	2288	141	1.368	136	203	2.2	16.4	290.820	F
C - A12 South	2137	534	788	1704	1.254	1703	1539	34.2	142.7	193.057	F

D - Anson Rd East	1390	348	1417	911	1.527	910	807	36.6	156.6	395.898	F
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17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2057	514	306	1942	1.060	1934	2113	36.1	67.1	103.771	F
B - Eagle Way West	193	48	2283	136	1.415	136	201	16.4	30.7	587.176	F
C - A12 South	2137	534	763	1721	1.242	1721	1539	142.7	246.7	413.453	F
D - Anson Rd East	1390	348	1426	876	1.587	876	813	156.6	285.2	883.140	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1680	420	320	1927	0.872	1902	2155	67.1	11.6	79.925	F
B - Eagle Way West	157	39	2294	188	0.840	182	203	30.7	24.7	550.252	F
C - A12 South	1745	436	802	1695	1.030	1694	1540	246.7	259.4	548.666	F
D - Anson Rd East	1135	284	1412	930	1.220	930	810	285.2	336.5	1158.966	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1407	352	309	2472	0.569	1448	2210	11.6	1.3	3.656	A
B - Eagle Way West	132	33	2337	190	0.694	183	188	24.7	12.0	371.808	F
C - A12 South	1461	365	909	1622	0.901	1616	1278	259.4	220.7	535.018	F
D - Anson Rd East	951	238	1083	1107	0.858	1104	674	336.5	298.1	1034.760	F

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.81	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	58	D - Anson Rd East

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	959	100.000
B - Eagle Way West		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	678	100.000
D - Anson Rd East		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	5	760	194
B - Eagle Way West	33	0	19	10
C - A12 South	558	1	0	118
D - Anson Rd East	86	0	85	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	25	6	2
B - Eagle Way West	7	0	6	0
C - A12 South	8	0	0	10
D - Anson Rd East	9	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.54	0.7	A	880	1320
B - Eagle Way West	0.08	4.53	0.1	A	57	85
C - A12 South	0.37	2.79	0.6	A	622	933
D - Anson Rd East	0.16	3.77	0.2	A	157	235

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	722	180	111	2509	0.288	720	508	0.0	0.4	2.011	A
B - Eagle Way West	46	12	572	995	0.047	46	5	0.0	0.0	3.792	A
C - A12 South	510	128	68	2060	0.248	509	649	0.0	0.3	2.319	A
D - Anson Rd East	128	32	589	1283	0.100	128	242	0.0	0.1	3.118	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	862	216	133	2495	0.346	862	608	0.4	0.5	2.204	A
B - Eagle Way West	56	14	685	939	0.059	55	5	0.0	0.1	4.074	A
C - A12 South	609	152	81	2051	0.297	609	776	0.3	0.4	2.497	A
D - Anson Rd East	153	38	704	1224	0.125	153	290	0.1	0.1	3.361	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1056	264	162	2475	0.427	1055	744	0.5	0.7	2.533	A
B - Eagle Way West	68	17	838	862	0.079	68	7	0.1	0.1	4.533	A
C - A12 South	746	187	100	2038	0.366	745	950	0.4	0.6	2.783	A

D - Anson Rd East	188	47	862	1144	0.164	188	355	0.1	0.2	3.765	A
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06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1056	264	162	2475	0.427	1056	745	0.7	0.7	2.535	A
B - Eagle Way West	68	17	839	862	0.079	68	7	0.1	0.1	4.535	A
C - A12 South	746	187	100	2038	0.366	746	951	0.6	0.6	2.786	A
D - Anson Rd East	188	47	863	1143	0.164	188	355	0.2	0.2	3.766	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	862	216	133	2494	0.346	863	609	0.7	0.5	2.207	A
B - Eagle Way West	56	14	686	939	0.059	56	5	0.1	0.1	4.077	A
C - A12 South	609	152	82	2050	0.297	610	777	0.6	0.4	2.499	A
D - Anson Rd East	153	38	705	1223	0.125	154	290	0.2	0.1	3.367	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	722	180	111	2508	0.288	722	510	0.5	0.4	2.017	A
B - Eagle Way West	46	12	574	994	0.047	47	5	0.1	0.0	3.800	A
C - A12 South	510	128	68	2060	0.248	511	651	0.4	0.3	2.325	A
D - Anson Rd East	128	32	591	1282	0.100	129	243	0.1	0.1	3.121	A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	100.25	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-9	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1764	100.000
B - Eagle Way West		ONE HOUR	✓	178	100.000
C - A12 South		ONE HOUR	✓	1678	100.000
D - Anson Rd East		ONE HOUR	✓	326	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	1	63	1307	393
B - Eagle Way West	98	0	59	21
C - A12 South	1396	7	0	275
D - Anson Rd East	195	2	129	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	2	5	2
B - Eagle Way West	5	0	2	6
C - A12 South	7	0	0	3
D - Anson Rd East	0	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.11	159.21	98.6	F	1619	2428
B - Eagle Way West	1.07	214.36	11.6	F	163	245
C - A12 South	0.94	26.45	12.7	D	1540	2309
D - Anson Rd East	0.98	106.85	10.3	F	300	449

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1328	332	266	2433	0.546	1323	1265	0.0	1.2	4.382	A
B - Eagle Way West	134	33	1398	607	0.221	133	54	0.0	0.3	7.571	A
C - A12 South	1263	316	196	2013	0.627	1257	1121	0.0	1.7	4.718	A
D - Anson Rd East	246	61	1073	1069	0.230	245	516	0.0	0.3	4.360	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1586	396	318	2401	0.660	1583	1514	1.2	1.9	4.382	A
B - Eagle Way West	160	40	1672	471	0.340	159	65	0.3	0.5	11.524	B
C - A12 South	1508	377	235	1988	0.759	1503	1342	1.7	3.0	7.331	A
D - Anson Rd East	293	73	1283	961	0.306	293	617	0.3	0.4	5.387	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1942	486	375	1782	1.090	1752	1806	1.9	49.4	61.357	F
B - Eagle Way West	196	49	2009	198	0.988	173	73	0.5	6.3	102.864	F
C - A12 South	1847	462	266	1968	0.939	1815	1488	3.0	11.0	20.305	C

D - Anson Rd East	359	90	1420	383	0.938	335	708	0.4	6.7	58.320	F
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07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1942	486	380	1748	1.111	1745	1834	49.4	98.6	159.211	F
B - Eagle Way West	196	49	2040	183	1.074	175	73	6.3	11.6	214.359	F
C - A12 South	1847	462	272	1964	0.940	1841	1488	11.0	12.7	26.447	D
D - Anson Rd East	359	90	1415	367	0.978	345	711	6.7	10.3	106.846	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1586	396	337	1777	0.892	1759	1575	98.6	55.2	156.870	F
B - Eagle Way West	160	40	1726	204	0.784	186	72	11.6	5.2	166.285	F
C - A12 South	1508	377	252	1977	0.763	1546	1489	12.7	3.3	9.033	A
D - Anson Rd East	293	73	1429	356	0.824	311	667	10.3	5.8	86.994	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1328	332	277	2426	0.547	1544	1301	55.2	1.2	5.313	A
B - Eagle Way West	134	33	1425	594	0.225	154	63	5.2	0.3	8.529	A
C - A12 South	1263	316	218	1999	0.632	1270	1301	3.3	1.7	4.978	A
D - Anson Rd East	246	61	1251	977	0.252	268	570	5.8	0.3	5.232	A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	337.96	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-20	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2264	100.000
B - Eagle Way West		ONE HOUR	✓	237	100.000
C - A12 South		ONE HOUR	✓	1932	100.000
D - Anson Rd East		ONE HOUR	✓	476	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	182	1423	660
B - Eagle Way West	155	0	35	47
C - A12 South	1620	24	0	288
D - Anson Rd East	340	23	112	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	3	7	3
B - Eagle Way West	4	0	0	8
C - A12 South	8	5	0	3
D - Anson Rd East	2	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.19	324.20	199.6	F	2078	3117
B - Eagle Way West	1.37	573.72	37.1	F	218	327
C - A12 South	1.20	378.25	192.8	F	1773	2660
D - Anson Rd East	1.01	115.49	16.5	F	437	655

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1705	426	277	2402	0.710	1695	1577	0.0	2.4	5.029	A
B - Eagle Way West	179	45	1678	464	0.385	176	171	0.0	0.6	12.410	B
C - A12 South	1455	364	408	1862	0.781	1441	1176	0.0	3.4	8.307	A
D - Anson Rd East	358	90	1227	986	0.364	356	744	0.0	0.6	5.699	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2036	509	326	2372	0.858	2023	1863	2.4	5.6	9.960	A
B - Eagle Way West	213	53	1961	312	0.683	208	204	0.6	1.9	32.965	D
C - A12 South	1737	434	488	1810	0.960	1697	1403	3.4	13.5	25.679	D
D - Anson Rd East	428	107	1464	861	0.497	426	884	0.6	1.0	8.256	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2493	623	332	2120	1.176	2109	1955	5.6	101.7	98.300	F
B - Eagle Way West	261	65	2095	199	1.316	192	215	1.9	19.2	233.078	F
C - A12 South	2128	532	538	1777	1.197	1772	1468	13.5	102.5	125.647	F

D - Anson Rd East	524	131	1523	521	1.005	483	918	1.0	11.4	64.240	F
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08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2493	623	330	2102	1.186	2102	1964	101.7	199.6	261.954	F
B - Eagle Way West	261	65	2105	191	1.370	190	215	19.2	37.1	531.705	F
C - A12 South	2128	532	553	1767	1.204	1766	1468	102.5	192.8	304.899	F
D - Anson Rd East	524	131	1518	521	1.006	504	914	11.4	16.5	115.490	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2036	509	344	2120	0.960	2110	1966	199.6	181.0	324.197	F
B - Eagle Way West	213	53	2086	224	0.954	224	214	37.1	34.5	573.722	F
C - A12 South	1737	434	522	1788	0.972	1778	1468	192.8	182.5	378.248	F
D - Anson Rd East	428	107	1528	498	0.859	461	925	16.5	8.1	96.708	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1705	426	361	2147	0.794	2135	1960	181.0	73.5	216.117	F
B - Eagle Way West	179	45	2064	264	0.677	256	212	34.5	15.0	355.790	F
C - A12 South	1455	364	457	1830	0.795	1820	1468	182.5	91.3	272.103	F
D - Anson Rd East	358	90	1551	454	0.789	374	945	8.1	4.3	49.488	E

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	570.39	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-25	B - Eagle Way West

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2036	100.000
B - Eagle Way West		ONE HOUR	✓	248	100.000
C - A12 South		ONE HOUR	✓	1972	100.000
D - Anson Rd East		ONE HOUR	✓	878	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	175	1304	557
B - Eagle Way West	146	0	29	73
C - A12 South	1640	46	1	285
D - Anson Rd East	545	79	253	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	1	6	2
B - Eagle Way West	4	0	0	2
C - A12 South	5	0	100	2
D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.14	234.91	142.5	F	1868	2803
B - Eagle Way West	1.33	578.80	38.4	F	228	342
C - A12 South	1.43	903.06	404.4	F	1810	2715
D - Anson Rd East	1.35	594.76	132.8	F	805	1208

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1533	383	288	2429	0.631	1526	1734	0.0	1.7	3.959	A
B - Eagle Way West	187	47	1838	407	0.459	184	225	0.0	0.8	15.867	C
C - A12 South	1485	371	597	1782	0.833	1466	1188	0.0	4.6	10.854	B
D - Anson Rd East	661	165	1131	1055	0.626	654	683	0.0	1.6	8.853	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	458	329	2404	0.762	1825	1994	1.7	3.1	6.159	A
B - Eagle Way West	223	56	2110	273	0.818	213	266	0.8	3.4	53.341	F
C - A12 South	1773	443	710	1707	1.039	1666	1418	4.6	31.3	49.082	E
D - Anson Rd East	789	197	1351	939	0.840	777	803	1.6	4.6	20.836	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2242	560	311	1973	1.136	1954	1900	3.1	75.0	79.209	F
B - Eagle Way West	273	68	2011	205	1.333	200	273	3.4	21.6	256.574	F
C - A12 South	2171	543	705	1580	1.374	1579	1493	31.3	179.4	248.898	F

D - Anson Rd East	966	242	1444	761	1.269	755	822	4.6	57.4	163.160	F
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15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2242	560	305	1973	1.136	1972	1829	75.0	142.5	203.982	F
B - Eagle Way West	273	68	1928	207	1.321	206	269	21.6	38.4	528.257	F
C - A12 South	2171	543	677	1521	1.428	1521	1493	179.4	342.0	620.623	F
D - Anson Rd East	966	242	1457	713	1.355	713	820	57.4	120.8	453.623	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	458	317	1969	0.930	1955	1865	142.5	111.4	234.908	F
B - Eagle Way West	223	56	1948	234	0.954	234	271	38.4	35.7	578.803	F
C - A12 South	1773	443	695	1523	1.164	1523	1493	342.0	404.4	871.400	F
D - Anson Rd East	789	197	1448	741	1.064	741	824	120.8	132.8	594.758	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1533	383	331	1923	0.797	1906	1979	111.4	18.2	125.881	F
B - Eagle Way West	187	47	2059	258	0.724	251	277	35.7	19.6	403.204	F
C - A12 South	1485	371	766	1574	0.943	1570	1495	404.4	383.1	903.057	F
D - Anson Rd East	661	165	1414	853	0.774	847	822	132.8	86.3	467.409	F

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	525.50	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-27	D - Anson Rd East

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1841	100.000
B - Eagle Way West		ONE HOUR	✓	175	100.000
C - A12 South		ONE HOUR	✓	1936	100.000
D - Anson Rd East		ONE HOUR	✓	1245	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	100	1258	483
B - Eagle Way West	105	0	32	39
C - A12 South	1605	45	0	286
D - Anson Rd East	848	84	312	1

Vehicle Mix

Heavy Vehicle Percentages

From	To			
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
A - A12 North	0	0	2	2
B - Eagle Way West	3	0	0	0
C - A12 South	2	0	0	1
D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.06	109.24	69.6	F	1689	2534
B - Eagle Way West	1.41	577.17	30.2	F	161	241
C - A12 South	1.25	524.80	248.0	F	1776	2664
D - Anson Rd East	1.58	1141.70	328.7	F	1142	1714

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1386	347	265	2499	0.555	1381	1895	0.0	1.2	3.206	A
B - Eagle Way West	132	33	2031	339	0.389	129	170	0.0	0.6	16.980	C
C - A12 South	1457	364	764	1720	0.847	1437	1198	0.0	5.1	11.965	B
D - Anson Rd East	937	234	1042	1128	0.831	920	604	0.0	4.4	16.124	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1655	414	302	2476	0.669	1652	2127	1.2	2.0	4.356	A
B - Eagle Way West	157	39	2278	219	0.720	151	195	0.6	2.1	49.771	E
C - A12 South	1740	435	842	1668	1.043	1631	1408	5.1	32.3	51.364	F
D - Anson Rd East	1119	280	1246	1023	1.093	1004	709	4.4	33.3	81.747	F

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2027	507	308	1928	1.051	1885	2115	2.0	37.6	46.653	E
B - Eagle Way West	193	48	2286	142	1.357	137	203	2.1	16.1	283.610	F
C - A12 South	2131	533	780	1710	1.247	1708	1539	32.3	138.1	185.831	F

D - Anson Rd East	1371	343	1415	905	1.514	905	778	33.3	149.8	378.504	F
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17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2027	507	311	1906	1.063	1899	2105	37.6	69.6	109.239	F
B - Eagle Way West	193	48	2279	137	1.405	136	201	16.1	30.2	577.171	F
C - A12 South	2131	533	752	1729	1.233	1728	1539	138.1	238.9	398.584	F
D - Anson Rd East	1371	343	1425	867	1.582	866	784	149.8	275.8	863.078	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1655	414	325	1897	0.873	1870	2144	69.6	16.0	86.407	F
B - Eagle Way West	157	39	2289	186	0.844	180	203	30.2	24.4	542.954	F
C - A12 South	1740	435	788	1705	1.021	1704	1540	238.9	248.0	524.802	F
D - Anson Rd East	1119	280	1412	916	1.222	915	783	275.8	326.7	1141.701	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1386	347	315	2468	0.562	1445	2202	16.0	1.3	3.725	A
B - Eagle Way West	132	33	2332	192	0.686	185	190	24.4	11.2	357.576	F
C - A12 South	1457	364	900	1629	0.895	1622	1295	248.0	206.7	504.855	F
D - Anson Rd East	937	234	1099	1099	0.853	1096	660	326.7	287.1	1008.853	F

Junctions 9
ARCADY 9 - Roundabout Module
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 Report generation date: 13/03/2020 14:39:22

- »2019 Base Year, 6-7 AM
- »2019 Base Year, 7-8 AM
- »2019 Base Year, 8-9 AM
- »2019 Base Year, 3-4 PM
- »2019 Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
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- »2023 Early Years, 6-7 AM
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- »2028 Peak Construction, 6-7 AM
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- »2034 Reference Case, 6-7 AM
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- »2034 Reference Case, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North	D1	0.6	2.35	0.38	A	D2	8.2	17.03	0.91	C	D3	15.4	25.67	0.96	D	D4	4.2	8.08	0.81	A	D5	2.7	5.47	0.73	A
B - Eagle Way West		0.1	4.05	0.06	A		1.0	22.66	0.51	C		2.0	34.04	0.68	D		4.4	75.85	0.86	F		1.5	35.90	0.62	E
C - A12 South		0.4	2.55	0.29	A		2.3	6.18	0.70	A		7.4	17.30	0.89	C		28.7	61.77	1.00	F		17.6	39.59	0.97	E
D - Anson Rd East		0.2	3.54	0.13	A		1.6	18.55	0.63	C		1.8	18.03	0.66	C		17.4	69.52	0.98	F		27.0	92.89	1.02	F
2023 Reference Case																									
A - A12 North	D6	0.7	2.44	0.41	A	D7	69.5	115.51	1.08	F	D8	67.6	92.93	1.06	F	D9	68.7	106.84	1.06	F	D10	51.1	83.48	1.04	F
B - Eagle Way West		0.1	4.25	0.07	A		5.8	121.37	0.93	F		8.9	131.29	1.00	F		11.0	162.96	1.02	F		6.6	135.79	0.96	F
C - A12 South		0.5	2.62	0.32	A		3.1	7.81	0.76	A		22.7	47.64	0.98	E		106.7	200.72	1.15	F		14.6	33.66	0.96	D
D - Anson Rd East		0.2	3.65	0.15	A		9.0	92.75	0.96	F		6.8	60.24	0.91	F		73.2	248.21	1.19	F		68.5	220.33	1.17	F
2023 Early Years																									
A - A12 North	D11	0.7	2.51	0.42	A	D12	149.7	293.06	1.18	F	D13	90.2	123.80	1.08	F	D14	169.8	312.23	1.18	F	D15	69.5	113.65	1.07	F
B - Eagle Way West		0.1	4.59	0.07	A		11.0	226.29	1.06	F		13.1	194.81	1.07	F		15.7	228.76	1.07	F		8.4	175.88	1.01	F
C - A12 South		0.6	2.93	0.38	A		8.5	18.88	0.90	C		49.2	90.83	1.04	F		233.1	580.84	1.31	F		19.1	42.35	0.98	E
D - Anson Rd East		0.2	3.73	0.16	A		11.5	127.27	0.99	F		9.2	76.36	0.95	F		140.8	665.80	1.38	F		80.5	281.60	1.21	F
2028 Reference Case																									
A - A12 North	D16	0.8	2.55	0.43	A	D17	42.2	64.17	1.03	F	D18	39.8	56.64	1.02	F	D19	10.6	18.49	0.92	C	D20	4.1	7.58	0.81	A
B - Eagle Way West		0.1	4.34	0.07	A		3.8	77.77	0.85	F		11.7	166.87	1.04	F		13.4	196.79	1.04	F		4.2	88.31	0.85	F
C - A12 South		0.5	2.67	0.33	A		5.7	13.09	0.86	B		74.6	128.30	1.07	F		162.0	355.40	1.19	F		148.8	295.79	1.17	F
D - Anson Rd East		0.2	3.63	0.15	A		5.6	49.37	0.88	E		4.8	37.81	0.86	E		50.4	161.18	1.09	F		35.5	116.10	1.04	F
2028 Peak Construction																									
A - A12 North	D21	0.7	2.42	0.40	A	D22	29.1	53.56	1.01	F	D23	63.6	87.59	1.05	F	D24	14.0	25.95	0.96	D	D25	3.0	6.09	0.75	A
B - Eagle Way West		0.1	4.81	0.08	A		4.6	92.18	0.89	F		12.8	180.50	1.06	F		22.2	301.11	1.16	F		4.0	84.30	0.84	F
C - A12 South		0.7	3.06	0.42	A		8.7	19.31	0.91	C		77.7	131.98	1.07	F		165.3	369.02	1.20	F		137.9	270.72	1.16	F
D - Anson Rd East		0.2	3.64	0.15	A		4.7	51.79	0.86	F		5.3	54.25	0.88	F		49.8	162.71	1.09	F		35.2	117.27	1.04	F
2034 Reference Case																									
A - A12 North	D26	0.8	2.62	0.45	A	D27	50.8	73.66	1.04	F	D28	26.7	40.00	1.00	E	D29	95.0	127.76	1.08	F	D30	17.0	30.50	0.97	D
B - Eagle Way West		0.1	4.43	0.08	A		5.4	105.75	0.92	F		11.2	154.53	1.03	F		36.3	558.77	1.31	F		11.3	212.61	1.06	F
C - A12 South		0.5	2.71	0.35	A		11.1	24.03	0.93	C		60.3	107.34	1.05	F		311.5	658.76	1.32	F		165.0	349.30	1.18	F
D - Anson Rd East		0.2	3.69	0.16	A		6.0	51.84	0.89	F		4.0	29.04	0.82	D		82.9	324.14	1.21	F		50.2	162.93	1.09	F

2034 Operational Led																									
A - A12 North		0.7	2.48	0.42	A		56.9	94.07	1.06	F		74.7	99.91	1.06	F		86.5	127.61	1.08	F		58.8	92.67	1.05	F
B - Eagle Way West	D31	0.1	4.43	0.08	A	D32	7.4	133.95	0.98	F	D33	16.5	219.68	1.11	F	D34	36.4	562.94	1.31	F	D35	13.5	247.52	1.11	F
C - A12 South		0.5	2.71	0.35	A		8.4	18.16	0.90	C		98.7	157.55	1.10	F		336.5	718.58	1.35	F		113.1	216.13	1.12	F
D - Anson Rd East		0.2	3.69	0.16	A		7.6	79.93	0.94	F		6.1	59.96	0.90	F		93.5	383.18	1.25	F		78.8	258.21	1.20	F

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
 Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / Eagle Way / Anson Rd
Location	52° 3'56.12"N, 1°16'29.45"E
Site number	24
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queuing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Eagle Way West	
C	A12 South	
D	Anson Rd East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.20	10.40	9.5	38.7	77.6	35.0	
B - Eagle Way West	3.50	6.90	12.7	15.3	77.6	11.0	
C - A12 South	7.50	10.70	34.5	40.2	77.6	33.0	
D - Anson Rd East	4.50	9.80	10.9	40.4	77.6	45.0	

Exit Restrictions

Arm	Exit restriction present	Linked exit restriction present	Maximum capacity (PCU/hr)
A - A12 North			
B - Eagle Way West			
C - A12 South	✓		1570
D - Anson Rd East			

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	50
B - Eagle Way West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-340
C - A12 South	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-780
D - Anson Rd East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-260

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.623	2715
B - Eagle Way West	0.489	1358
C - A12 South	0.684	2283
D - Anson Rd East	0.507	1677

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	869	100.000
B - Eagle Way West		ONE HOUR	✓	51	100.000
C - A12 South		ONE HOUR	✓	530	100.000
D - Anson Rd East		ONE HOUR	✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

	To
	A - A12 North B - Eagle Way West C - A12 South D - Anson Rd East

From	A - A12 North	0	4	671	194
	B - Eagle Way West	27	0	16	8
	C - A12 South	451	1	0	78
	D - Anson Rd East	66	0	77	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
	A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East	
	A - A12 North	0	25	7	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	11	0	0	15
D - Anson Rd East	12	0	4	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.38	2.35	0.6	A	797	1196
B - Eagle Way West	0.06	4.05	0.1	A	47	70
C - A12 South	0.29	2.55	0.4	A	486	730
D - Anson Rd East	0.13	3.54	0.2	A	131	197

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	654	164	77	2511	0.261	653	408	0.0	0.4	1.936	A
B - Eagle Way West	38	10	447	1052	0.037	38	4	0.0	0.0	3.550	A
C - A12 South	399	100	53	2014	0.198	398	574	0.0	0.2	2.226	A
D - Anson Rd East	108	27	519	1296	0.083	107	210	0.0	0.1	3.029	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	781	195	92	2501	0.312	781	489	0.4	0.5	2.092	A
B - Eagle Way West	46	11	535	1007	0.046	46	4	0.0	0.0	3.745	A
C - A12 South	476	119	63	2007	0.237	476	686	0.2	0.3	2.351	A
D - Anson Rd East	129	32	621	1244	0.103	128	252	0.1	0.1	3.226	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	957	239	112	2488	0.385	956	599	0.5	0.6	2.349	A
B - Eagle Way West	56	14	655	945	0.059	56	6	0.0	0.1	4.050	A
C - A12 South	584	146	77	1997	0.292	583	841	0.3	0.4	2.546	A
D - Anson Rd East	157	39	760	1174	0.134	157	308	0.1	0.2	3.541	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	957	239	112	2488	0.385	957	599	0.6	0.6	2.351	A
B - Eagle Way West	56	14	655	945	0.059	56	6	0.1	0.1	4.051	A
C - A12 South	584	146	77	1997	0.292	584	841	0.4	0.4	2.546	A
D - Anson Rd East	157	39	761	1174	0.134	157	308	0.2	0.2	3.542	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	781	195	92	2501	0.312	782	489	0.6	0.5	2.096	A
B - Eagle Way West	46	11	535	1006	0.046	46	4	0.1	0.0	3.747	A
C - A12 South	476	119	63	2007	0.237	477	687	0.4	0.3	2.354	A
D - Anson Rd East	129	32	622	1244	0.103	129	252	0.2	0.1	3.230	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	654	164	77	2511	0.261	655	410	0.5	0.4	1.940	A
B - Eagle Way West	38	10	448	1051	0.037	38	4	0.0	0.0	3.556	A
C - A12 South	399	100	53	2014	0.198	399	576	0.3	0.2	2.231	A
D - Anson Rd East	108	27	521	1295	0.083	108	211	0.1	0.1	3.034	A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	13.29	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1621	100.000
B - Eagle Way West		ONE HOUR	✓	147	100.000
C - A12 South		ONE HOUR	✓	1226	100.000
D - Anson Rd East		ONE HOUR	✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	52	1187	381
	B - Eagle Way West	81	0	49	17
	C - A12 South	1051	6	0	169
	D - Anson Rd East	177	2	118	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	6	2
	B - Eagle Way West	5	0	2	6
	C - A12 South	9	0	0	5
	D - Anson Rd East	6	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	17.03	8.2	C	1487	2231
B - Eagle Way West	0.51	22.66	1.0	C	135	202
C - A12 South	0.70	6.18	2.3	A	1125	1687
D - Anson Rd East	0.63	18.55	1.6	C	273	409

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1220	305	176	2477	0.493	1217	982	0.0	1.0	2,849	A
B - Eagle Way West	111	28	1048	770	0.144	110	45	0.0	0.2	5,451	A
C - A12 South	923	231	174	1984	0.465	920	1016	0.0	0.9	3,369	A
D - Anson Rd East	224	56	967	1079	0.207	223	425	0.0	0.3	4,199	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1457	364	211	2455	0.594	1455	1176	1.0	1.4	3.595	A
B - Eagle Way West	132	33	1255	664	0.199	132	54	0.2	0.2	6.755	A
C - A12 South	1102	276	208	1962	0.562	1101	1216	0.9	1.3	4.173	A
D - Anson Rd East	267	67	1157	984	0.271	267	509	0.3	0.4	5.015	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1785	446	257	2131	0.838	1771	1436	1.4	4.8	9.666	A
B - Eagle Way West	162	40	1534	411	0.394	160	66	0.2	0.6	14.298	B
C - A12 South	1350	337	253	1932	0.699	1346	1479	1.3	2.3	6.103	A
D - Anson Rd East	327	82	1408	640	0.511	324	620	0.4	1.0	11.305	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1785	446	258	1968	0.907	1771	1440	4.8	8.2	17.028	C
B - Eagle Way West	162	40	1538	318	0.509	160	66	0.6	1.0	22.664	C
C - A12 South	1350	337	253	1932	0.699	1350	1479	2.3	2.3	6.183	A
D - Anson Rd East	327	82	1408	516	0.634	324	621	1.0	1.6	18.552	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1457	364	213	2454	0.594	1484	1186	8.2	1.5	3.818	A
B - Eagle Way West	132	33	1264	660	0.200	135	55	1.0	0.3	6.899	A
C - A12 South	1102	276	212	1959	0.563	1106	1240	2.3	1.3	4.242	A
D - Anson Rd East	267	67	1180	972	0.275	272	517	1.6	0.4	5.179	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1220	305	177	2476	0.493	1222	988	1.5	1.0	2.878	A
B - Eagle Way West	111	28	1054	767	0.144	111	45	0.3	0.2	5.493	A
C - A12 South	923	231	175	1984	0.465	925	1021	1.3	0.9	3.403	A
D - Anson Rd East	224	56	972	1076	0.208	224	428	0.4	0.3	4.227	A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	22.31	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2002	100.000
B - Eagle Way West		ONE HOUR	✓	196	100.000
C - A12 South		ONE HOUR	✓	1459	100.000
D - Anson Rd East		ONE HOUR	✓	333	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	150	1193	659
	B - Eagle Way West	128	0	29	39
	C - A12 South	1286	20	0	153
	D - Anson Rd East	206	19	107	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	9	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	10	5	0	5
	D - Anson Rd East	10	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.96	25.67	15.4	D	1837	2756
B - Eagle Way West	0.68	34.04	2.0	D	180	270
C - A12 South	0.89	17.30	7.4	C	1339	2008
D - Anson Rd East	0.66	18.03	1.8	C	306	458

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1507	377	166	2448	0.616	1501	1213	0.0	1.6	3.778	A
B - Eagle Way West	148	37	1233	668	0.221	146	142	0.0	0.3	6.892	A
C - A12 South	1098	275	282	1894	0.580	1093	996	0.0	1.4	4.466	A
D - Anson Rd East	251	63	1028	1029	0.244	249	639	0.0	0.3	4.608	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1800	450	199	2428	0.741	1795	1452	1.6	2.8	5.645	A
B - Eagle Way West	176	44	1475	543	0.325	175	169	0.3	0.5	9.784	A
C - A12 South	1312	328	337	1857	0.706	1308	1192	1.4	2.4	6.511	A
D - Anson Rd East	299	75	1230	927	0.323	299	764	0.3	0.5	5.724	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2204	551	241	2401	0.918	2178	1765	2.8	9.3	14.683	B
B - Eagle Way West	216	54	1793	379	0.570	213	206	0.5	1.3	21.319	C
C - A12 South	1606	402	411	1807	0.889	1588	1447	2.4	6.9	15.282	C
D - Anson Rd East	367	92	1493	794	0.462	365	927	0.5	0.8	8.374	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2204	551	243	2296	0.960	2180	1778	9.3	15.4	25.666	D
B - Eagle Way West	216	54	1808	316	0.684	213	206	1.3	2.0	34.045	D
C - A12 South	1606	402	410	1808	0.888	1605	1447	6.9	7.4	17.299	C
D - Anson Rd East	367	92	1494	559	0.656	363	929	0.8	1.8	18.033	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1800	450	204	2425	0.742	1850	1481	15.4	3.0	6.793	A
B - Eagle Way West	176	44	1502	529	0.333	182	174	2.0	0.5	10.545	B
C - A12 South	1312	328	345	1851	0.708	1331	1227	7.4	2.5	7.166	A
D - Anson Rd East	299	75	1268	908	0.330	305	786	1.8	0.5	6.017	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1507	377	168	2447	0.616	1513	1224	3.0	1.6	3.876	A
B - Eagle Way West	148	37	1244	662	0.223	148	143	0.5	0.3	7.018	A
C - A12 South	1098	275	284	1892	0.580	1103	1004	2.5	1.4	4.586	A
D - Anson Rd East	251	63	1037	1025	0.245	251	644	0.5	0.3	4.656	A

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	41.94	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1743	100.000
B - Eagle Way West		ONE HOUR	✓	204	100.000
C - A12 South		ONE HOUR	✓	1497	100.000
D - Anson Rd East		ONE HOUR	✓	837	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	144	1042	557
	B - Eagle Way West	120	0	24	60
	C - A12 South	1213	38	1	245
	D - Anson Rd East	506	65	266	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	8	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	7	0	100	3
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	8.08	4.2	A	1599	2399
B - Eagle Way West	0.86	75.85	4.4	F	187	281
C - A12 South	1.00	61.77	28.7	F	1374	2061
D - Anson Rd East	0.98	69.52	17.4	F	768	1152

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1312	328	247	2429	0.540	1308	1376	0.0	1.2	3.197	A
B - Eagle Way West	154	38	1470	584	0.263	152	185	0.0	0.4	8.314	A
C - A12 South	1127	282	535	1801	0.626	1120	999	0.0	1.6	5.243	A
D - Anson Rd East	630	158	908	1163	0.542	625	646	0.0	1.2	6.643	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1567	392	295	2400	0.653	1564	1644	1.2	1.9	4.293	A
B - Eagle Way West	183	46	1757	440	0.416	182	221	0.4	0.7	13.861	B
C - A12 South	1346	336	639	1732	0.777	1339	1195	1.6	3.3	9.006	A
D - Anson Rd East	752	188	1087	1068	0.704	748	773	1.2	2.3	11.088	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1919	480	349	2367	0.811	1910	1942	1.9	4.1	7.730	A
B - Eagle Way West	225	56	2076	281	0.799	215	266	0.7	3.1	48.986	E
C - A12 South	1648	412	758	1654	0.966	1584	1448	3.3	19.4	35.406	E
D - Anson Rd East	922	230	1326	941	0.980	880	933	2.3	12.7	43.230	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1919	480	355	2363	0.812	1919	1980	4.1	4.2	8.076	A
B - Eagle Way West	225	56	2116	261	0.861	219	270	3.1	4.4	75.845	F
C - A12 South	1648	412	775	1644	1.003	1611	1461	19.4	28.7	61.765	F
D - Anson Rd East	922	230	1332	937	0.983	903	941	12.7	17.4	69.523	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1567	392	318	2386	0.657	1576	1777	4.2	1.9	4.495	A
B - Eagle Way West	183	46	1898	370	0.496	197	230	4.4	1.0	22.281	C
C - A12 South	1346	336	684	1703	0.790	1444	1224	28.7	4.0	18.840	C
D - Anson Rd East	752	188	1097	1063	0.708	812	798	17.4	2.5	17.559	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1312	328	251	2427	0.541	1315	1397	1.9	1.2	3.250	A
B - Eagle Way West	154	38	1492	573	0.268	156	187	1.0	0.4	8.686	A
C - A12 South	1127	282	542	1796	0.628	1136	1007	4.0	1.7	5.532	A
D - Anson Rd East	630	158	914	1160	0.543	635	652	2.5	1.2	6.932	A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	37.78	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1626	100.000
B - Eagle Way West		ONE HOUR	✓	144	100.000
C - A12 South		ONE HOUR	✓	1523	100.000
D - Anson Rd East		ONE HOUR	✓	923	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	82	1061	483
	B - Eagle Way West	86	0	26	32
	C - A12 South	1244	37	0	242
	D - Anson Rd East	543	69	310	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	3	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	3	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	5.47	2.7	A	1492	2238
B - Eagle Way West	0.62	35.90	1.5	E	132	198
C - A12 South	0.97	39.59	17.6	E	1398	2096
D - Anson Rd East	1.02	92.89	27.0	F	847	1270

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1224	306	225	2512	0.487	1220	1401	0.0	0.9	2.780	A
B - Eagle Way West	108	27	1519	587	0.185	108	141	0.0	0.2	7.492	A
C - A12 South	1147	287	520	1881	0.609	1140	1047	0.0	1.5	4.819	A
D - Anson Rd East	695	174	877	1210	0.574	690	568	0.0	1.3	6.853	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1462	365	269	2485	0.588	1460	1675	0.9	1.4	3.507	A
B - Eagle Way West	129	32	1816	442	0.293	129	168	0.2	0.4	11.474	B
C - A12 South	1369	342	621	1813	0.755	1363	1253	1.5	3.0	7.904	A
D - Anson Rd East	830	207	1049	1121	0.740	824	680	1.3	2.7	11.913	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1790	448	323	2452	0.730	1785	1990	1.4	2.6	5.364	A
B - Eagle Way West	159	40	2158	275	0.577	155	201	0.4	1.3	29.298	D
C - A12 South	1677	419	725	1743	0.962	1634	1514	3.0	13.6	26.340	D
D - Anson Rd East	1016	254	1283	1000	1.016	956	826	2.7	17.9	51.827	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1790	448	328	2448	0.731	1790	2027	2.6	2.7	5.465	A
B - Eagle Way West	159	40	2198	255	0.622	158	204	1.3	1.5	35.899	E
C - A12 South	1677	419	741	1732	0.968	1661	1526	13.6	17.6	39.593	E
D - Anson Rd East	1016	254	1287	998	1.018	980	832	17.9	27.0	92.886	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1462	365	281	2477	0.590	1467	1788	2.7	1.5	3.581	A
B - Eagle Way West	129	32	1936	384	0.337	133	178	1.5	0.5	14.612	B
C - A12 South	1369	342	688	1768	0.775	1425	1292	17.6	3.6	12.109	B
D - Anson Rd East	830	207	1055	1118	0.742	925	693	27.0	3.1	27.241	D

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1224	306	228	2510	0.488	1226	1421	1.5	1.0	2.810	A
B - Eagle Way West	108	27	1540	577	0.188	110	142	0.5	0.2	7.721	A
C - A12 South	1147	287	528	1876	0.611	1155	1056	3.6	1.6	5.046	A
D - Anson Rd East	695	174	882	1208	0.575	702	573	3.1	1.4	7.211	A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	925	100.000
B - Eagle Way West		ONE HOUR	✓	57	100.000
C - A12 South		ONE HOUR	✓	594	100.000
D - Anson Rd East		ONE HOUR	✓	157	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	4	727	194
	B - Eagle Way West	30	0	18	9
	C - A12 South	499	1	0	93
	D - Anson Rd East	78	0	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	9	0	0	13
	D - Anson Rd East	9	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.41	2.44	0.7	A	849	1274
B - Eagle Way West	0.07	4.25	0.1	A	52	78
C - A12 South	0.32	2.62	0.5	A	545	817
D - Anson Rd East	0.15	3.65	0.2	A	144	216

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	697	174	90	2522	0.276	695	456	0.0	0.4	1.969	A
B - Eagle Way West	43	11	504	1028	0.041	42	4	0.0	0.0	3.653	A
C - A12 South	447	112	62	2047	0.218	446	618	0.0	0.3	2.248	A
D - Anson Rd East	118	30	563	1291	0.091	118	223	0.0	0.1	3.068	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	832	208	108	2510	0.331	831	546	0.4	0.5	2.145	A
B - Eagle Way West	51	13	603	978	0.052	51	5	0.0	0.1	3.883	A
C - A12 South	534	133	74	2038	0.262	533	740	0.3	0.4	2.392	A
D - Anson Rd East	141	35	673	1235	0.114	141	266	0.1	0.1	3.289	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1019	255	132	2494	0.409	1018	668	0.5	0.7	2.437	A
B - Eagle Way West	62	16	738	909	0.069	62	6	0.1	0.1	4.249	A
C - A12 South	654	163	91	2027	0.323	653	906	0.4	0.5	2.621	A
D - Anson Rd East	173	43	824	1159	0.149	173	326	0.1	0.2	3.649	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1019	255	132	2494	0.409	1019	669	0.7	0.7	2.440	A
B - Eagle Way West	62	16	739	909	0.069	62	6	0.1	0.1	4.250	A
C - A12 South	654	163	91	2027	0.323	654	906	0.5	0.5	2.621	A
D - Anson Rd East	173	43	825	1159	0.149	173	326	0.2	0.2	3.650	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	832	208	108	2510	0.331	833	547	0.7	0.5	2.147	A
B - Eagle Way West	51	13	604	977	0.052	51	5	0.1	0.1	3.886	A
C - A12 South	534	133	74	2038	0.262	534	741	0.5	0.4	2.394	A
D - Anson Rd East	141	35	674	1235	0.114	141	267	0.2	0.1	3.294	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	697	174	90	2521	0.276	697	458	0.5	0.4	1.975	A
B - Eagle Way West	43	11	505	1027	0.042	43	4	0.1	0.0	3.659	A
C - A12 South	447	112	62	2046	0.218	447	620	0.4	0.3	2.253	A
D - Anson Rd East	118	30	564	1290	0.092	118	223	0.1	0.1	3.073	A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	72.25	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1710	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	1328	100.000
D - Anson Rd East		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	58	1270	381
	B - Eagle Way West	90	0	54	19
	C - A12 South	1120	7	0	201
	D - Anson Rd East	207	2	119	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	6	2
	B - Eagle Way West	5	0	2	6
	C - A12 South	10	0	0	4
	D - Anson Rd East	0	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.08	115.51	69.5	F	1569	2353
B - Eagle Way West	0.93	121.37	5.8	F	150	225
C - A12 South	0.76	7.81	3.1	A	1219	1828
D - Anson Rd East	0.96	92.75	9.0	F	301	452

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1287	322	206	2458	0.524	1283	1063	0.0	1.1	3.051	A
B - Eagle Way West	123	31	1147	725	0.170	122	50	0.0	0.2	5.968	A
C - A12 South	1000	250	201	1974	0.507	996	1083	0.0	1.0	3.666	A
D - Anson Rd East	247	62	1038	1084	0.228	246	451	0.0	0.3	4.290	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1537	384	246	2433	0.632	1535	1272	1.1	1.7	3.995	A
B - Eagle Way West	147	37	1372	610	0.240	146	60	0.2	0.3	7.750	A
C - A12 South	1194	299	240	1949	0.613	1192	1296	1.0	1.6	4.743	A
D - Anson Rd East	295	74	1242	978	0.302	295	539	0.3	0.4	5.261	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1883	471	296	1794	1.049	1750	1536	1.7	34.9	46.943	E
B - Eagle Way West	180	45	1665	213	0.843	167	69	0.3	3.5	66.160	F
C - A12 South	1462	366	277	1926	0.759	1456	1479	1.6	3.1	7.578	A
D - Anson Rd East	362	90	1416	400	0.905	341	630	0.4	5.6	50.512	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1883	471	298	1751	1.075	1744	1548	34.9	69.5	115.510	F
B - Eagle Way West	180	45	1675	192	0.934	171	69	3.5	5.8	121.370	F
C - A12 South	1462	366	282	1923	0.761	1462	1479	3.1	3.1	7.805	A
D - Anson Rd East	362	90	1413	376	0.963	348	630	5.6	9.0	92.746	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1537	384	255	1788	0.860	1763	1303	69.5	13.0	88.683	F
B - Eagle Way West	147	37	1396	237	0.620	163	68	5.8	1.8	55.325	F
C - A12 South	1194	299	263	1934	0.617	1200	1480	3.1	1.6	4.941	A
D - Anson Rd East	295	74	1424	401	0.737	319	593	9.0	3.2	50.987	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1287	322	210	2456	0.524	1335	1081	13.0	1.1	3.352	A
B - Eagle Way West	123	31	1161	717	0.171	129	52	1.8	0.2	6.186	A
C - A12 South	1000	250	211	1968	0.508	1002	1129	1.6	1.0	3.740	A
D - Anson Rd East	247	62	1081	1062	0.233	259	464	3.2	0.3	4.547	A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	74.59	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2060	100.000
B - Eagle Way West		ONE HOUR	✓	218	100.000
C - A12 South		ONE HOUR	✓	1603	100.000
D - Anson Rd East		ONE HOUR	✓	392	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	167	1235	659
	B - Eagle Way West	142	0	32	43
	C - A12 South	1380	22	0	201
	D - Anson Rd East	241	21	129	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	9	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	10	5	0	4
	D - Anson Rd East	3	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.06	92.93	67.6	F	1890	2836
B - Eagle Way West	1.00	131.29	8.9	F	200	300
C - A12 South	0.98	47.64	22.7	E	1471	2207
D - Anson Rd East	0.91	60.24	6.8	F	359	539

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1551	388	208	2427	0.639	1544	1319	0.0	1.7	4.046	A
B - Eagle Way West	164	41	1364	608	0.269	162	157	0.0	0.4	8.046	A
C - A12 South	1207	302	322	1882	0.641	1200	1046	0.0	1.8	5.224	A
D - Anson Rd East	295	74	1074	1055	0.279	293	677	0.0	0.4	4.718	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1852	463	248	2402	0.771	1846	1577	1.7	3.3	6.403	A
B - Eagle Way West	196	49	1631	472	0.414	194	188	0.4	0.7	12.874	B
C - A12 South	1441	360	385	1842	0.783	1435	1251	1.8	3.5	8.702	A
D - Anson Rd East	352	88	1284	943	0.373	351	810	0.4	0.6	6.069	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2268	567	293	2192	1.035	2141	1873	3.3	35.0	40.769	E
B - Eagle Way West	240	60	1943	265	0.906	223	219	0.7	5.0	69.179	F
C - A12 South	1765	441	452	1798	0.982	1710	1453	3.5	17.1	30.351	D
D - Anson Rd East	431	108	1490	506	0.852	416	945	0.6	4.5	35.355	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2268	567	298	2147	1.056	2138	1906	35.0	67.6	92.927	F
B - Eagle Way West	240	60	1979	240	0.996	224	220	5.0	8.9	131.288	F
C - A12 South	1765	441	456	1796	0.983	1743	1453	17.1	22.7	47.645	E
D - Anson Rd East	431	108	1487	471	0.914	422	948	4.5	6.8	60.238	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1852	463	270	2389	0.775	2108	1685	67.6	3.6	27.164	D
B - Eagle Way West	196	49	1727	423	0.462	227	212	8.9	0.9	21.293	C
C - A12 South	1441	360	423	1817	0.793	1516	1421	22.7	4.1	14.672	B
D - Anson Rd East	352	88	1467	847	0.416	376	910	6.8	0.7	8.056	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1551	388	211	2425	0.640	1558	1337	3.6	1.8	4.188	A
B - Eagle Way West	164	41	1382	599	0.273	166	159	0.9	0.4	8.340	A
C - A12 South	1207	302	325	1880	0.642	1216	1056	4.1	1.8	5.489	A
D - Anson Rd East	295	74	1085	1049	0.281	296	685	0.7	0.4	4.787	A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	168.80	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1857	100.000
B - Eagle Way West		ONE HOUR	✓	227	100.000
C - A12 South		ONE HOUR	✓	1537	100.000
D - Anson Rd East		ONE HOUR	✓	869	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	160	1140	557
	B - Eagle Way West	134	0	27	67
	C - A12 South	1241	42	1	252
	D - Anson Rd East	506	72	291	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	8	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	8	0	100	3
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.06	106.84	68.7	F	1704	2556
B - Eagle Way West	1.02	162.96	11.0	F	208	312
C - A12 South	1.15	200.72	106.7	F	1410	2115
D - Anson Rd East	1.19	248.21	73.2	F	797	1196

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1398	350	259	2422	0.577	1393	1406	0.0	1.4	3.481	A
B - Eagle Way West	171	43	1496	568	0.301	169	206	0.0	0.4	8.980	A
C - A12 South	1157	289	552	1782	0.649	1150	1093	0.0	1.8	5.628	A
D - Anson Rd East	654	164	996	1118	0.585	649	656	0.0	1.4	7.588	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1670	417	310	2391	0.698	1666	1678	1.4	2.3	4.939	A
B - Eagle Way West	204	51	1786	423	0.483	202	246	0.4	0.9	16.173	C
C - A12 South	1381	345	659	1712	0.807	1373	1306	1.8	3.9	10.350	B
D - Anson Rd East	781	195	1191	1014	0.770	774	785	1.4	3.1	14.594	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2045	511	341	1950	1.048	1906	1828	2.3	36.9	45.960	E
B - Eagle Way West	250	62	1943	255	0.981	226	275	0.9	7.0	89.582	F
C - A12 South	1692	423	716	1521	1.112	1501	1475	3.9	51.6	76.490	F
D - Anson Rd East	957	239	1362	846	1.131	829	885	3.1	35.0	97.186	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2045	511	339	1925	1.062	1918	1794	36.9	68.7	106.836	F
B - Eagle Way West	250	62	1899	246	1.016	234	273	7.0	11.0	162.960	F
C - A12 South	1692	423	701	1473	1.149	1471	1475	51.6	106.7	198.915	F
D - Anson Rd East	957	239	1371	806	1.188	804	886	35.0	73.2	248.208	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1670	417	349	1908	0.875	1881	1894	68.7	15.9	85.060	F
B - Eagle Way West	204	51	2015	258	0.790	228	278	11.0	5.0	123.528	F
C - A12 South	1381	345	746	1561	0.885	1546	1476	106.7	65.5	200.718	F
D - Anson Rd East	781	195	1345	890	0.878	878	885	73.2	49.1	247.813	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1398	350	310	2391	0.585	1456	1740	15.9	1.4	4.097	A
B - Eagle Way West	171	43	1863	385	0.444	187	235	5.0	0.8	19.655	C
C - A12 South	1157	289	688	1694	0.683	1410	1199	65.5	2.2	30.286	D
D - Anson Rd East	654	164	1043	1093	0.599	844	723	49.1	1.5	31.434	D

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	95.82	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1766	100.000
B - Eagle Way West		ONE HOUR	✓	160	100.000
C - A12 South		ONE HOUR	✓	1514	100.000
D - Anson Rd East		ONE HOUR	✓	898	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	91	1192	483
	B - Eagle Way West	96	0	29	36
	C - A12 South	1241	41	0	232
	D - Anson Rd East	553	77	268	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	3	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	4	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.04	83.48	51.1	F	1621	2431
B - Eagle Way West	0.96	135.79	6.6	F	147	221
C - A12 South	0.96	33.86	14.6	D	1389	2084
D - Anson Rd East	1.17	220.33	68.5	F	824	1237

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1330	332	222	2513	0.529	1325	1413	0.0	1.1	3.019	A
B - Eagle Way West	121	30	1516	584	0.206	120	157	0.0	0.3	7.729	A
C - A12 South	1140	285	539	1854	0.615	1133	1116	0.0	1.6	4.955	A
D - Anson Rd East	676	169	984	1155	0.586	671	563	0.0	1.4	7.362	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1588	397	266	2486	0.639	1585	1689	1.1	1.7	3.983	A
B - Eagle Way West	144	36	1812	439	0.328	143	187	0.3	0.5	12.133	B
C - A12 South	1361	340	644	1784	0.763	1355	1334	1.6	3.1	8.272	A
D - Anson Rd East	808	202	1177	1055	0.766	801	673	1.4	3.1	13.821	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1944	486	315	1901	1.023	1841	1968	1.7	27.7	38.022	E
B - Eagle Way West	176	44	2120	202	0.873	163	214	0.5	3.9	75.385	F
C - A12 South	1667	417	707	1742	0.957	1627	1531	3.1	12.9	25.501	D
D - Anson Rd East	989	247	1367	891	1.111	871	789	3.1	32.5	87.642	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1944	486	322	1865	1.043	1851	1980	27.7	51.1	83.480	F
B - Eagle Way West	176	44	2136	183	0.963	166	213	3.9	6.6	135.792	F
C - A12 South	1667	417	689	1754	0.950	1660	1531	12.9	14.6	33.656	D
D - Anson Rd East	989	247	1375	847	1.167	845	798	32.5	68.5	220.327	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1588	397	283	2476	0.641	1785	1843	51.1	1.8	7.055	A
B - Eagle Way West	144	36	1958	368	0.392	168	213	6.6	0.7	20.089	C
C - A12 South	1361	340	769	1701	0.800	1402	1522	14.6	4.2	13.539	B
D - Anson Rd East	808	202	1327	978	0.826	964	741	68.5	29.5	185.133	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1330	332	226	2511	0.530	1332	1501	1.8	1.1	3.063	A
B - Eagle Way West	121	30	1604	541	0.223	122	167	0.7	0.3	8.617	A
C - A12 South	1140	285	622	1798	0.634	1150	1156	4.2	1.8	5.633	A
D - Anson Rd East	676	169	990	1152	0.587	789	568	29.5	1.5	13.534	B

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	958	100.000
B - Eagle Way West		ONE HOUR	✓	57	100.000
C - A12 South		ONE HOUR	✓	690	100.000
D - Anson Rd East		ONE HOUR	✓	161	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	4	760	194
	B - Eagle Way West	30	0	18	9
	C - A12 South	590	1	0	99
	D - Anson Rd East	80	0	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	11	0	0	12
	D - Anson Rd East	9	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.51	0.7	A	879	1319
B - Eagle Way West	0.07	4.59	0.1	A	52	78
C - A12 South	0.38	2.93	0.6	A	633	949
D - Anson Rd East	0.16	3.73	0.2	A	148	221

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	722	180	94	2520	0.286	720	526	0.0	0.4	1.997	A
B - Eagle Way West	43	11	577	986	0.043	42	4	0.0	0.0	3.816	A
C - A12 South	519	130	64	2007	0.259	518	644	0.0	0.3	2.415	A
D - Anson Rd East	121	30	587	1279	0.095	121	227	0.0	0.1	3.108	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North											
B - Eagle Way West											
C - A12 South											
D - Anson Rd East											

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	862	215	113	2508	0.343	861	629	0.4	0.5	2.185	A
B - Eagle Way West	51	13	691	927	0.055	51	5	0.0	0.1	4.107	A
C - A12 South	620	155	76	1999	0.310	620	771	0.3	0.4	2.610	A
D - Anson Rd East	145	36	702	1221	0.118	144	271	0.1	0.1	3.344	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1055	264	138	2492	0.423	1054	770	0.5	0.7	2.503	A
B - Eagle Way West	62	16	846	848	0.074	62	6	0.1	0.1	4.583	A
C - A12 South	759	190	93	1987	0.382	759	944	0.4	0.6	2.929	A
D - Anson Rd East	177	44	860	1141	0.155	177	332	0.1	0.2	3.733	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1055	264	138	2492	0.423	1055	771	0.7	0.7	2.505	A
B - Eagle Way West	62	16	847	847	0.074	62	6	0.1	0.1	4.586	A
C - A12 South	759	190	93	1987	0.382	759	945	0.6	0.6	2.931	A
D - Anson Rd East	177	44	861	1141	0.155	177	332	0.2	0.2	3.735	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	862	215	113	2508	0.344	862	630	0.7	0.5	2.188	A
B - Eagle Way West	51	13	692	927	0.055	51	5	0.1	0.1	4.111	A
C - A12 South	620	155	76	1998	0.310	621	772	0.6	0.5	2.615	A
D - Anson Rd East	145	36	704	1220	0.119	145	272	0.2	0.1	3.347	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	722	180	94	2520	0.286	722	528	0.5	0.4	2.003	A
B - Eagle Way West	43	11	579	985	0.043	43	4	0.1	0.0	3.824	A
C - A12 South	519	130	64	2007	0.259	520	646	0.5	0.4	2.422	A
D - Anson Rd East	121	30	589	1278	0.095	121	227	0.1	0.1	3.114	A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	162.84	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1816	100.000
B - Eagle Way West		ONE HOUR	✓	163	100.000
C - A12 South		ONE HOUR	✓	1548	100.000
D - Anson Rd East		ONE HOUR	✓	307	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	58	1376	381
	B - Eagle Way West	90	0	54	19
	C - A12 South	1285	7	0	257
	D - Anson Rd East	183	2	121	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	7	2
	B - Eagle Way West	5	0	2	6
	C - A12 South	14	0	0	4
	D - Anson Rd East	0	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.18	293.06	149.7	F	1666	2499
B - Eagle Way West	1.06	226.29	11.0	F	150	225
C - A12 South	0.90	18.88	8.5	C	1421	2131
D - Anson Rd East	0.99	127.27	11.5	F	281	422

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1367	342	247	2418	0.565	1362	1167	0.0	1.3	3.394	A
B - Eagle Way West	123	31	1292	632	0.195	122	50	0.0	0.2	7.051	A
C - A12 South	1166	291	183	1927	0.605	1160	1164	0.0	1.5	4.654	A
D - Anson Rd East	231	58	1117	1036	0.223	230	492	0.0	0.3	4.459	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1632	408	296	2388	0.684	1629	1397	1.3	2.1	4.723	A
B - Eagle Way West	147	37	1546	499	0.294	146	60	0.2	0.4	10.172	B
C - A12 South	1392	348	219	1905	0.731	1387	1392	1.5	2.6	6.893	A
D - Anson Rd East	276	69	1336	922	0.299	275	589	0.3	0.4	5.563	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1999	500	349	1727	1.158	1709	1668	2.1	74.6	88.354	F
B - Eagle Way West	180	45	1862	177	1.014	155	64	0.4	6.6	115.016	F
C - A12 South	1705	426	241	1891	0.901	1684	1469	2.6	7.7	16.016	C
D - Anson Rd East	337	84	1402	346	0.975	308	656	0.4	7.8	70.199	F

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1999	500	355	1700	1.176	1699	1695	74.6	149.7	242.670	F
B - Eagle Way West	180	45	1888	170	1.060	162	64	6.6	11.0	226.286	F
C - A12 South	1705	426	250	1886	0.904	1702	1469	7.7	8.5	18.882	C
D - Anson Rd East	337	84	1396	340	0.992	323	657	7.8	11.5	127.268	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1632	408	310	1724	0.947	1712	1442	149.7	129.7	293.060	F
B - Eagle Way West	147	37	1584	184	0.798	168	63	11.0	5.7	190.241	F
C - A12 South	1392	348	232	1897	0.734	1414	1469	8.5	2.8	7.790	A
D - Anson Rd East	276	69	1409	325	0.848	292	613	11.5	7.2	113.692	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1367	342	255	1765	0.775	1751	1193	129.7	33.6	170.525	F
B - Eagle Way West	123	31	1312	183	0.671	136	63	5.7	2.4	86.302	F
C - A12 South	1166	291	204	1914	0.609	1171	1469	2.8	1.6	4.875	A
D - Anson Rd East	231	58	1429	303	0.763	244	578	7.2	3.8	68.795	F

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	109.96	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2058	100.000
B - Eagle Way West		ONE HOUR	✓	218	100.000
C - A12 South		ONE HOUR	✓	1639	100.000
D - Anson Rd East		ONE HOUR	✓	413	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	167	1233	659
	B - Eagle Way West	142	0	32	43
	C - A12 South	1425	22	0	192
	D - Anson Rd East	243	21	147	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	10	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	14	5	0	4
	D - Anson Rd East	4	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.08	123.80	90.2	F	1889	2833
B - Eagle Way West	1.07	194.81	13.1	F	200	300
C - A12 South	1.04	90.83	49.2	F	1504	2256
D - Anson Rd East	0.95	76.36	9.2	F	379	568

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1549	387	201	2416	0.641	1542	1354	0.0	1.8	4.088	A
B - Eagle Way West	164	41	1392	574	0.285	162	157	0.0	0.4	8.712	A
C - A12 South	1234	309	324	1824	0.677	1226	1058	0.0	2.1	5.944	A
D - Anson Rd East	311	78	1073	1046	0.297	309	670	0.0	0.4	4.875	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1850	463	240	2392	0.773	1844	1618	1.8	3.3	6.491	A
B - Eagle Way West	196	49	1663	432	0.453	194	188	0.4	0.8	15.034	C
C - A12 South	1474	368	387	1784	0.826	1464	1265	2.1	4.5	10.946	B
D - Anson Rd East	371	93	1283	934	0.397	370	801	0.4	0.7	6.370	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2266	567	275	2131	1.063	2095	1875	3.3	46.1	50.875	F
B - Eagle Way West	240	60	1935	242	0.989	215	215	0.8	7.0	94.001	F
C - A12 South	1805	451	448	1746	1.034	1702	1441	4.5	30.2	46.511	E
D - Anson Rd East	454	114	1456	501	0.907	432	914	0.7	6.1	43.768	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2266	567	278	2094	1.082	2090	1904	46.1	90.2	123.802	F
B - Eagle Way West	240	60	1967	223	1.072	215	215	7.0	13.1	194.812	F
C - A12 South	1805	451	453	1742	1.036	1729	1441	30.2	49.2	90.828	F
D - Anson Rd East	454	114	1453	477	0.952	442	915	6.1	9.2	76.360	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1850	463	274	2137	0.866	2114	1813	90.2	24.2	100.477	F
B - Eagle Way West	196	49	1857	256	0.765	230	213	13.1	4.4	138.827	F
C - A12 South	1474	368	424	1761	0.837	1647	1440	49.2	6.0	48.298	E
D - Anson Rd East	371	93	1472	482	0.769	393	916	9.2	3.8	45.776	E

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1549	387	210	2411	0.643	1639	1395	24.2	1.8	5.238	A
B - Eagle Way West	164	41	1424	557	0.294	180	166	4.4	0.4	9.932	A
C - A12 South	1234	309	341	1813	0.681	1249	1124	6.0	2.2	6.557	A
D - Anson Rd East	311	78	1141	1009	0.308	324	707	3.8	0.4	5.352	A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	464.57	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1994	100.000
B - Eagle Way West		ONE HOUR	✓	227	100.000
C - A12 South		ONE HOUR	✓	1625	100.000
D - Anson Rd East		ONE HOUR	✓	856	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	160	1277	557
	B - Eagle Way West	134	0	27	67
	C - A12 South	1316	42	1	265
	D - Anson Rd East	506	72	278	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	10	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	10	0	100	3
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.18	312.23	169.8	F	1830	2745
B - Eagle Way West	1.07	228.76	15.7	F	208	312
C - A12 South	1.31	580.84	233.1	F	1491	2236
D - Anson Rd East	1.38	665.80	140.8	F	785	1178

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1501	375	269	2380	0.631	1495	1460	0.0	1.7	4.036	A
B - Eagle Way West	171	43	1560	527	0.325	169	206	0.0	0.5	10.015	B
C - A12 South	1223	306	551	1756	0.697	1214	1185	0.0	2.2	6.541	A
D - Anson Rd East	644	161	1098	1052	0.612	638	666	0.0	1.5	8.571	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1793	448	320	2349	0.763	1787	1739	1.7	3.1	6.337	A
B - Eagle Way West	204	51	1858	375	0.544	201	245	0.5	1.1	20.386	C
C - A12 South	1461	365	656	1688	0.865	1447	1415	2.2	5.7	14.119	B
D - Anson Rd East	769	192	1312	936	0.822	759	795	1.5	4.1	19.301	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2196	549	319	1867	1.176	1853	1696	3.1	88.9	96.249	F
B - Eagle Way West	250	62	1801	233	1.072	215	247	1.1	9.9	122.342	F
C - A12 South	1789	447	640	1415	1.265	1408	1448	5.7	100.9	145.337	F
D - Anson Rd East	942	236	1361	733	1.286	726	811	4.1	58.1	169.963	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2196	549	317	1873	1.172	1872	1639	88.9	169.8	253.709	F
B - Eagle Way West	250	62	1729	233	1.073	227	243	9.9	15.7	228.761	F
C - A12 South	1789	447	611	1362	1.314	1362	1447	100.9	207.7	413.491	F
D - Anson Rd East	942	236	1376	682	1.382	682	812	58.1	123.3	484.379	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1793	448	320	1873	0.957	1862	1653	169.8	152.5	312.225	F
B - Eagle Way West	204	51	1737	249	0.820	237	244	15.7	7.5	195.445	F
C - A12 South	1461	365	622	1359	1.075	1359	1448	207.7	233.1	580.836	F
D - Anson Rd East	769	192	1370	700	1.099	700	812	123.3	140.8	665.801	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1501	375	306	1857	0.809	1844	1693	152.5	66.7	215.598	F
B - Eagle Way West	171	43	1815	219	0.779	183	249	7.5	4.4	108.749	F
C - A12 South	1223	306	658	1412	0.867	1405	1448	233.1	187.5	539.086	F
D - Anson Rd East	644	161	1351	761	0.847	755	799	140.8	113.0	605.651	F

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	123.76	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1768	100.000
B - Eagle Way West		ONE HOUR	✓	160	100.000
C - A12 South		ONE HOUR	✓	1555	100.000
D - Anson Rd East		ONE HOUR	✓	886	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	91	1194	483
	B - Eagle Way West	96	0	29	36
	C - A12 South	1277	41	0	237
	D - Anson Rd East	545	77	264	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	6	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	4	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.07	113.65	69.5	F	1622	2434
B - Eagle Way West	1.01	175.88	8.4	F	147	221
C - A12 South	0.98	42.35	19.1	E	1427	2140
D - Anson Rd East	1.21	281.60	80.5	F	813	1220

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1331	333	226	2464	0.540	1326	1434	0.0	1.2	3.151	A
B - Eagle Way West	121	30	1540	570	0.212	120	157	0.0	0.3	7.972	A
C - A12 South	1171	293	533	1851	0.632	1164	1114	0.0	1.7	5.188	A
D - Anson Rd East	667	167	986	1141	0.585	662	567	0.0	1.4	7.431	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1589	397	270	2437	0.652	1587	1713	1.2	1.8	4.218	A
B - Eagle Way West	144	36	1840	422	0.341	143	187	0.3	0.5	12.850	B
C - A12 South	1398	349	637	1782	0.784	1391	1333	1.7	3.5	9.032	A
D - Anson Rd East	797	199	1179	1038	0.767	790	678	1.4	3.1	14.112	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1947	487	318	1847	1.054	1805	1974	1.8	37.4	48.147	E
B - Eagle Way West	176	44	2133	190	0.931	159	210	0.5	4.9	91.192	F
C - A12 South	1712	428	682	1752	0.977	1661	1497	3.5	16.1	29.829	D
D - Anson Rd East	976	244	1340	853	1.144	838	782	3.1	37.6	101.689	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1947	487	325	1825	1.067	1818	1988	37.4	69.5	113.650	F
B - Eagle Way West	176	44	2150	174	1.012	162	209	4.9	8.4	175.877	F
C - A12 South	1712	428	658	1768	0.968	1700	1496	16.1	19.1	42.346	E
D - Anson Rd East	976	244	1351	805	1.212	804	792	37.6	80.5	269.108	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1589	397	289	1811	0.877	1786	1835	69.5	20.5	94.133	F
B - Eagle Way West	144	36	1959	200	0.719	165	207	8.4	3.2	112.949	F
C - A12 South	1398	349	710	1734	0.806	1456	1498	19.1	4.4	15.356	C
D - Anson Rd East	797	199	1328	890	0.895	879	747	80.5	59.9	281.600	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1331	333	234	2459	0.541	1408	1601	20.5	1.2	3.687	A
B - Eagle Way West	121	30	1703	491	0.246	132	182	3.2	0.3	10.335	B
C - A12 South	1171	293	705	1736	0.674	1180	1243	4.4	2.1	6.574	A
D - Anson Rd East	667	167	1047	1108	0.602	901	595	59.9	1.6	48.820	E

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	983	100.000
B - Eagle Way West		ONE HOUR	✓	60	100.000
C - A12 South		ONE HOUR	✓	614	100.000
D - Anson Rd East		ONE HOUR	✓	161	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	710	268
	B - Eagle Way West	32	0	19	9
	C - A12 South	513	1	0	99
	D - Anson Rd East	84	0	77	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	9	0	0	12
	D - Anson Rd East	9	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.55	0.8	A	902	1352
B - Eagle Way West	0.07	4.34	0.1	A	55	82
C - A12 South	0.33	2.67	0.5	A	563	845
D - Anson Rd East	0.15	3.63	0.2	A	148	221

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	740	185	96	2523	0.293	738	472	0.0	0.4	2.015	A
B - Eagle Way West	45	11	523	1019	0.044	45	4	0.0	0.0	3.696	A
C - A12 South	462	116	66	2047	0.226	461	606	0.0	0.3	2.269	A
D - Anson Rd East	121	30	551	1297	0.093	121	283	0.0	0.1	3.060	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	883	221	114	2511	0.352	883	565	0.4	0.5	2.211	A
B - Eagle Way West	53	13	626	967	0.055	53	5	0.0	0.1	3.941	A
C - A12 South	552	138	79	2038	0.271	551	724	0.3	0.4	2.422	A
D - Anson Rd East	145	36	659	1242	0.116	144	338	0.1	0.1	3.278	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1082	270	140	2494	0.434	1081	691	0.5	0.8	2.547	A
B - Eagle Way West	66	16	766	896	0.073	65	6	0.1	0.1	4.335	A
C - A12 South	676	169	97	2025	0.334	675	887	0.4	0.5	2.666	A
D - Anson Rd East	177	44	807	1168	0.152	177	414	0.1	0.2	3.633	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1082	270	140	2494	0.434	1082	692	0.8	0.8	2.549	A
B - Eagle Way West	66	16	767	896	0.073	66	6	0.1	0.1	4.336	A
C - A12 South	676	169	97	2025	0.334	676	888	0.5	0.5	2.667	A
D - Anson Rd East	177	44	808	1167	0.152	177	414	0.2	0.2	3.635	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	883	221	115	2511	0.352	884	565	0.8	0.5	2.216	A
B - Eagle Way West	53	13	627	966	0.055	54	5	0.1	0.1	3.946	A
C - A12 South	552	138	79	2038	0.271	552	726	0.5	0.4	2.426	A
D - Anson Rd East	145	36	660	1242	0.116	145	339	0.2	0.1	3.281	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	740	185	96	2523	0.293	740	473	0.5	0.4	2.021	A
B - Eagle Way West	45	11	525	1018	0.044	45	4	0.1	0.0	3.702	A
C - A12 South	462	116	67	2046	0.226	462	607	0.4	0.3	2.272	A
D - Anson Rd East	121	30	553	1296	0.093	121	283	0.1	0.1	3.063	A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	43.99	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1934	100.000
B - Eagle Way West		ONE HOUR	✓	172	100.000
C - A12 South		ONE HOUR	✓	1469	100.000
D - Anson Rd East		ONE HOUR	✓	388	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	61	1207	665
	B - Eagle Way West	95	0	57	20
	C - A12 South	1189	7	0	273
	D - Anson Rd East	264	2	121	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	7	1
	B - Eagle Way West	5	0	2	6
	C - A12 South	9	0	0	3
	D - Anson Rd East	0	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.03	64.17	42.2	F	1774	2662
B - Eagle Way West	0.85	77.77	3.8	F	157	236
C - A12 South	0.86	13.09	5.7	B	1348	2021
D - Anson Rd East	0.88	49.37	5.6	E	356	534

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1456	364	262	2431	0.599	1450	1160	0.0	1.5	3.645	A
B - Eagle Way West	129	32	1294	654	0.197	128	52	0.0	0.2	6.831	A
C - A12 South	1106	276	246	1957	0.565	1100	1038	0.0	1.3	4.180	A
D - Anson Rd East	292	73	994	1109	0.263	290	718	0.0	0.4	4.392	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1738	435	314	2400	0.724	1734	1389	1.5	2.6	5.372	A
B - Eagle Way West	154	39	1549	526	0.293	154	63	0.2	0.4	9.641	A
C - A12 South	1320	330	295	1926	0.686	1317	1242	1.3	2.1	5.880	A
D - Anson Rd East	348	87	1189	1007	0.346	348	859	0.4	0.5	5.459	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2129	532	379	2135	0.997	2051	1682	2.6	22.1	30.065	D
B - Eagle Way West	189	47	1880	257	0.735	181	75	0.4	2.3	43.970	E
C - A12 South	1617	404	351	1890	0.856	1604	1470	2.1	5.4	12.063	B
D - Anson Rd East	427	107	1406	533	0.801	415	1025	0.5	3.5	28.319	D

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2129	532	382	2072	1.028	2049	1695	22.1	42.2	64.165	F
B - Eagle Way West	189	47	1895	223	0.846	183	75	2.3	3.8	77.771	F
C - A12 South	1617	404	353	1888	0.856	1616	1470	5.4	5.7	13.089	B
D - Anson Rd East	427	107	1405	482	0.885	418	1026	3.5	5.6	49.372	E

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1738	435	323	2394	0.726	1896	1424	42.2	2.7	9.919	A
B - Eagle Way West	154	39	1580	511	0.302	168	68	3.8	0.4	10.892	B
C - A12 South	1320	330	314	1913	0.690	1334	1354	5.7	2.3	6.351	A
D - Anson Rd East	348	87	1300	948	0.367	368	919	5.6	0.6	6.420	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1456	364	264	2430	0.599	1461	1170	2.7	1.5	3.734	A
B - Eagle Way West	129	32	1305	649	0.199	130	53	0.4	0.3	6.948	A
C - A12 South	1106	276	248	1955	0.565	1109	1046	2.3	1.3	4.276	A
D - Anson Rd East	292	73	1002	1105	0.264	293	724	0.6	0.4	4.440	A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	88.01	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2111	100.000
B - Eagle Way West		ONE HOUR	✓	229	100.000
C - A12 South		ONE HOUR	✓	1697	100.000
D - Anson Rd East		ONE HOUR	✓	432	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	175	1218	717
	B - Eagle Way West	149	0	34	46
	C - A12 South	1501	23	0	173
	D - Anson Rd East	312	22	96	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	10	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	9	5	0	5
	D - Anson Rd East	3	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.02	56.64	39.8	F	1937	2905
B - Eagle Way West	1.04	166.87	11.7	F	210	315
C - A12 South	1.07	128.30	74.6	F	1558	2336
D - Anson Rd East	0.86	37.81	4.8	E	396	594

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1589	397	189	2427	0.655	1581	1468	0.0	1.9	4.222	A
B - Eagle Way West	172	43	1486	552	0.312	170	165	0.0	0.4	9.398	A
C - A12 South	1278	319	382	1855	0.689	1269	1010	0.0	2.2	6.062	A
D - Anson Rd East	325	81	1069	1055	0.308	323	701	0.0	0.4	4.909	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1897	474	226	2405	0.789	1890	1752	1.9	3.6	6.909	A
B - Eagle Way West	206	51	1775	406	0.507	203	197	0.4	1.0	17.607	C
C - A12 South	1526	381	457	1806	0.845	1515	1207	2.2	5.0	11.901	B
D - Anson Rd East	388	97	1278	943	0.411	387	838	0.4	0.7	6.462	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2324	581	256	2344	0.991	2252	2007	3.6	21.5	27.926	D
B - Eagle Way West	252	63	2033	261	0.964	230	234	1.0	6.5	84.566	F
C - A12 South	1869	467	549	1747	1.070	1719	1438	5.0	42.5	59.445	F
D - Anson Rd East	475	119	1521	618	0.769	466	987	0.7	3.0	22.486	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2324	581	259	2280	1.019	2251	2029	21.5	39.8	56.640	F
B - Eagle Way West	252	63	2056	242	1.040	231	235	6.5	11.7	166.865	F
C - A12 South	1869	467	550	1746	1.070	1741	1438	42.5	74.6	128.298	F
D - Anson Rd East	475	119	1520	556	0.855	468	989	3.0	4.8	37.815	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1897	474	263	2382	0.797	2040	2009	39.8	4.1	15.103	C
B - Eagle Way West	206	51	2035	273	0.753	237	214	11.7	3.9	109.614	F
C - A12 South	1526	381	483	1789	0.853	1766	1302	74.6	14.6	95.274	F
D - Anson Rd East	388	97	1382	888	0.437	404	921	4.8	0.8	7.681	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1589	397	200	2420	0.657	1598	1531	4.1	1.9	4.424	A
B - Eagle Way West	172	43	1546	521	0.330	186	168	3.9	0.5	11.141	B
C - A12 South	1278	319	386	1852	0.690	1327	1022	14.6	2.3	7.499	A
D - Anson Rd East	325	81	1082	1048	0.310	326	716	0.8	0.5	4.997	A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	174.90	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1987	100.000
B - Eagle Way West		ONE HOUR	✓	239	100.000
C - A12 South		ONE HOUR	✓	1742	100.000
D - Anson Rd East		ONE HOUR	✓	925	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	169	1021	797
	B - Eagle Way West	141	0	28	70
	C - A12 South	1414	45	1	282
	D - Anson Rd East	559	76	290	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	8	1
	B - Eagle Way West	4	0	0	2
	C - A12 South	7	0	100	2
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	18.49	10.6	C	1823	2734
B - Eagle Way West	1.04	196.79	13.4	F	219	329
C - A12 South	1.19	355.40	162.0	F	1598	2398
D - Anson Rd East	1.09	161.18	50.4	F	849	1273

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1496	374	285	2418	0.619	1489	1577	0.0	1.6	3.852	A
B - Eagle Way West	180	45	1684	478	0.377	177	216	0.0	0.6	11.905	B
C - A12 South	1311	328	600	1760	0.745	1300	1004	0.0	2.8	7.644	A
D - Anson Rd East	696	174	913	1160	0.600	690	860	0.0	1.5	7.569	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1786	446	337	2386	0.749	1781	1870	1.6	2.9	5.898	A
B - Eagle Way West	215	54	1996	322	0.668	210	258	0.6	1.8	30.989	D
C - A12 South	1566	391	717	1684	0.930	1538	1199	2.8	9.8	21.451	C
D - Anson Rd East	831	208	1092	1065	0.780	824	1025	1.5	3.3	14.493	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2187	547	359	2372	0.922	2160	2003	2.9	9.7	15.349	C
B - Eagle Way West	263	66	2127	257	1.024	235	300	1.8	8.7	108.655	F
C - A12 South	1918	479	814	1620	1.184	1613	1427	9.8	85.9	115.309	F
D - Anson Rd East	1018	255	1322	942	1.081	918	1197	3.3	28.2	75.549	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2187	547	363	2370	0.923	2184	2015	9.7	10.6	18.489	C
B - Eagle Way West	263	66	2134	254	1.038	244	303	8.7	13.4	190.232	F
C - A12 South	1918	479	823	1614	1.188	1614	1443	85.9	162.0	282.759	F
D - Anson Rd East	1018	255	1337	934	1.090	930	1209	28.2	50.4	161.181	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1786	446	350	2378	0.751	1816	2032	10.6	3.1	6.739	A
B - Eagle Way West	215	54	2159	242	0.887	224	278	13.4	11.1	196.788	F
C - A12 South	1566	391	850	1597	0.981	1587	1278	162.0	156.8	355.398	F
D - Anson Rd East	831	208	1115	1053	0.789	1013	1052	50.4	4.9	96.806	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1496	374	370	2365	0.632	1501	1966	3.1	1.7	4.193	A
B - Eagle Way West	180	45	2124	256	0.704	213	230	11.1	2.9	99.839	F
C - A12 South	1311	328	614	1751	0.749	1740	1020	156.8	49.6	215.613	F
D - Anson Rd East	696	174	925	1154	0.603	710	947	4.9	1.6	8.329	A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	141.57	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1788	100.000
B - Eagle Way West		ONE HOUR	✓	169	100.000
C - A12 South		ONE HOUR	✓	1769	100.000
D - Anson Rd East		ONE HOUR	✓	937	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	96	1055	637
	B - Eagle Way West	101	0	30	37
	C - A12 South	1451	43	0	274
	D - Anson Rd East	622	81	234	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	4	1
	B - Eagle Way West	3	0	0	0
	C - A12 South	3	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	7.58	4.1	A	1641	2461
B - Eagle Way West	0.85	88.31	4.2	F	155	232
C - A12 South	1.17	295.79	148.8	F	1623	2435
D - Anson Rd East	1.04	116.10	35.5	F	860	1290

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1346	336	256	2489	0.541	1341	1623	0.0	1.2	3.125	A
B - Eagle Way West	127	32	1754	472	0.269	126	165	0.0	0.4	10.343	B
C - A12 South	1332	333	597	1829	0.728	1321	989	0.0	2.6	6.957	A
D - Anson Rd East	706	176	886	1203	0.587	700	712	0.0	1.4	7.082	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1607	402	304	2459	0.654	1604	1930	1.2	1.9	4.199	A
B - Eagle Way West	152	38	2085	310	0.489	149	197	0.4	0.9	22.086	C
C - A12 South	1590	398	714	1751	0.908	1568	1183	2.6	8.1	17.904	C
D - Anson Rd East	843	211	1060	1113	0.757	837	849	1.4	3.0	12.744	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1968	492	331	2443	0.806	1960	2107	1.9	4.0	7.325	A
B - Eagle Way West	186	46	2262	224	0.828	176	229	0.9	3.4	64.873	F
C - A12 South	1948	487	823	1677	1.161	1667	1427	8.1	78.2	101.819	F
D - Anson Rd East	1032	258	1293	992	1.041	957	997	3.0	21.9	60.026	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1968	492	333	2442	0.806	1968	2123	4.0	4.1	7.585	A
B - Eagle Way West	186	46	2274	218	0.850	182	231	3.4	4.2	88.306	F
C - A12 South	1948	487	839	1666	1.169	1665	1438	78.2	148.8	250.512	F
D - Anson Rd East	1032	258	1300	988	1.044	977	1001	21.9	35.5	116.103	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1607	402	324	2447	0.657	1616	2109	4.1	1.9	4.372	A
B - Eagle Way West	152	38	2275	218	0.696	158	211	4.2	2.6	64.280	F
C - A12 South	1590	398	815	1682	0.945	1671	1224	148.8	128.6	295.792	F
D - Anson Rd East	843	211	1069	1108	0.760	971	871	35.5	3.5	44.054	E

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1346	336	335	2441	0.552	1349	2035	1.9	1.2	3.307	A
B - Eagle Way West	127	32	2238	235	0.540	132	178	2.6	1.3	36.672	E
C - A12 South	1332	333	608	1822	0.731	1808	998	128.6	9.7	141.432	F
D - Anson Rd East	706	176	892	1200	0.588	714	791	3.5	1.5	7.529	A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	912	100.000
B - Eagle Way West		ONE HOUR	✓	60	100.000
C - A12 South		ONE HOUR	✓	759	100.000
D - Anson Rd East		ONE HOUR	✓	161	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	713	194
	B - Eagle Way West	32	0	19	9
	C - A12 South	659	1	0	99
	D - Anson Rd East	81	0	80	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	10	0	0	12
	D - Anson Rd East	9	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.40	2.42	0.7	A	836	1255
B - Eagle Way West	0.08	4.81	0.1	A	55	82
C - A12 South	0.42	3.06	0.7	A	697	1045
D - Anson Rd East	0.15	3.64	0.2	A	148	221

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	686	172	95	2518	0.273	685	579	0.0	0.4	1.962	A
B - Eagle Way West	45	11	630	962	0.047	45	4	0.0	0.0	3.921	A
C - A12 South	572	143	64	2032	0.281	570	609	0.0	0.4	2.460	A
D - Anson Rd East	121	30	553	1297	0.093	121	227	0.0	0.1	3.059	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	819	205	114	2505	0.327	819	693	0.4	0.5	2.135	A
B - Eagle Way West	53	13	754	899	0.059	53	5	0.0	0.1	4.255	A
C - A12 South	683	171	77	2024	0.337	682	729	0.4	0.5	2.683	A
D - Anson Rd East	145	36	661	1242	0.116	144	272	0.1	0.1	3.278	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1004	251	140	2489	0.403	1003	848	0.5	0.7	2.422	A
B - Eagle Way West	66	16	923	814	0.081	65	6	0.1	0.1	4.812	A
C - A12 South	836	209	94	2012	0.416	835	893	0.5	0.7	3.058	A
D - Anson Rd East	177	44	810	1167	0.152	177	333	0.1	0.2	3.634	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1004	251	140	2488	0.403	1004	849	0.7	0.7	2.424	A
B - Eagle Way West	66	16	924	813	0.081	66	6	0.1	0.1	4.815	A
C - A12 South	836	209	94	2012	0.416	836	893	0.7	0.7	3.060	A
D - Anson Rd East	177	44	810	1167	0.152	177	333	0.2	0.2	3.636	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	819	205	115	2505	0.327	820	694	0.7	0.5	2.137	A
B - Eagle Way West	53	13	755	899	0.060	54	5	0.1	0.1	4.261	A
C - A12 South	683	171	77	2024	0.337	683	730	0.7	0.5	2.687	A
D - Anson Rd East	145	36	662	1242	0.116	145	272	0.2	0.1	3.280	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	686	172	96	2517	0.273	687	581	0.5	0.4	1.966	A
B - Eagle Way West	45	11	632	961	0.047	45	4	0.1	0.0	3.928	A
C - A12 South	572	143	64	2032	0.281	572	611	0.5	0.4	2.467	A
D - Anson Rd East	121	30	555	1297	0.093	121	228	0.1	0.1	3.064	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	40.26	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1649	100.000
B - Eagle Way West		ONE HOUR	✓	172	100.000
C - A12 South		ONE HOUR	✓	1561	100.000
D - Anson Rd East		ONE HOUR	✓	312	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	61	1206	381
	B - Eagle Way West	95	0	57	20
	C - A12 South	1309	7	0	245
	D - Anson Rd East	192	2	117	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	7	2
	B - Eagle Way West	5	0	2	6
	C - A12 South	12	0	0	4
	D - Anson Rd East	0	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	53.56	29.1	F	1513	2270
B - Eagle Way West	0.89	92.18	4.6	F	157	236
C - A12 South	0.91	19.31	8.7	C	1433	2149
D - Anson Rd East	0.86	51.79	4.7	F	286	429

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1241	310	241	2429	0.511	1237	1196	0.0	1.0	3.012	A
B - Eagle Way West	129	32	1309	632	0.204	128	53	0.0	0.3	7.135	A
C - A12 South	1176	294	192	1948	0.603	1170	1035	0.0	1.5	4.588	A
D - Anson Rd East	235	59	994	1105	0.212	234	485	0.0	0.3	4.127	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1482	371	288	2400	0.618	1480	1431	1.0	1.6	3.905	A
B - Eagle Way West	154	39	1566	499	0.309	153	63	0.3	0.4	10.386	B
C - A12 South	1404	351	230	1925	0.729	1399	1239	1.5	2.6	6.791	A
D - Anson Rd East	280	70	1189	1003	0.279	280	580	0.3	0.4	4.974	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1815	454	347	1871	0.970	1761	1729	1.6	15.2	25.559	D
B - Eagle Way West	189	47	1897	247	0.764	180	75	0.4	2.6	48.923	E
C - A12 South	1719	430	274	1897	0.906	1697	1473	2.6	8.1	16.464	C
D - Anson Rd East	343	86	1414	451	0.762	333	695	0.4	2.8	28.760	D

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1815	454	351	1795	1.011	1760	1747	15.2	29.1	53.563	F
B - Eagle Way West	189	47	1917	213	0.886	181	75	2.6	4.6	92.175	F
C - A12 South	1719	430	275	1897	0.906	1716	1473	8.1	8.7	19.311	C
D - Anson Rd East	343	86	1413	397	0.864	335	697	2.8	4.7	51.795	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1482	371	301	2392	0.620	1592	1475	29.1	1.7	5.169	A
B - Eagle Way West	154	39	1605	480	0.321	171	67	4.6	0.5	12.241	B
C - A12 South	1404	351	245	1915	0.733	1427	1333	8.7	2.8	7.714	A
D - Anson Rd East	280	70	1281	955	0.293	297	612	4.7	0.4	5.616	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1241	310	244	2427	0.511	1244	1208	1.7	1.1	3.050	A
B - Eagle Way West	129	32	1321	625	0.207	130	53	0.5	0.3	7.279	A
C - A12 South	1176	294	193	1948	0.604	1181	1041	2.8	1.5	4.726	A
D - Anson Rd East	235	59	999	1102	0.213	235	488	0.4	0.3	4.157	A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	107.75	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2071	100.000
B - Eagle Way West		ONE HOUR	✓	229	100.000
C - A12 South		ONE HOUR	✓	1717	100.000
D - Anson Rd East		ONE HOUR	✓	340	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	175	1237	659
	B - Eagle Way West	149	0	34	46
	C - A12 South	1537	23	0	156
	D - Anson Rd East	222	22	95	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	11	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	13	5	0	5
	D - Anson Rd East	4	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	87.59	63.6	F	1901	2851
B - Eagle Way West	1.06	180.50	12.8	F	210	315
C - A12 South	1.07	131.98	77.7	F	1575	2363
D - Anson Rd East	0.88	54.25	5.3	F	312	467

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1559	390	177	2417	0.645	1552	1427	0.0	1.8	4.130	A
B - Eagle Way West	172	43	1433	557	0.309	170	165	0.0	0.4	9.263	A
C - A12 South	1293	323	315	1844	0.701	1283	1023	0.0	2.3	6.323	A
D - Anson Rd East	256	64	1083	1034	0.247	254	645	0.0	0.3	4.608	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1862	466	211	2396	0.777	1856	1703	1.8	3.4	6.583	A
B - Eagle Way West	206	51	1710	413	0.498	204	198	0.4	1.0	17.034	C
C - A12 South	1543	386	376	1805	0.855	1531	1223	2.3	5.4	12.602	B
D - Anson Rd East	305	76	1295	921	0.331	305	771	0.3	0.5	5.835	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2281	570	238	2216	1.029	2161	1939	3.4	33.2	39.062	E
B - Eagle Way West	252	63	1950	257	0.981	228	230	1.0	7.0	90.068	F
C - A12 South	1890	473	444	1762	1.073	1736	1425	5.4	44.0	60.814	F
D - Anson Rd East	374	93	1507	462	0.809	362	892	0.5	3.5	32.690	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2281	570	240	2170	1.051	2159	1961	33.2	63.6	87.587	F
B - Eagle Way West	252	63	1972	238	1.059	229	230	7.0	12.8	180.495	F
C - A12 South	1890	473	447	1760	1.074	1755	1426	44.0	77.7	131.981	F
D - Anson Rd East	374	93	1506	425	0.880	367	893	3.5	5.3	54.253	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1862	466	246	2375	0.784	2101	1948	63.6	3.9	26.502	D
B - Eagle Way West	206	51	1949	288	0.715	245	223	12.8	3.1	100.604	F
C - A12 South	1543	386	411	1783	0.866	1760	1381	77.7	23.5	106.910	F
D - Anson Rd East	305	76	1469	828	0.369	324	879	5.3	0.6	7.408	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1559	390	189	2409	0.647	1567	1520	3.9	1.9	4.317	A
B - Eagle Way West	172	43	1526	508	0.339	182	168	3.1	0.5	11.386	B
C - A12 South	1293	323	318	1842	0.702	1377	1035	23.5	2.4	9.203	A
D - Anson Rd East	256	64	1096	1028	0.249	257	661	0.6	0.3	4.675	A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	196.07	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1752	100.000
B - Eagle Way West		ONE HOUR	✓	239	100.000
C - A12 South		ONE HOUR	✓	1727	100.000
D - Anson Rd East		ONE HOUR	✓	908	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	169	1027	557
	B - Eagle Way West	141	0	28	70
	C - A12 South	1399	45	1	282
	D - Anson Rd East	533	76	299	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	11	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	10	0	100	2
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.96	25.95	14.0	D	1608	2412
B - Eagle Way West	1.16	301.11	22.2	F	219	329
C - A12 South	1.20	369.02	165.3	F	1585	2377
D - Anson Rd East	1.09	162.71	49.8	F	833	1249

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1319	330	284	2367	0.557	1314	1546	0.0	1.2	3.404	A
B - Eagle Way West	180	45	1653	477	0.377	177	217	0.0	0.6	11.917	B
C - A12 South	1300	325	581	1732	0.751	1289	1015	0.0	2.9	7.929	A
D - Anson Rd East	683	171	918	1147	0.596	678	680	0.0	1.4	7.576	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1575	394	336	2336	0.674	1572	1832	1.2	2.0	4.691	A
B - Eagle Way West	215	54	1958	322	0.667	210	258	0.6	1.8	30.873	D
C - A12 South	1553	388	694	1660	0.936	1523	1213	2.9	10.3	22.617	C
D - Anson Rd East	816	204	1098	1049	0.778	809	810	1.4	3.3	14.535	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1929	482	352	2169	0.890	1909	1949	2.0	7.1	12.966	B
B - Eagle Way West	263	66	2080	235	1.120	221	300	1.8	12.2	145.444	F
C - A12 South	1901	475	787	1600	1.189	1593	1442	10.3	87.4	118.942	F
D - Anson Rd East	999	250	1329	923	1.082	900	932	3.3	28.2	76.671	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1929	482	352	2017	0.957	1902	1955	7.1	14.0	25.947	D
B - Eagle Way West	263	66	2085	226	1.163	223	301	12.2	22.2	301.113	F
C - A12 South	1901	475	795	1591	1.195	1590	1442	87.4	165.3	292.103	F
D - Anson Rd East	999	250	1325	918	1.089	913	930	28.2	49.8	162.707	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1575	394	354	2326	0.677	1623	1992	14.0	2.1	5.463	A
B - Eagle Way West	215	54	2110	247	0.869	236	280	22.2	16.8	299.300	F
C - A12 South	1553	388	823	1577	0.985	1567	1307	165.3	161.6	369.021	F
D - Anson Rd East	816	204	1136	1029	0.793	994	841	49.8	5.1	100.136	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1319	330	377	2312	0.571	1322	1935	2.1	1.3	3.649	A
B - Eagle Way West	180	45	2077	258	0.696	235	230	16.8	3.1	152.435	F
C - A12 South	1300	325	595	1722	0.755	1712	1033	161.6	58.7	233.575	F
D - Anson Rd East	683	171	931	1141	0.599	698	769	5.1	1.5	8.385	A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	134.64	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1633	100.000
B - Eagle Way West		ONE HOUR	✓	169	100.000
C - A12 South		ONE HOUR	✓	1743	100.000
D - Anson Rd East		ONE HOUR	✓	920	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	96	1054	483
	B - Eagle Way West	101	0	30	37
	C - A12 South	1428	43	0	272
	D - Anson Rd East	609	81	229	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	7	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	4	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	6.09	3.0	A	1498	2247
B - Eagle Way West	0.84	84.30	4.0	F	155	232
C - A12 South	1.16	270.72	137.9	F	1600	2400
D - Anson Rd East	1.04	117.27	35.2	F	845	1267

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1229	307	255	2435	0.505	1225	1597	0.0	1.0	2.965	A
B - Eagle Way West	127	32	1726	480	0.265	126	165	0.0	0.4	10.117	B
C - A12 South	1312	328	588	1818	0.722	1302	985	0.0	2.5	6.856	A
D - Anson Rd East	693	173	885	1191	0.582	688	594	0.0	1.4	7.079	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1468	367	303	2406	0.610	1466	1900	1.0	1.5	3.819	A
B - Eagle Way West	152	38	2053	319	0.476	150	197	0.4	0.9	21.023	C
C - A12 South	1567	392	703	1741	0.900	1547	1178	2.5	7.6	16.995	C
D - Anson Rd East	827	207	1059	1098	0.754	821	709	1.4	2.9	12.731	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1798	449	331	2389	0.752	1792	2085	1.5	3.0	5.969	A
B - Eagle Way West	186	46	2240	227	0.817	176	229	0.9	3.2	62.183	F
C - A12 South	1919	480	810	1670	1.149	1659	1422	7.6	72.6	95.812	F
D - Anson Rd East	1013	253	1294	973	1.042	938	829	2.9	21.7	60.703	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1798	449	334	2388	0.753	1797	2102	3.0	3.0	6.093	A
B - Eagle Way West	186	46	2253	221	0.841	183	231	3.2	4.0	84.304	F
C - A12 South	1919	480	826	1659	1.157	1658	1432	72.6	137.9	234.004	F
D - Anson Rd East	1013	253	1299	970	1.045	959	832	21.7	35.2	117.271	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1468	367	324	2394	0.613	1473	2087	3.0	1.6	3.935	A
B - Eagle Way West	152	38	2254	220	0.688	157	212	4.0	2.5	61.216	F
C - A12 South	1567	392	803	1674	0.936	1662	1217	137.9	114.1	270.716	F
D - Anson Rd East	827	207	1066	1094	0.756	955	731	35.2	3.4	43.482	E

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1229	307	329	2391	0.514	1231	1982	1.6	1.1	3.110	A
B - Eagle Way West	127	32	2177	256	0.495	133	178	2.5	1.0	30.380	D
C - A12 South	1312	328	599	1811	0.725	1756	993	114.1	3.2	112.929	F
D - Anson Rd East	693	173	891	1188	0.583	701	669	3.4	1.4	7.510	A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1011	100.000
B - Eagle Way West		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	645	100.000
D - Anson Rd East		ONE HOUR	✓	164	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	736	270
	B - Eagle Way West	33	0	19	10
	C - A12 South	535	1	0	108
	D - Anson Rd East	82	0	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	8	0	0	11
	D - Anson Rd East	9	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.45	2.62	0.8	A	927	1391
B - Eagle Way West	0.08	4.43	0.1	A	57	85
C - A12 South	0.35	2.71	0.5	A	592	888
D - Anson Rd East	0.16	3.69	0.2	A	150	226

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	761	190	103	2519	0.302	759	488	0.0	0.4	2.044	A
B - Eagle Way West	46	12	545	1009	0.046	46	5	0.0	0.0	3.740	A
C - A12 South	485	121	65	2059	0.236	484	629	0.0	0.3	2.287	A
D - Anson Rd East	123	31	571	1292	0.096	123	291	0.0	0.1	3.080	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	909	227	123	2506	0.363	908	584	0.4	0.6	2.253	A
B - Eagle Way West	56	14	652	955	0.058	55	5	0.0	0.1	4.001	A
C - A12 South	580	145	78	2050	0.283	579	752	0.3	0.4	2.448	A
D - Anson Rd East	147	37	683	1235	0.119	147	348	0.1	0.1	3.309	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1113	278	151	2488	0.447	1112	715	0.6	0.8	2.615	A
B - Eagle Way West	68	17	798	882	0.077	68	7	0.1	0.1	4.424	A
C - A12 South	710	177	96	2038	0.348	709	921	0.4	0.5	2.708	A
D - Anson Rd East	180	45	836	1157	0.156	180	426	0.1	0.2	3.685	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1113	278	151	2488	0.447	1113	716	0.8	0.8	2.617	A
B - Eagle Way West	68	17	799	881	0.077	68	7	0.1	0.1	4.426	A
C - A12 South	710	177	96	2038	0.348	710	922	0.5	0.5	2.711	A
D - Anson Rd East	180	45	837	1157	0.156	180	427	0.2	0.2	3.686	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	909	227	124	2506	0.363	910	585	0.8	0.6	2.258	A
B - Eagle Way West	56	14	653	955	0.058	56	5	0.1	0.1	4.004	A
C - A12 South	580	145	78	2050	0.283	580	753	0.5	0.4	2.452	A
D - Anson Rd East	147	37	684	1234	0.119	147	349	0.2	0.1	3.312	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	761	190	103	2519	0.302	761	490	0.6	0.4	2.048	A
B - Eagle Way West	46	12	547	1008	0.046	47	5	0.1	0.0	3.747	A
C - A12 South	485	121	66	2058	0.236	486	631	0.4	0.3	2.291	A
D - Anson Rd East	123	31	573	1291	0.096	123	292	0.1	0.1	3.083	A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	53.55	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1995	100.000
B - Eagle Way West		ONE HOUR	✓	178	100.000
C - A12 South		ONE HOUR	✓	1612	100.000
D - Anson Rd East		ONE HOUR	✓	395	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	63	1228	704
	B - Eagle Way West	98	0	59	21
	C - A12 South	1315	7	0	290
	D - Anson Rd East	271	2	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	6	1
	B - Eagle Way West	5	0	2	6
	C - A12 South	7	0	0	3
	D - Anson Rd East	0	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.04	73.66	50.8	F	1831	2746
B - Eagle Way West	0.92	105.75	5.4	F	163	245
C - A12 South	0.93	24.03	11.1	C	1479	2219
D - Anson Rd East	0.89	51.84	6.0	F	362	543

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1502	375	277	2440	0.616	1496	1262	0.0	1.6	3.789	A
B - Eagle Way West	134	33	1405	606	0.221	133	54	0.0	0.3	7.590	A
C - A12 South	1213	303	253	1980	0.613	1207	1056	0.0	1.6	4.621	A
D - Anson Rd East	297	74	1012	1107	0.268	296	760	0.0	0.4	4.428	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1794	448	331	2406	0.745	1788	1509	1.6	2.9	5.777	A
B - Eagle Way West	160	40	1681	469	0.341	159	65	0.3	0.5	11.568	B
C - A12 South	1449	362	302	1948	0.744	1444	1262	1.6	2.8	7.070	A
D - Anson Rd East	355	89	1211	1004	0.353	354	909	0.4	0.5	5.535	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2197	549	397	2172	1.011	2102	1817	2.9	26.4	33.687	D
B - Eagle Way West	196	49	2029	241	0.814	185	77	0.5	3.2	56.988	F
C - A12 South	1775	444	359	1912	0.928	1746	1485	2.8	9.9	19.175	C
D - Anson Rd East	435	109	1423	531	0.818	422	1077	0.5	3.8	30.058	D

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2197	549	402	2116	1.038	2099	1840	26.4	50.8	73.660	F
B - Eagle Way West	196	49	2055	213	0.918	187	77	3.2	5.4	105.751	F
C - A12 South	1775	444	362	1910	0.929	1770	1485	9.9	11.1	24.029	C
D - Anson Rd East	435	109	1421	486	0.894	426	1080	3.8	6.0	51.845	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1794	448	347	2397	0.748	1984	1566	50.8	3.1	13.750	B
B - Eagle Way West	160	40	1734	444	0.361	179	72	5.4	0.6	14.594	B
C - A12 South	1449	362	324	1934	0.749	1481	1397	11.1	3.1	8.479	A
D - Anson Rd East	355	89	1344	934	0.380	376	987	6.0	0.6	6.696	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1502	375	280	2438	0.616	1508	1274	3.1	1.6	3.894	A
B - Eagle Way West	134	33	1419	600	0.223	135	55	0.6	0.3	7.771	A
C - A12 South	1213	303	255	1979	0.613	1219	1065	3.1	1.6	4.775	A
D - Anson Rd East	297	74	1021	1103	0.270	298	767	0.6	0.4	4.481	A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	70.31	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2108	100.000
B - Eagle Way West		ONE HOUR	✓	237	100.000
C - A12 South		ONE HOUR	✓	1665	100.000
D - Anson Rd East		ONE HOUR	✓	462	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	182	1217	710
	B - Eagle Way West	155	0	35	47
	C - A12 South	1469	24	0	172
	D - Anson Rd East	331	23	108	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	8	2
	B - Eagle Way West	4	0	0	8
	C - A12 South	8	5	0	4
	D - Anson Rd East	3	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	40.00	26.7	E	1934	2902
B - Eagle Way West	1.03	154.53	11.2	F	218	327
C - A12 South	1.05	107.34	60.3	F	1528	2292
D - Anson Rd East	0.82	29.04	4.0	D	424	637

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1587	397	191	2457	0.646	1580	1462	0.0	1.8	4.070	A
B - Eagle Way West	179	45	1476	564	0.317	177	171	0.0	0.5	9.255	A
C - A12 South	1254	313	402	1862	0.673	1246	1019	0.0	2.0	5.770	A
D - Anson Rd East	348	87	1074	1063	0.327	346	697	0.0	0.5	5.008	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1895	474	228	2435	0.778	1889	1746	1.8	3.4	6.520	A
B - Eagle Way West	213	53	1763	420	0.508	211	205	0.5	1.0	17.068	C
C - A12 South	1497	374	481	1810	0.827	1487	1218	2.0	4.5	10.835	B
D - Anson Rd East	416	104	1284	953	0.436	415	833	0.5	0.8	6.677	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2321	580	261	2414	0.961	2275	2023	3.4	15.0	21.062	C
B - Eagle Way West	261	65	2044	273	0.957	240	246	1.0	6.4	80.504	F
C - A12 South	1834	458	582	1744	1.051	1708	1466	4.5	35.8	52.217	F
D - Anson Rd East	509	127	1544	712	0.716	503	991	0.8	2.4	16.762	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2321	580	264	2331	0.996	2274	2049	15.0	26.7	39.998	E
B - Eagle Way West	261	65	2071	255	1.026	242	246	6.4	11.2	154.531	F
C - A12 South	1834	458	582	1744	1.051	1735	1466	35.8	60.3	107.345	F
D - Anson Rd East	509	127	1544	620	0.821	503	994	2.4	4.0	29.043	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1895	474	264	2412	0.786	1987	1980	26.7	3.8	10.261	B
B - Eagle Way West	213	53	1997	302	0.706	247	217	11.2	2.8	80.064	F
C - A12 South	1497	374	500	1798	0.833	1714	1283	60.3	6.0	62.056	F
D - Anson Rd East	416	104	1354	916	0.454	428	896	4.0	0.8	7.564	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1587	397	197	2453	0.647	1595	1492	3.8	1.9	4.230	A
B - Eagle Way West	179	45	1502	551	0.324	188	173	2.8	0.5	10.166	B
C - A12 South	1254	313	406	1859	0.674	1269	1030	6.0	2.1	6.256	A
D - Anson Rd East	348	87	1086	1057	0.329	350	706	0.8	0.5	5.099	A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	380.83	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2126	100.000
B - Eagle Way West		ONE HOUR	✓	248	100.000
C - A12 South		ONE HOUR	✓	1936	100.000
D - Anson Rd East		ONE HOUR	✓	891	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	175	1200	751
	B - Eagle Way West	146	0	29	73
	C - A12 South	1563	46	1	325
	D - Anson Rd East	540	79	271	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	6	1
	B - Eagle Way West	4	0	0	2
	C - A12 South	6	0	100	2
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.08	127.76	95.0	F	1951	2926
B - Eagle Way West	1.31	558.77	36.3	F	228	342
C - A12 South	1.32	658.76	311.5	F	1776	2664
D - Anson Rd East	1.21	324.14	82.9	F	817	1226

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1601	400	318	2420	0.661	1593	1674	0.0	1.9	4.314	A
B - Eagle Way West	187	47	1809	421	0.443	184	225	0.0	0.8	14.962	B
C - A12 South	1457	364	593	1783	0.817	1440	1124	0.0	4.2	10.075	B
D - Anson Rd East	671	168	1052	1095	0.612	664	859	0.0	1.5	8.238	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1911	478	367	2390	0.800	1904	1942	1.9	3.8	7.286	A
B - Eagle Way West	223	56	2095	279	0.798	214	267	0.8	3.1	49.380	E
C - A12 South	1740	435	707	1707	1.019	1655	1341	4.2	25.5	42.225	E
D - Anson Rd East	801	200	1257	988	0.810	791	1014	1.5	3.9	17.491	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2341	585	361	2184	1.072	2152	1952	3.8	51.0	54.050	F
B - Eagle Way West	273	68	2107	211	1.295	205	291	3.1	20.0	235.763	F
C - A12 South	2131	533	758	1641	1.298	1640	1494	25.5	148.3	198.013	F
D - Anson Rd East	981	245	1417	848	1.157	835	1096	3.9	40.3	109.544	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2341	585	358	2169	1.079	2165	1921	51.0	95.0	127.760	F
B - Eagle Way West	273	68	2071	209	1.308	208	289	20.0	36.3	496.164	F
C - A12 South	2131	533	742	1619	1.317	1619	1494	148.3	276.5	478.487	F
D - Anson Rd East	981	245	1425	811	1.209	810	1098	40.3	82.9	281.158	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1911	478	366	2166	0.882	2144	1940	95.0	36.9	112.902	F
B - Eagle Way West	223	56	2071	234	0.951	234	289	36.3	33.5	558.773	F
C - A12 South	1740	435	761	1600	1.087	1600	1494	276.5	311.5	658.757	F
D - Anson Rd East	801	200	1415	850	0.941	840	1095	82.9	73.0	324.140	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1601	400	372	2387	0.671	1740	2038	36.9	2.1	6.922	A
B - Eagle Way West	187	47	2175	241	0.775	234	267	33.5	21.7	429.137	F
C - A12 South	1457	364	807	1641	0.888	1636	1301	311.5	266.9	636.749	F
D - Anson Rd East	671	168	1153	1043	0.643	955	958	73.0	2.0	109.128	F

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	186.21	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1804	100.000
B - Eagle Way West		ONE HOUR	✓	175	100.000
C - A12 South		ONE HOUR	✓	1821	100.000
D - Anson Rd East		ONE HOUR	✓	909	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	100	1191	513
	B - Eagle Way West	105	0	32	39
	C - A12 South	1477	45	0	299
	D - Anson Rd East	606	84	217	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	2	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	2	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	30.50	17.0	D	1655	2482
B - Eagle Way West	1.06	212.61	11.3	F	161	241
C - A12 South	1.18	349.30	165.0	F	1671	2506
D - Anson Rd East	1.09	162.93	50.2	F	834	1251

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1358	339	276	2492	0.545	1353	1633	0.0	1.2	3.148	A
B - Eagle Way West	132	33	1779	461	0.286	130	171	0.0	0.4	10.821	B
C - A12 South	1371	343	591	1838	0.746	1359	1079	0.0	2.8	7.358	A
D - Anson Rd East	684	171	992	1154	0.593	678	637	0.0	1.4	7.480	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1621	405	327	2461	0.659	1618	1938	1.2	1.9	4.260	A
B - Eagle Way West	157	39	2110	300	0.525	155	204	0.4	1.0	24.389	C
C - A12 South	1637	409	706	1761	0.930	1609	1291	2.8	9.9	20.688	C
D - Anson Rd East	817	204	1186	1054	0.775	810	759	1.4	3.2	14.304	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1986	496	347	2166	0.917	1957	2078	1.9	9.0	15.520	C
B - Eagle Way West	193	48	2254	193	0.999	171	233	1.0	6.6	113.106	F
C - A12 South	2005	501	795	1700	1.179	1693	1540	9.9	87.9	112.201	F
D - Anson Rd East	1000	250	1432	927	1.079	903	873	3.2	27.5	75.163	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1986	496	349	2045	0.971	1954	2087	9.0	17.0	30.500	D
B - Eagle Way West	193	48	2262	182	1.060	174	234	6.6	11.3	212.607	F
C - A12 South	2005	501	800	1697	1.182	1696	1540	87.9	165.0	274.993	F
D - Anson Rd East	1000	250	1430	914	1.094	910	873	27.5	50.2	162.934	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1621	405	348	2448	0.662	1681	2118	17.0	2.0	5.068	A
B - Eagle Way West	157	39	2277	219	0.720	189	226	11.3	3.3	132.297	F
C - A12 South	1637	409	851	1662	0.985	1652	1383	165.0	161.2	349.295	F
D - Anson Rd East	817	204	1238	1028	0.794	996	792	50.2	5.3	102.187	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1358	339	355	2444	0.556	1361	2023	2.0	1.3	3.332	A
B - Eagle Way West	132	33	2238	237	0.557	140	185	3.3	1.4	39.508	E
C - A12 South	1371	343	607	1827	0.750	1816	1091	161.2	50.0	211.431	F
D - Anson Rd East	684	171	999	1150	0.595	699	716	5.3	1.5	8.236	A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	2.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	936	100.000
B - Eagle Way West		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	646	100.000
D - Anson Rd East		ONE HOUR	✓	164	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	5	737	194
	B - Eagle Way West	33	0	19	10
	C - A12 South	536	1	0	108
	D - Anson Rd East	82	0	82	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	25	6	2
	B - Eagle Way West	7	0	6	0
	C - A12 South	8	0	0	11
	D - Anson Rd East	9	0	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.48	0.7	A	859	1288
B - Eagle Way West	0.08	4.43	0.1	A	57	85
C - A12 South	0.35	2.71	0.5	A	593	889
D - Anson Rd East	0.16	3.69	0.2	A	150	226

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	704	176	103	2513	0.280	703	489	0.0	0.4	1.986	A
B - Eagle Way West	46	12	546	1008	0.046	46	5	0.0	0.0	3.741	A
C - A12 South	486	122	65	2059	0.236	485	629	0.0	0.3	2.287	A
D - Anson Rd East	123	31	571	1291	0.096	123	235	0.0	0.1	3.081	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	841	210	123	2500	0.336	841	585	0.4	0.5	2.169	A
B - Eagle Way West	56	14	653	955	0.058	55	5	0.0	0.1	4.003	A
C - A12 South	581	145	78	2050	0.283	580	753	0.3	0.4	2.449	A
D - Anson Rd East	147	37	684	1235	0.119	147	281	0.1	0.1	3.310	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1030	258	151	2482	0.415	1029	716	0.5	0.7	2.476	A
B - Eagle Way West	68	17	800	881	0.077	68	7	0.1	0.1	4.427	A
C - A12 South	711	178	96	2038	0.349	711	921	0.4	0.5	2.710	A
D - Anson Rd East	180	45	837	1157	0.156	180	344	0.1	0.2	3.686	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1030	258	151	2482	0.415	1030	717	0.7	0.7	2.478	A
B - Eagle Way West	68	17	800	881	0.077	68	7	0.1	0.1	4.428	A
C - A12 South	711	178	96	2038	0.349	711	922	0.5	0.5	2.712	A
D - Anson Rd East	180	45	838	1156	0.156	180	344	0.2	0.2	3.687	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	841	210	124	2500	0.336	842	586	0.7	0.5	2.173	A
B - Eagle Way West	56	14	654	954	0.058	56	5	0.1	0.1	4.008	A
C - A12 South	581	145	78	2050	0.283	581	754	0.5	0.4	2.451	A
D - Anson Rd East	147	37	685	1234	0.119	147	281	0.2	0.1	3.312	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	704	176	103	2513	0.280	705	491	0.5	0.4	1.991	A
B - Eagle Way West	46	12	548	1007	0.046	47	5	0.1	0.0	3.748	A
C - A12 South	486	122	66	2059	0.236	487	631	0.4	0.3	2.290	A
D - Anson Rd East	123	31	573	1291	0.096	123	235	0.1	0.1	3.084	A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	62.37	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1702	100.000
B - Eagle Way West		ONE HOUR	✓	178	100.000
C - A12 South		ONE HOUR	✓	1602	100.000
D - Anson Rd East		ONE HOUR	✓	327	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	1	63	1251	387
	B - Eagle Way West	98	0	59	21
	C - A12 South	1317	7	0	278
	D - Anson Rd East	203	2	122	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	2	6	2
	B - Eagle Way West	5	0	2	6
	C - A12 South	8	0	0	3
	D - Anson Rd East	0	0	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.06	94.07	56.9	F	1562	2343
B - Eagle Way West	0.98	133.95	7.4	F	163	245
C - A12 South	0.90	18.16	8.4	C	1470	2205
D - Anson Rd East	0.94	79.93	7.6	F	300	450

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1281	320	268	2429	0.528	1277	1213	0.0	1.1	3.115	A
B - Eagle Way West	134	33	1347	632	0.212	133	54	0.0	0.3	7.196	A
C - A12 South	1206	301	202	2007	0.601	1200	1074	0.0	1.5	4.429	A
D - Anson Rd East	246	61	1031	1092	0.225	245	514	0.0	0.3	4.245	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1530	383	320	2396	0.639	1528	1451	1.1	1.7	4.131	A
B - Eagle Way West	160	40	1612	500	0.320	159	65	0.3	0.5	10.535	B
C - A12 South	1440	360	242	1981	0.727	1436	1285	1.5	2.6	6.543	A
D - Anson Rd East	294	73	1233	987	0.298	293	615	0.3	0.4	5.185	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1874	469	383	1821	1.029	1766	1746	1.7	28.9	40.602	E
B - Eagle Way West	196	49	1948	222	0.881	181	76	0.5	4.2	71.713	F
C - A12 South	1764	441	281	1956	0.902	1743	1485	2.6	7.8	15.583	C
D - Anson Rd East	360	90	1424	412	0.872	342	725	0.4	4.8	44.035	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1874	469	387	1772	1.058	1762	1766	28.9	56.9	94.066	F
B - Eagle Way West	196	49	1970	200	0.981	183	76	4.2	7.4	133.953	F
C - A12 South	1764	441	285	1953	0.903	1761	1485	7.8	8.4	18.159	C
D - Anson Rd East	360	90	1422	383	0.940	348	727	4.8	7.6	79.934	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1530	383	338	2386	0.641	1751	1507	56.9	1.8	8.262	A
B - Eagle Way West	160	40	1657	478	0.335	188	74	7.4	0.5	13.563	B
C - A12 South	1440	360	268	1964	0.733	1462	1469	8.4	2.8	7.479	A
D - Anson Rd East	294	73	1415	893	0.329	322	673	7.6	0.5	6.625	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1281	320	270	2427	0.528	1284	1224	1.8	1.1	3.157	A
B - Eagle Way West	134	33	1360	626	0.214	135	55	0.5	0.3	7.346	A
C - A12 South	1206	301	203	2006	0.601	1211	1081	2.8	1.5	4.559	A
D - Anson Rd East	246	61	1037	1089	0.226	247	518	0.5	0.3	4.281	A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	126.51	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	2110	100.000
B - Eagle Way West		ONE HOUR	✓	237	100.000
C - A12 South		ONE HOUR	✓	1815	100.000
D - Anson Rd East		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	182	1269	659
	B - Eagle Way West	155	0	35	47
	C - A12 South	1617	24	0	174
	D - Anson Rd East	220	23	107	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	3	8	3
	B - Eagle Way West	4	0	0	8
	C - A12 South	8	5	0	5
	D - Anson Rd East	4	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.06	99.91	74.7	F	1936	2904
B - Eagle Way West	1.11	219.68	16.5	F	218	327
C - A12 South	1.10	157.55	98.7	F	1666	2499
D - Anson Rd East	0.90	59.96	6.1	F	322	482

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1589	397	192	2446	0.650	1581	1489	0.0	1.8	4.131	A
B - Eagle Way West	179	45	1504	545	0.328	177	171	0.0	0.5	9.715	A
C - A12 South	1367	342	319	1911	0.715	1357	1057	0.0	2.5	6.393	A
D - Anson Rd East	264	66	1114	1031	0.256	262	660	0.0	0.3	4.675	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1897	474	229	2423	0.783	1890	1776	1.8	3.5	6.674	A
B - Eagle Way West	213	53	1793	399	0.534	211	205	0.5	1.1	18.852	C
C - A12 South	1632	408	381	1869	0.873	1617	1264	2.5	6.2	13.531	B
D - Anson Rd East	315	79	1331	917	0.343	314	788	0.3	0.5	5.964	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2323	581	254	2228	1.043	2183	1993	3.5	38.7	43.306	E
B - Eagle Way West	261	65	2016	253	1.032	230	236	1.1	8.8	105.932	F
C - A12 South	1999	500	446	1827	1.094	1806	1460	6.2	54.2	69.304	F
D - Anson Rd East	386	96	1535	461	0.837	372	901	0.5	4.1	36.020	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2323	581	255	2187	1.062	2180	2010	38.7	74.7	99.911	F
B - Eagle Way West	261	65	2035	236	1.105	231	237	8.8	16.5	219.683	F
C - A12 South	1999	500	450	1824	1.096	1821	1460	54.2	98.7	157.554	F
D - Anson Rd East	386	96	1533	429	0.899	378	902	4.1	6.1	59.956	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1897	474	267	2399	0.791	2179	2009	74.7	4.1	37.350	E
B - Eagle Way West	213	53	2012	289	0.738	264	234	16.5	3.8	140.139	F
C - A12 South	1632	408	422	1843	0.886	1824	1453	98.7	50.6	148.862	F
D - Anson Rd East	315	79	1538	809	0.389	337	909	6.1	0.6	7.965	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1589	397	216	2431	0.654	1597	1680	4.1	1.9	4.364	A
B - Eagle Way West	179	45	1704	444	0.402	191	176	3.8	0.7	14.920	B
C - A12 South	1367	342	322	1908	0.716	1558	1070	50.6	2.6	17.633	C
D - Anson Rd East	264	66	1127	1024	0.258	265	687	0.6	0.3	4.748	A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	423.39	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1945	100.000
B - Eagle Way West		ONE HOUR	✓	248	100.000
C - A12 South		ONE HOUR	✓	1937	100.000
D - Anson Rd East		ONE HOUR	✓	887	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	175	1213	557
	B - Eagle Way West	146	0	29	73
	C - A12 South	1564	46	1	325
	D - Anson Rd East	543	79	265	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	1	6	2
	B - Eagle Way West	4	0	0	2
	C - A12 South	6	0	100	2
	D - Anson Rd East	2	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.08	127.61	86.5	F	1785	2677
B - Eagle Way West	1.31	562.94	36.4	F	228	342
C - A12 South	1.35	718.58	336.5	F	1777	2666
D - Anson Rd East	1.25	383.18	93.5	F	814	1220

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1464	366	318	2412	0.607	1458	1677	0.0	1.5	3.751	A
B - Eagle Way West	187	47	1811	420	0.445	184	225	0.0	0.8	15.036	C
C - A12 South	1458	364	595	1781	0.818	1441	1129	0.0	4.2	10.128	B
D - Anson Rd East	668	167	1063	1090	0.612	661	714	0.0	1.5	8.280	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1749	437	367	2382	0.734	1744	1944	1.5	2.7	5.598	A
B - Eagle Way West	223	56	2097	279	0.800	214	267	0.8	3.1	49.812	E
C - A12 South	1741	435	709	1706	1.021	1654	1349	4.2	25.9	42.737	E
D - Anson Rd East	797	199	1270	982	0.812	788	840	1.5	3.9	17.737	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2142	535	356	2001	1.070	1967	1923	2.7	46.3	53.385	F
B - Eagle Way West	273	68	2074	210	1.299	205	288	3.1	20.2	237.661	F
C - A12 South	2132	533	747	1617	1.319	1615	1494	25.9	155.1	209.343	F
D - Anson Rd East	976	244	1428	823	1.186	813	895	3.9	44.8	122.230	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2142	535	352	1986	1.079	1981	1877	46.3	86.5	127.615	F
B - Eagle Way West	273	68	2021	209	1.306	208	286	20.2	36.4	497.647	F
C - A12 South	2132	533	726	1580	1.349	1580	1494	155.1	293.1	516.276	F
D - Anson Rd East	976	244	1439	782	1.248	782	894	44.8	93.5	323.917	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1749	437	361	1982	0.882	1960	1905	86.5	33.8	112.677	F
B - Eagle Way West	223	56	2031	235	0.951	235	287	36.4	33.5	562.941	F
C - A12 South	1741	435	750	1568	1.111	1568	1494	293.1	336.5	718.580	F
D - Anson Rd East	797	199	1427	826	0.965	818	894	93.5	88.4	383.180	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1464	366	365	2383	0.614	1593	2051	33.8	1.6	5.380	A
B - Eagle Way West	187	47	2186	236	0.791	229	272	33.5	22.9	447.387	F
C - A12 South	1458	364	853	1610	0.905	1606	1323	336.5	299.6	713.196	F
D - Anson Rd East	668	167	1164	1037	0.644	1011	793	88.4	2.4	159.577	F

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	C - A12 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J24	A12 / Eagle Way / Anson Rd	Standard Roundabout		A, D, C, B	176.75	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1835	100.000
B - Eagle Way West		ONE HOUR	✓	175	100.000
C - A12 South		ONE HOUR	✓	1768	100.000
D - Anson Rd East		ONE HOUR	✓	897	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	100	1252	483
	B - Eagle Way West	105	0	32	39
	C - A12 South	1466	45	0	257
	D - Anson Rd East	588	84	224	1

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Eagle Way West	C - A12 South	D - Anson Rd East
From	A - A12 North	0	0	2	2
	B - Eagle Way West	3	0	0	0
	C - A12 South	2	0	0	1
	D - Anson Rd East	1	0	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	92.67	58.8	F	1683	2525
B - Eagle Way West	1.11	247.52	13.5	F	161	241
C - A12 South	1.12	216.13	113.1	F	1622	2433
D - Anson Rd East	1.20	258.21	78.8	F	823	1234

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1381	345	245	2511	0.550	1376	1612	0.0	1.2	3.160	A
B - Eagle Way West	132	33	1727	487	0.271	130	171	0.0	0.4	10.057	B
C - A12 South	1331	333	577	1847	0.721	1321	1129	0.0	2.5	6.719	A
D - Anson Rd East	675	169	1037	1131	0.597	669	584	0.0	1.4	7.706	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1649	412	292	2482	0.664	1646	1918	1.2	2.0	4.290	A
B - Eagle Way West	157	39	2054	327	0.481	155	204	0.4	0.9	20.711	C
C - A12 South	1589	397	689	1772	0.897	1570	1350	2.5	7.4	16.426	C
D - Anson Rd East	806	202	1241	1026	0.785	798	697	1.4	3.4	15.279	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2020	505	318	1955	1.033	1901	2085	2.0	31.6	40.815	E
B - Eagle Way West	193	48	2237	186	1.036	167	227	0.9	7.4	124.255	F
C - A12 South	1946	487	742	1736	1.121	1721	1539	7.4	63.6	83.139	F
D - Anson Rd East	987	247	1431	866	1.140	851	789	3.4	37.4	100.607	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	2020	505	323	1922	1.051	1911	2089	31.6	58.8	92.667	F
B - Eagle Way West	193	48	2244	174	1.107	169	225	7.4	13.5	247.521	F
C - A12 South	1946	487	721	1750	1.112	1748	1539	63.6	113.1	189.035	F
D - Anson Rd East	987	247	1438	823	1.199	822	796	37.4	78.8	258.211	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1649	412	326	2051	0.804	1866	2122	58.8	4.5	37.712	E
B - Eagle Way West	157	39	2249	226	0.697	199	231	13.5	3.0	143.992	F
C - A12 South	1589	397	795	1700	0.935	1685	1540	113.1	89.1	216.127	F
D - Anson Rd East	806	202	1411	936	0.862	924	782	78.8	49.3	247.655	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1381	345	300	2477	0.558	1394	2038	4.5	1.3	3.364	A
B - Eagle Way West	132	33	2199	257	0.514	139	199	3.0	1.1	32.408	D
C - A12 South	1331	333	726	1746	0.762	1672	1192	89.1	3.8	89.078	F
D - Anson Rd East	675	169	1052	1123	0.601	866	642	49.3	1.6	29.941	D

Project and User Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	J25_Model_v11_Fixed.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 2, 40, 0

Network Results**Scenario 1: '2019 Base Year 6-7AM'** (FG1: '17BY_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	67.3%
J25 - A12 / Main Road / P&R	-	-	-	67.3%
1/1	A12 North Left Ahead	1.6	4.8	19.6%
1/2+1/3	A12 North Ahead	2.6	4.7	30.2 : 30.2%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.7	5.6 : 5.6%
3/2+3/1	A12 South Left Ahead	2.6	8.9	25.9 : 25.9%
3/3	A12 South Ahead	2.0	9.3	19.2%
4/1	A1214 Main Road (W) Left Ahead	2.3	36.1	45.4%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	4.0	36.0	67.3 : 67.3%
5/1	Park and Ride Exit Left	0.0	0.0	0.0%
5/2	Park and Ride Exit Ahead	0.0	14.7	0.3%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.3	15.3	13.2%
8/2	Internal 1 Right	0.4	8.6	27.8%
8/3	Internal 1 Right	0.9	9.3	36.1%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	6.9	0.6%
10/2	Internal 2 Right	1.2	7.5	26.8%
10/3	Internal 2 Right Right2	0.9	7.3	20.7%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	2.0	17.7	24.7 : 24.7%	
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	33.8	Total Delay for Signalled Lanes (pcuHr):	5.41	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	149.3	Total Delay for Signalled Lanes (pcuHr):	1.81	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	247.6	Total Delay for Signalled Lanes (pcuHr):	2.30	Cycle Time (s): 60
	PRC Over All Lanes (%)	33.8	Total Delay Over All Lanes(pcuHr):	9.56	

Scenario 2: '2019 Base Year 7-8AM' (FG2: '17BY_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	85.5%
J25 - A12 / Main Road / P&R	-	-	-	85.5%
1/1	A12 North Left Ahead	4.3	7.7	39.2%
1/2+1/3	A12 North Ahead	5.9	7.4	52.3 : 52.3%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.4	13.5 : 13.5%
3/2+3/1	A12 South Left Ahead	8.8	16.7	66.7 : 66.7%
3/3	A12 South Ahead	7.3	17.7	58.6%
4/1	A1214 Main Road (W) Left Ahead	8.1	34.8	77.7%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	10.0	34.6	85.5 : 85.5%
5/1	Park and Ride Exit Left	0.0	29.8	1.1%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.8	16.8	22.6%
8/2	Internal 1 Right	1.6	17.1	54.3%
8/3	Internal 1 Right	1.7	17.5	58.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	1.7	3.7%
10/2	Internal 2 Right	0.5	3.2	51.1%
10/3	Internal 2 Right Right2	0.5	3.1	46.2%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	5.2	16.1	44.3 : 44.3%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	5.2	Total Delay for Signalled Lanes (pcuHr):	11.59 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	53.0	Total Delay for Signalled Lanes (pcuHr):	6.24 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	35.0	Total Delay for Signalled Lanes (pcuHr):	8.51 Cycle Time (s): 60
	PRC Over All Lanes (%)	5.2	Total Delay Over All Lanes(pcuHr):	26.41

Scenario 3: '2019 Base Year 8-9AM' (FG3: '17BY_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	88.7%
J25 - A12 / Main Road / P&R	-	-	-	88.7%
1/1	A12 North Left Ahead	7.0	12.5	55.6%
1/2+1/3	A12 North Ahead	9.0	11.9	67.1 : 67.1%
2/2+2/1	Main Road (E) Left Ahead	0.2	4.0	23.4 : 23.4%
3/2+3/1	A12 South Left Ahead	8.8	11.7	65.8 : 65.8%
3/3	A12 South Ahead	8.3	12.9	59.6%
4/1	A1214 Main Road (W) Left Ahead	5.5	19.8	51.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	13.2	32.3	88.7 : 88.7%
5/1	Park and Ride Exit Left	0.1	29.9	1.9%
5/2	Park and Ride Exit Ahead	0.2	29.6	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	1.1	11.3	22.3%
8/2	Internal 1 Right	1.8	7.7	54.8%
8/3	Internal 1 Right	3.2	9.1	57.0%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.2	7.6	5.5%
10/2	Internal 2 Right	4.1	13.1	74.6%
10/3	Internal 2 Right Right2	3.8	12.5	72.1%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		8.1	34.1	71.4 : 71.4%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	1.5	Total Delay for Signalled Lanes (pcuHr):	14.95	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	34.1	Total Delay for Signalled Lanes (pcuHr):	7.97	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	26.0	Total Delay for Signalled Lanes (pcuHr):	10.12	Cycle Time (s):	60
	PRC Over All Lanes (%)	1.5	Total Delay Over All Lanes(pcuHr):	33.21		

Scenario 4: '2019 Base Year 3-4PM' (FG4: '17BY_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	85.8%
J25 - A12 / Main Road / P&R	-	-	-	85.8%
1/1	A12 North Left Ahead	9.1	21.4	61.0%
1/2+1/3	A12 North Ahead	11.4	20.5	72.5 : 72.5%
2/2+2/1	Main Road (E) Left Ahead	0.9	4.8	30.4 : 30.4%
3/2+3/1	A12 South Left Ahead	15.8	28.2	85.8 : 85.8%
3/3	A12 South Ahead	13.5	29.2	78.0%
4/1	A1214 Main Road (W) Left Ahead	7.5	30.9	62.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	9.6	31.7	77.3 : 77.3%
5/1	Park and Ride Exit Left	0.1	27.9	0.9%
5/2	Park and Ride Exit Ahead	0.2	27.7	2.0%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.4	17.4	17.3%
8/2	Internal 1 Right	0.4	4.1	29.7%
8/3	Internal 1 Right	0.5	4.2	32.6%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	2.1	0.2%
10/2	Internal 2 Right	1.5	7.1	72.4%
10/3	Internal 2 Right Right2	1.2	6.1	67.8%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.1	22.1	53.7 : 53.7%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	16.5	Total Delay for Signalled Lanes (pcuHr):	11.44	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	24.1	Total Delay for Signalled Lanes (pcuHr):	10.25	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	4.9	Total Delay for Signalled Lanes (pcuHr):	18.44	Cycle Time (s):	75
	PRC Over All Lanes (%)	4.9	Total Delay Over All Lanes(pcuHr):	40.43		

Scenario 5: '2019 Base Year 5-6PM' (FG5: '17BY_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	84.8%
J25 - A12 / Main Road / P&R	-	-	-	84.8%
1/1	A12 North Left Ahead	10.3	34.1	75.1%
1/2+1/3	A12 North Ahead	13.6	33.0	84.8 : 84.8%
2/2+2/1	Main Road (E) Left Ahead	1.3	5.3	35.6 : 35.6%
3/2+3/1	A12 South Left Ahead	13.5	22.0	79.5 : 79.5%
3/3	A12 South Ahead	11.7	22.3	68.6%
4/1	A1214 Main Road (W) Left Ahead	5.7	28.1	50.6%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	6.9	28.0	66.7 : 66.7%
5/1	Park and Ride Exit Left	0.4	35.9	7.5%
5/2	Park and Ride Exit Ahead	0.4	35.5	7.8%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.6	9.7	18.5%
8/2	Internal 1 Right	0.2	2.1	16.3%
8/3	Internal 1 Right	0.2	2.2	23.0%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	6.0	0.8%
10/2	Internal 2 Right	1.0	4.4	60.9%
10/3	Internal 2 Right Right2	0.8	4.0	57.6%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		11.3	29.9	65.0 : 65.0%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	34.9	Total Delay for Signalled Lanes (pcuHr):	8.66	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	6.2	Total Delay for Signalled Lanes (pcuHr):	14.01	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	13.2	Total Delay for Signalled Lanes (pcuHr):	16.33	Cycle Time (s):	75
	PRC Over All Lanes (%)	6.2	Total Delay Over All Lanes(pcuHr):	39.42		

Scenario 6: '2023 Reference Case 6-7AM' (FG6: '23RC_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	68.2%
J25 - A12 / Main Road / P&R	-	-	-	68.2%
1/1	A12 North Left Ahead	1.9	4.9	21.8%
1/2+1/3	A12 North Ahead	2.9	4.7	32.7 : 32.7%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.7	5.6 : 5.6%
3/2+3/1	A12 South Left Ahead	2.8	9.0	28.0 : 28.0%
3/3	A12 South Ahead	2.1	9.4	20.9%
4/1	A1214 Main Road (W) Left Ahead	2.4	36.5	46.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	4.1	36.2	68.2 : 68.2%
5/1	Park and Ride Exit Left	0.0	14.8	0.1%
5/2	Park and Ride Exit Ahead	0.0	14.7	0.3%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.3	17.3	10.2%
8/2	Internal 1 Right	0.4	8.8	29.5%
8/3	Internal 1 Right	1.0	9.5	37.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	7.6	0.7%
10/2	Internal 2 Right	1.3	7.6	28.9%
10/3	Internal 2 Right Right2	1.0	7.3	22.6%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	2.4	18.1	28.2 : 28.2%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	32.1	Total Delay for Signalled Lanes (pcuHr):	5.67
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	138.1	Total Delay for Signalled Lanes (pcuHr):	1.97
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	219.5	Total Delay for Signalled Lanes (pcuHr):	2.59
	PRC Over All Lanes (%)	32.1	Total Delay Over All Lanes(pcuHr):	10.25
				Cycle Time (s): 60
				Cycle Time (s): 60
				Cycle Time (s): 60

Scenario 7: '2023 Reference Case 7-8AM' (FG7: '23RC_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	86.1%
J25 - A12 / Main Road / P&R	-	-	-	86.1%
1/1	A12 North Left Ahead	5.1	8.3	45.4%
1/2+1/3	A12 North Ahead	6.8	7.9	57.9 : 57.9%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.6	14.8 : 14.8%
3/2+3/1	A12 South Left Ahead	9.9	17.6	71.0 : 71.0%
3/3	A12 South Ahead	8.1	18.6	63.1%
4/1	A1214 Main Road (W) Left Ahead	8.3	35.6	78.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	10.2	35.3	86.1 : 86.1%
5/1	Park and Ride Exit Left	0.0	29.8	1.1%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.7	17.8	18.1%
8/2	Internal 1 Right	1.6	17.3	54.3%
8/3	Internal 1 Right	1.8	17.9	59.4%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	2.1	4.0%
10/2	Internal 2 Right	0.6	3.5	54.7%
10/3	Internal 2 Right Right2	0.6	3.2	49.5%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		5.8	16.8	48.1 : 48.1%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	4.5	Total Delay for Signalled Lanes (pcuHr):	12.05	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	51.4	Total Delay for Signalled Lanes (pcuHr):	6.83	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	26.7	Total Delay for Signalled Lanes (pcuHr):	9.64	Cycle Time (s):	60
	PRC Over All Lanes (%)	4.5	Total Delay Over All Lanes(pcuHr):	28.61		

Scenario 8: '2023 Reference Case 8-9AM' (FG8: '23RC_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	89.3%
J25 - A12 / Main Road / P&R	-	-	-	89.3%
1/1	A12 North Left Ahead	8.7	13.9	63.7%
1/2+1/3	A12 North Ahead	11.0	13.2	74.9 : 74.9%
2/2+2/1	Main Road (E) Left Ahead	0.3	4.3	25.1 : 25.1%
3/2+3/1	A12 South Left Ahead	13.1	19.6	81.3 : 81.3%
3/3	A12 South Ahead	12.3	23.1	79.0%
4/1	A1214 Main Road (W) Left Ahead	5.8	20.1	53.2%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	13.5	33.1	89.3 : 89.3%
5/1	Park and Ride Exit Left	0.1	29.9	2.3%
5/2	Park and Ride Exit Ahead	0.2	29.6	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	1.3	11.5	23.0%
8/2	Internal 1 Right	1.9	7.9	55.7%
8/3	Internal 1 Right	3.2	9.2	57.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.2	7.8	5.9%
10/2	Internal 2 Right	6.4	19.5	80.0%
10/3	Internal 2 Right Right2	5.8	18.1	78.0%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.4	31.5	66.5 : 66.5%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	0.8	Total Delay for Signalled Lanes (pcuHr):	18.21	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	20.1	Total Delay for Signalled Lanes (pcuHr):	9.66	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	10.7	Total Delay for Signalled Lanes (pcuHr):	16.10	Cycle Time (s):	60
	PRC Over All Lanes (%)	0.8	Total Delay Over All Lanes(pcuHr):	44.16		

Scenario 9: '2023 Reference Case 3-4PM' (FG9: '23RC_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	107.2%
J25 - A12 / Main Road / P&R	-	-	-	107.2%
1/1	A12 North Left Ahead	7.3	10.0	50.0%
1/2+1/3	A12 North Ahead	8.6	9.6	63.1 : 63.1%
2/2+2/1	Main Road (E) Left Ahead	1.6	8.7	52.3 : 52.3%
3/2+3/1	A12 South Left Ahead	65.8	147.3	107.2 : 103.8%
3/3	A12 South Ahead	42.2	161.4	105.5%
4/1	A1214 Main Road (W) Left Ahead	7.0	25.3	54.3%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	9.8	26.7	73.3 : 73.3%
5/1	Park and Ride Exit Left	0.1	39.0	2.3%
5/2	Park and Ride Exit Ahead	0.2	38.7	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	3.8	28.5	36.7%
8/2	Internal 1 Right	6.2	12.8	57.6%
8/3	Internal 1 Right	6.2	13.1	57.7%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	1.8	0.2%
10/2	Internal 2 Right	1.1	5.1	65.2%
10/3	Internal 2 Right Right2	1.0	4.9	64.8%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.5	16.8	56.5 : 56.5%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	22.8	Total Delay for Signalled Lanes (pcuHr):	9.82	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	42.7	Total Delay for Signalled Lanes (pcuHr):	8.45	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-19.2	Total Delay for Signalled Lanes (pcuHr):	91.33	Cycle Time (s):	75
	PRC Over All Lanes (%)	-19.2	Total Delay Over All Lanes(pcuHr):	110.28		

Scenario 10: '2023 Reference Case 5-6PM' (FG10: '23RC_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	81.0%
J25 - A12 / Main Road / P&R	-	-	-	81.0%
1/1	A12 North Left Ahead	6.4	9.0	45.6%
1/2+1/3	A12 North Ahead	7.5	8.6	59.0 : 59.0%
2/2+2/1	Main Road (E) Left Ahead	1.2	5.9	44.8 : 44.8%
3/2+3/1	A12 South Left Ahead	12.8	17.7	77.8 : 77.8%
3/3	A12 South Ahead	11.7	18.0	65.9%
4/1	A1214 Main Road (W) Left Ahead	5.5	23.6	44.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	6.7	23.5	60.5 : 60.5%
5/1	Park and Ride Exit Left	0.4	39.8	9.9%
5/2	Park and Ride Exit Ahead	0.5	39.2	10.1%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	3.9	23.9	49.3%
8/2	Internal 1 Right	1.6	18.1	45.6%
8/3	Internal 1 Right	1.7	18.3	50.1%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	8.0	0.8%
10/2	Internal 2 Right	4.2	11.6	67.7%
10/3	Internal 2 Right Right2	4.1	11.4	66.7%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.6	34.3	81.0 : 81.0%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	33.0	Total Delay for Signalled Lanes (pcuHr):	10.82	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	52.6	Total Delay for Signalled Lanes (pcuHr):	8.08	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	11.2	Total Delay for Signalled Lanes (pcuHr):	15.55	Cycle Time (s):	75
	PRC Over All Lanes (%)	11.2	Total Delay Over All Lanes(pcuHr):	34.92		

Scenario 11: '2023 Early Years 6-7AM' (FG11: '23EY_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	37.8%
J25 - A12 / Main Road / P&R	-	-	-	37.8%
1/1	A12 North Left Ahead	2.0	5.3	22.8%
1/2+1/3	A12 North Ahead	3.0	5.2	33.8 : 33.8%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.7	5.6 : 5.6%
3/2+3/1	A12 South Left Ahead	3.3	8.8	32.0 : 32.0%
3/3	A12 South Ahead	2.6	9.2	25.0%
4/1	A1214 Main Road (W) Left Ahead	1.9	18.7	22.7%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	2.8	18.6	37.8 : 37.8%
5/1	Park and Ride Exit Left	0.0	29.8	0.4%
5/2	Park and Ride Exit Ahead	0.0	29.4	0.7%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.3	18.3	9.3%
8/2	Internal 1 Right	0.5	14.3	27.8%
8/3	Internal 1 Right	0.6	14.5	33.3%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	4.9	0.7%
10/2	Internal 2 Right	0.4	3.0	30.8%
10/3	Internal 2 Right Right2	0.3	2.8	25.3%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	2.6	21.2	29.8 : 29.8%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	138.2	Total Delay for Signalled Lanes (pcuHr):	3.00 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	166.7	Total Delay for Signalled Lanes (pcuHr):	2.45 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	181.3	Total Delay for Signalled Lanes (pcuHr):	2.96 Cycle Time (s): 60
	PRC Over All Lanes (%)	138.2	Total Delay Over All Lanes(pcuHr):	8.43

Scenario 12: '2023 Early Years 7-8AM' (FG12: '23EY_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	74.2%
J25 - A12 / Main Road / P&R	-	-	-	74.2%
1/1	A12 North Left Ahead	5.3	7.9	46.2%
1/2+1/3	A12 North Ahead	6.8	7.5	58.5 : 58.5%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.7	15.0 : 15.0%
3/2+3/1	A12 South Left Ahead	9.3	12.7	67.0 : 67.0%
3/3	A12 South Ahead	8.6	14.0	61.8%
4/1	A1214 Main Road (W) Left Ahead	6.5	21.1	58.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	7.7	20.9	70.7 : 70.7%
5/1	Park and Ride Exit Left	0.0	29.8	1.1%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.7	23.8	9.5%
8/2	Internal 1 Right	5.2	17.2	62.4%
8/3	Internal 1 Right	5.1	17.5	62.1%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	5.9	4.8%
10/2	Internal 2 Right	3.2	10.9	74.2%
10/3	Internal 2 Right Right2	3.0	10.4	72.0%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		6.2	21.1	62.5 : 62.5%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	21.4	Total Delay for Signalled Lanes (pcuHr):	10.87	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	44.2	Total Delay for Signalled Lanes (pcuHr):	6.59	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	34.4	Total Delay for Signalled Lanes (pcuHr):	8.66	Cycle Time (s):	60
	PRC Over All Lanes (%)	21.4	Total Delay Over All Lanes(pcuHr):	26.21		

Scenario 13: '2023 Early Years 8-9AM' (FG13: '23EY_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	86.7%
J25 - A12 / Main Road / P&R	-	-	-	86.7%
1/1	A12 North Left Ahead	8.1	12.0	60.5%
1/2+1/3	A12 North Ahead	10.2	11.4	72.6 : 72.6%
2/2+2/1	Main Road (E) Left Ahead	0.3	4.3	25.1 : 25.1%
3/2+3/1	A12 South Left Ahead	13.5	18.4	81.9 : 81.9%
3/3	A12 South Ahead	12.6	21.1	78.5%
4/1	A1214 Main Road (W) Left Ahead	6.7	21.5	60.1%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	12.1	29.9	86.7 : 86.7%
5/1	Park and Ride Exit Left	0.1	29.9	2.3%
5/2	Park and Ride Exit Ahead	0.2	29.6	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	1.6	15.2	22.8%
8/2	Internal 1 Right	5.7	11.0	61.6%
8/3	Internal 1 Right	5.9	12.1	64.9%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	4.4	5.9%
10/2	Internal 2 Right	4.1	14.5	85.6%
10/3	Internal 2 Right Right2	3.6	12.8	83.2%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.0	23.8	75.8 : 75.8%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	3.8	Total Delay for Signalled Lanes (pcuHr):	15.93	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	23.9	Total Delay for Signalled Lanes (pcuHr):	9.48	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	9.9	Total Delay for Signalled Lanes (pcuHr):	14.88	Cycle Time (s):	60
	PRC Over All Lanes (%)	3.8	Total Delay Over All Lanes(pcuHr):	40.48		

Scenario 14: '2023 Early Years 3-4PM' (FG14: '23EY_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	152.4%
J25 - A12 / Main Road / P&R	-	-	-	152.4%
1/1	A12 North Left Ahead	7.8	10.3	52.2%
1/2+1/3	A12 North Ahead	9.2	9.8	65.2 : 65.2%
2/2+2/1	Main Road (E) Left Ahead	1.9	10.4	57.3 : 57.3%
3/2+3/1	A12 South Left Ahead	244.1	628.9	152.4 : 135.7%
3/3	A12 South Ahead	155.4	700.2	151.8%
4/1	A1214 Main Road (W) Left Ahead	7.4	28.2	59.4%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	10.8	30.5	78.0 : 78.0%
5/1	Park and Ride Exit Left	0.1	39.0	2.3%
5/2	Park and Ride Exit Ahead	0.2	38.7	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.7	22.3	29.5%
8/2	Internal 1 Right	5.6	11.2	57.6%
8/3	Internal 1 Right	5.6	11.5	57.3%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	1.7	0.1%
10/2	Internal 2 Right	0.5	3.2	44.8%
10/3	Internal 2 Right Right2	0.4	3.0	44.6%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.5	14.4	50.6 : 50.6%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	15.3	Total Delay for Signalled Lanes (pcuHr):	9.80	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	37.9	Total Delay for Signalled Lanes (pcuHr):	7.94	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-69.3	Total Delay for Signalled Lanes (pcuHr):	390.94	Cycle Time (s):	75
	PRC Over All Lanes (%)	-69.3	Total Delay Over All Lanes(pcuHr):	409.51		

Scenario 15: '2023 Early Years 5-6PM' (FG15: '23EY_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	83.8%
J25 - A12 / Main Road / P&R	-	-	-	83.8%
1/1	A12 North Left Ahead	6.7	8.7	47.5%
1/2+1/3	A12 North Ahead	8.0	8.4	61.8 : 61.8%
2/2+2/1	Main Road (E) Left Ahead	0.5	3.5	26.4 : 27.3%
3/2+3/1	A12 South Left Ahead	12.9	17.3	78.5 : 78.5%
3/3	A12 South Ahead	11.7	17.3	65.9%
4/1	A1214 Main Road (W) Left Ahead	5.6	24.6	46.3%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	6.9	24.7	61.8 : 61.8%
5/1	Park and Ride Exit Left	0.4	39.8	9.9%
5/2	Park and Ride Exit Ahead	0.5	39.2	10.1%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	4.1	25.5	52.2%
8/2	Internal 1 Right	1.6	18.8	49.1%
8/3	Internal 1 Right	1.5	18.4	49.4%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	7.8	0.8%
10/2	Internal 2 Right	4.7	11.9	67.3%
10/3	Internal 2 Right Right2	4.6	11.8	66.6%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.6	37.2	83.8 : 83.8%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	33.6	Total Delay for Signalled Lanes (pcuHr):	11.23	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	45.7	Total Delay for Signalled Lanes (pcuHr):	8.36	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	7.4	Total Delay for Signalled Lanes (pcuHr):	16.09	Cycle Time (s):	75
	PRC Over All Lanes (%)	7.4	Total Delay Over All Lanes(pcuHr):	35.90		

Scenario 16: '2028 Reference Case 6-7AM' (FG16: '28RC_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	36.7%
J25 - A12 / Main Road / P&R	-	-	-	36.7%
1/1	A12 North Left Ahead	2.2	5.4	24.5%
1/2+1/3	A12 North Ahead	3.2	5.3	33.5 : 33.5%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.8	5.7 : 5.7%
3/2+3/1	A12 South Left Ahead	2.1	5.1	24.1 : 24.1%
3/3	A12 South Ahead	1.7	5.4	18.1%
4/1	A1214 Main Road (W) Left Ahead	1.8	16.8	20.2%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	2.5	16.6	33.7 : 33.7%
5/1	Park and Ride Exit Left	0.0	29.8	0.4%
5/2	Park and Ride Exit Ahead	0.0	29.4	0.7%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.2	39.5	2.7%
8/2	Internal 1 Right	2.1	14.7	32.4%
8/3	Internal 1 Right	2.0	14.5	31.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	7.3	0.7%
10/2	Internal 2 Right	1.4	7.0	28.1%
10/3	Internal 2 Right Right2	1.0	6.8	23.7%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	2.2	25.4	36.7 : 36.7%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	167.2	Total Delay for Signalled Lanes (pcuHr):	3.23
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	169.0	Total Delay for Signalled Lanes (pcuHr):	2.45
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	145.5	Total Delay for Signalled Lanes (pcuHr):	1.96
	PRC Over All Lanes (%)	145.5	Total Delay Over All Lanes(pcuHr):	7.67
				Cycle Time (s): 60
				Cycle Time (s): 60
				Cycle Time (s): 60

Scenario 17: '2028 Reference Case 7-8AM' (FG17: '28RC_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	76.5%
J25 - A12 / Main Road / P&R	-	-	-	76.5%
1/1	A12 North Left Ahead	6.8	11.7	54.3%
1/2+1/3	A12 North Ahead	8.6	11.1	64.9 : 64.9%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.8	15.1 : 15.1%
3/2+3/1	A12 South Left Ahead	8.0	10.6	62.4 : 62.4%
3/3	A12 South Ahead	7.3	11.6	55.1%
4/1	A1214 Main Road (W) Left Ahead	6.9	23.0	62.6%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	8.4	23.1	76.5 : 76.5%
5/1	Park and Ride Exit Left	0.1	29.8	1.5%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.4	24.9	4.0%
8/2	Internal 1 Right	1.4	10.0	57.6%
8/3	Internal 1 Right	1.4	9.9	57.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.2	6.2	5.2%
10/2	Internal 2 Right	3.4	9.8	68.7%
10/3	Internal 2 Right Right2	2.8	9.2	65.7%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		6.6	29.5	63.5 : 63.5%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	17.7	Total Delay for Signalled Lanes (pcuHr):	11.45	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	38.6	Total Delay for Signalled Lanes (pcuHr):	7.42	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	41.7	Total Delay for Signalled Lanes (pcuHr):	8.31	Cycle Time (s):	60
	PRC Over All Lanes (%)	17.7	Total Delay Over All Lanes(pcuHr):	27.27		

Scenario 18: '2028 Reference Case 8-9AM' (FG18: '28RC_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	93.1%
J25 - A12 / Main Road / P&R	-	-	-	93.1%
1/1	A12 North Left Ahead	7.9	12.5	59.7%
1/2+1/3	A12 North Ahead	9.6	11.9	69.0 : 69.0%
2/2+2/1	Main Road (E) Left Ahead	0.2	4.3	25.3 : 25.3%
3/2+3/1	A12 South Left Ahead	10.6	12.3	73.4 : 73.4%
3/3	A12 South Ahead	10.0	13.7	67.1%
4/1	A1214 Main Road (W) Left Ahead	7.5	21.4	63.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	16.7	39.2	93.1 : 93.1%
5/1	Park and Ride Exit Left	0.1	29.9	2.6%
5/2	Park and Ride Exit Ahead	0.2	29.6	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.1	13.0	29.9%
8/2	Internal 1 Right	5.0	10.0	60.4%
8/3	Internal 1 Right	5.2	11.0	63.5%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.2	8.0	6.3%
10/2	Internal 2 Right	6.9	20.7	87.2%
10/3	Internal 2 Right Right2	6.5	19.5	86.2%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		6.2	27.5	60.7 : 60.7%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	-3.4	Total Delay for Signalled Lanes (pcuHr):	22.10	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	30.5	Total Delay for Signalled Lanes (pcuHr):	8.83	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	22.6	Total Delay for Signalled Lanes (pcuHr):	10.37	Cycle Time (s):	60
	PRC Over All Lanes (%)	-3.4	Total Delay Over All Lanes(pcuHr):	41.48		

Scenario 19: '2028 Reference Case 3-4PM' (FG19: '28RC_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	97.0%
J25 - A12 / Main Road / P&R	-	-	-	97.0%
1/1	A12 North Left Ahead	6.8	10.2	47.4%
1/2+1/3	A12 North Ahead	8.1	9.8	60.5 : 60.5%
2/2+2/1	Main Road (E) Left Ahead	0.8	5.4	35.0 : 35.0%
3/2+3/1	A12 South Left Ahead	26.4	47.3	97.0 : 97.0%
3/3	A12 South Ahead	17.4	35.7	87.3%
4/1	A1214 Main Road (W) Left Ahead	8.0	27.8	61.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	9.8	27.8	74.6 : 74.6%
5/1	Park and Ride Exit Left	0.1	39.1	2.8%
5/2	Park and Ride Exit Ahead	0.3	38.8	5.3%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.4	40.4	20.1%
8/2	Internal 1 Right	6.8	12.0	59.5%
8/3	Internal 1 Right	6.7	12.0	59.2%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	9.6	0.3%
10/2	Internal 2 Right	1.1	4.8	64.5%
10/3	Internal 2 Right Right2	1.1	5.2	68.4%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.0	17.3	57.4 : 57.4%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	20.7	Total Delay for Signalled Lanes (pcuHr):	10.76	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	48.8	Total Delay for Signalled Lanes (pcuHr):	7.99	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-7.8	Total Delay for Signalled Lanes (pcuHr):	29.14	Cycle Time (s):	75
	PRC Over All Lanes (%)	-7.8	Total Delay Over All Lanes(pcuHr):	48.23		

Scenario 20: '2028 Reference Case 5-6PM' (FG20: '28RC_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	127.5%
J25 - A12 / Main Road / P&R	-	-	-	127.5%
1/1	A12 North Left Ahead	5.9	10.7	42.4%
1/2+1/3	A12 North Ahead	7.5	10.4	57.9 : 57.9%
2/2+2/1	Main Road (E) Left Ahead	0.4	3.6	27.4 : 27.4%
3/2+3/1	A12 South Left Ahead	188.2	442.6	127.5 : 127.5%
3/3	A12 South Ahead	116.3	372.6	121.0%
4/1	A1214 Main Road (W) Left Ahead	7.1	30.3	60.2%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	8.6	30.1	73.2 : 73.2%
5/1	Park and Ride Exit Left	0.5	39.8	10.3%
5/2	Park and Ride Exit Ahead	0.5	39.3	11.0%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.6	37.4	20.7%
8/2	Internal 1 Right	0.6	6.8	46.8%
8/3	Internal 1 Right	0.6	6.7	48.4%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	5.6	0.7%
10/2	Internal 2 Right	0.5	2.5	30.4%
10/3	Internal 2 Right Right2	1.4	5.2	70.5%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.9	16.8	59.1 : 59.1%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	22.9	Total Delay for Signalled Lanes (pcuHr):	10.03	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	55.3	Total Delay for Signalled Lanes (pcuHr):	6.94	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-41.7	Total Delay for Signalled Lanes (pcuHr):	282.21	Cycle Time (s):	75
	PRC Over All Lanes (%)	-41.7	Total Delay Over All Lanes(pcuHr):	299.39		

Scenario 21: '2028 Peak Construction 6-7AM' (FG21: '28PC_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	38.6%
J25 - A12 / Main Road / P&R	-	-	-	38.6%
1/1	A12 North Left Ahead	2.0	4.9	22.7%
1/2+1/3	A12 North Ahead	2.9	4.8	32.3 : 32.3%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.7	5.6 : 5.6%
3/2+3/1	A12 South Left Ahead	2.8	5.4	30.3 : 30.3%
3/3	A12 South Ahead	2.4	5.7	24.7%
4/1	A1214 Main Road (W) Left Ahead	2.2	16.4	24.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	2.9	16.2	35.8 : 35.8%
5/1	Park and Ride Exit Left	0.0	29.8	0.4%
5/2	Park and Ride Exit Ahead	0.0	29.4	0.7%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.6	21.5	10.8%
8/2	Internal 1 Right	1.8	16.5	31.2%
8/3	Internal 1 Right	1.8	16.6	30.5%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	7.9	0.7%
10/2	Internal 2 Right	1.8	8.3	37.1%
10/3	Internal 2 Right Right2	1.5	8.1	33.3%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	2.3	26.0	38.6 : 38.6%	
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	142.7	Total Delay for Signalled Lanes (pcuHr):	4.03	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	178.8	Total Delay for Signalled Lanes (pcuHr):	2.40	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	133.1	Total Delay for Signalled Lanes (pcuHr):	2.37	Cycle Time (s): 60
	PRC Over All Lanes (%)	133.1	Total Delay Over All Lanes(pcuHr):	8.82	

Scenario 22: '2028 Peak Construction 7-8AM' (FG22: '28PC_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	76.7%
J25 - A12 / Main Road / P&R	-	-	-	76.7%
1/1	A12 North Left Ahead	5.4	9.5	46.3%
1/2+1/3	A12 North Ahead	7.2	9.1	58.2 : 58.2%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.2	14.6 : 14.6%
3/2+3/1	A12 South Left Ahead	8.8	10.1	66.0 : 66.0%
3/3	A12 South Ahead	8.4	11.1	59.8%
4/1	A1214 Main Road (W) Left Ahead	7.3	23.6	65.0%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	8.8	23.4	75.3 : 75.3%
5/1	Park and Ride Exit Left	0.1	29.8	1.5%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	1.4	11.3	23.9%
8/2	Internal 1 Right	3.7	9.2	49.3%
8/3	Internal 1 Right	3.8	9.8	49.2%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.2	7.4	4.8%
10/2	Internal 2 Right	4.6	13.3	76.7%
10/3	Internal 2 Right Right2	4.4	12.9	75.4%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		7.4	35.0	74.6 : 74.6%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	17.3	Total Delay for Signalled Lanes (pcuHr):	13.27	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	54.5	Total Delay for Signalled Lanes (pcuHr):	5.85	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	20.7	Total Delay for Signalled Lanes (pcuHr):	8.99	Cycle Time (s):	60
	PRC Over All Lanes (%)	17.3	Total Delay Over All Lanes(pcuHr):	28.20		

Scenario 23: '2028 Peak Construction 8-9AM' (FG23: '28PC_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	99.5%
J25 - A12 / Main Road / P&R	-	-	-	99.5%
1/1	A12 North Left Ahead	7.9	12.5	59.4%
1/2+1/3	A12 North Ahead	9.6	11.8	69.0 : 69.0%
2/2+2/1	Main Road (E) Left Ahead	0.4	4.0	25.0 : 25.0%
3/2+3/1	A12 South Left Ahead	11.6	13.1	76.5 : 76.5%
3/3	A12 South Ahead	11.1	14.5	70.4%
4/1	A1214 Main Road (W) Left Ahead	7.4	22.4	64.0%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	26.2	72.9	99.5 : 99.5%
5/1	Park and Ride Exit Left	0.1	29.9	2.6%
5/2	Park and Ride Exit Ahead	0.2	29.6	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.3	12.4	34.8%
8/2	Internal 1 Right	4.5	9.6	59.1%
8/3	Internal 1 Right	4.7	10.4	62.5%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.3	7.7	6.2%
10/2	Internal 2 Right	7.0	20.5	88.2%
10/3	Internal 2 Right Right2	6.7	19.6	87.3%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	7.5	29.7	70.6 : 70.6%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	-10.6	Total Delay for Signalled Lanes (pcuHr):	31.31 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	30.4	Total Delay for Signalled Lanes (pcuHr):	8.79 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	17.6	Total Delay for Signalled Lanes (pcuHr):	11.52 Cycle Time (s): 60
	PRC Over All Lanes (%)	-10.6	Total Delay Over All Lanes(pcuHr):	51.82

Scenario 24: '2028 Peak Construction 3-4PM' (FG24: '28PC_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	101.2%
J25 - A12 / Main Road / P&R	-	-	-	101.2%
1/1	A12 North Left Ahead	6.2	9.0	45.3%
1/2+1/3	A12 North Ahead	7.6	8.6	59.6 : 59.6%
2/2+2/1	Main Road (E) Left Ahead	0.9	5.8	38.8 : 38.8%
3/2+3/1	A12 South Left Ahead	39.5	80.5	101.0 : 101.2%
3/3	A12 South Ahead	22.4	55.6	95.1%
4/1	A1214 Main Road (W) Left Ahead	7.4	24.8	55.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	8.9	24.6	68.2 : 68.2%
5/1	Park and Ride Exit Left	0.1	39.0	1.4%
5/2	Park and Ride Exit Ahead	0.3	38.8	6.2%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	5.4	37.2	50.8%
8/2	Internal 1 Right	5.5	14.0	53.4%
8/3	Internal 1 Right	5.4	14.4	52.7%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	9.7	0.3%
10/2	Internal 2 Right	1.5	6.4	72.5%
10/3	Internal 2 Right Right2	1.4	6.5	73.4%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.9	15.7	62.1 : 62.1%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	22.7	Total Delay for Signalled Lanes (pcuHr):	10.09	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	51.0	Total Delay for Signalled Lanes (pcuHr):	8.77	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-12.5	Total Delay for Signalled Lanes (pcuHr):	47.77	Cycle Time (s):	75
	PRC Over All Lanes (%)	-12.5	Total Delay Over All Lanes(pcuHr):	67.02		

Scenario 25: '2028 Peak Construction 5-6PM' (FG25: '28PC_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	150.9%
J25 - A12 / Main Road / P&R	-	-	-	150.9%
1/1	A12 North Left Ahead	6.5	9.1	46.3%
1/2+1/3	A12 North Ahead	7.9	8.7	61.1 : 61.1%
2/2+2/1	Main Road (E) Left Ahead	1.2	5.9	43.4 : 43.4%
3/2+3/1	A12 South Left Ahead	266.1	666.6	149.7 : 149.7%
3/3	A12 South Ahead	221.5	689.4	150.9%
4/1	A1214 Main Road (W) Left Ahead	7.6	31.1	63.0%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	9.1	30.8	72.4 : 72.4%
5/1	Park and Ride Exit Left	0.5	39.8	10.3%
5/2	Park and Ride Exit Ahead	0.5	39.3	11.0%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	5.3	25.7	53.5%
8/2	Internal 1 Right	3.0	8.4	40.4%
8/3	Internal 1 Right	3.1	9.0	40.2%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	6.1	0.6%
10/2	Internal 2 Right	0.2	2.3	22.1%
10/3	Internal 2 Right Right2	0.9	4.0	61.1%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.3	13.6	62.4 : 62.4%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	24.4	Total Delay for Signalled Lanes (pcuHr):	9.42	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	47.4	Total Delay for Signalled Lanes (pcuHr):	7.13	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-67.6	Total Delay for Signalled Lanes (pcuHr):	465.29	Cycle Time (s):	75
	PRC Over All Lanes (%)	-67.6	Total Delay Over All Lanes(pcuHr):	482.31		

Scenario 26: '2034 Reference Case 6-7AM' (FG26: '34RC_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	35.7%
J25 - A12 / Main Road / P&R	-	-	-	35.7%
1/1	A12 North Left Ahead	2.2	5.0	25.2%
1/2+1/3	A12 North Ahead	3.1	4.9	34.1 : 34.1%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.8	5.8 : 5.8%
3/2+3/1	A12 South Left Ahead	2.4	6.0	26.6 : 26.6%
3/3	A12 South Ahead	2.0	6.3	20.2%
4/1	A1214 Main Road (W) Left Ahead	1.8	14.4	19.3%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	2.4	14.3	31.2 : 31.2%
5/1	Park and Ride Exit Left	0.0	29.8	0.4%
5/2	Park and Ride Exit Ahead	0.0	29.4	0.7%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.2	41.9	3.0%
8/2	Internal 1 Right	2.2	18.6	35.7%
8/3	Internal 1 Right	2.1	18.5	35.5%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	8.6	0.8%
10/2	Internal 2 Right	1.4	8.7	32.9%
10/3	Internal 2 Right Right2	1.2	8.5	27.9%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	2.2	22.6	33.3 : 33.3%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	173.7	Total Delay for Signalled Lanes (pcuHr):	3.36 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	152.4	Total Delay for Signalled Lanes (pcuHr):	2.72 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	170.0	Total Delay for Signalled Lanes (pcuHr):	2.16 Cycle Time (s): 60
	PRC Over All Lanes (%)	152.4	Total Delay Over All Lanes(pcuHr):	8.27

Scenario 27: '2034 Reference Case 7-8AM' (FG27: '34RC_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	75.6%
J25 - A12 / Main Road / P&R	-	-	-	75.6%
1/1	A12 North Left Ahead	6.7	10.9	53.1%
1/2+1/3	A12 North Ahead	8.3	10.3	64.0 : 64.0%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.8	15.3 : 15.3%
3/2+3/1	A12 South Left Ahead	7.9	9.5	63.0 : 63.0%
3/3	A12 South Ahead	7.2	10.3	54.5%
4/1	A1214 Main Road (W) Left Ahead	6.9	23.0	62.9%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	8.3	22.9	75.6 : 75.6%
5/1	Park and Ride Exit Left	0.1	29.8	1.5%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.8%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.4	25.0	4.3%
8/2	Internal 1 Right	1.5	11.0	56.6%
8/3	Internal 1 Right	1.5	11.1	57.9%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.2	7.2	5.6%
10/2	Internal 2 Right	4.2	11.5	71.4%
10/3	Internal 2 Right Right2	4.0	11.0	68.9%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		7.1	37.2	72.5 : 72.5%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	19.0	Total Delay for Signalled Lanes (pcuHr):	12.17	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	40.7	Total Delay for Signalled Lanes (pcuHr):	7.20	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	24.1	Total Delay for Signalled Lanes (pcuHr):	8.84	Cycle Time (s):	60
	PRC Over All Lanes (%)	19.0	Total Delay Over All Lanes(pcuHr):	28.31		

Scenario 28: '2034 Reference Case 8-9AM' (FG28: '34RC_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	107.8%
J25 - A12 / Main Road / P&R	-	-	-	107.8%
1/1	A12 North Left Ahead	8.5	13.0	62.1%
1/2+1/3	A12 North Ahead	10.2	12.3	71.2 : 71.2%
2/2+2/1	Main Road (E) Left Ahead	0.2	4.4	25.2 : 25.2%
3/2+3/1	A12 South Left Ahead	9.6	10.5	74.3 : 74.3%
3/3	A12 South Ahead	9.0	10.8	61.9%
4/1	A1214 Main Road (W) Left Ahead	8.9	24.9	72.0%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	58.2	177.1	107.8 : 107.8%
5/1	Park and Ride Exit Left	0.1	29.9	3.0%
5/2	Park and Ride Exit Ahead	0.2	29.7	5.3%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.3	12.7	33.7%
8/2	Internal 1 Right	5.1	10.3	60.5%
8/3	Internal 1 Right	4.7	10.9	63.2%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.4	9.2	6.9%
10/2	Internal 2 Right	7.1	19.8	83.9%
10/3	Internal 2 Right Right2	7.0	19.7	83.8%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		7.3	40.6	75.3 : 75.3%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	-19.8	Total Delay for Signalled Lanes (pcuHr):	62.08	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	26.5	Total Delay for Signalled Lanes (pcuHr):	9.34	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	19.5	Total Delay for Signalled Lanes (pcuHr):	10.68	Cycle Time (s):	60
	PRC Over All Lanes (%)	-19.8	Total Delay Over All Lanes(pcuHr):	82.28		

Scenario 29: '2034 Reference Case 3-4PM' (FG29: '34RC_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	104.6%
J25 - A12 / Main Road / P&R	-	-	-	104.6%
1/1	A12 North Left Ahead	7.8	11.3	51.9%
1/2+1/3	A12 North Ahead	9.2	10.8	64.2 : 64.2%
2/2+2/1	Main Road (E) Left Ahead	1.4	7.5	50.5 : 50.5%
3/2+3/1	A12 South Left Ahead	68.4	124.7	104.6 : 104.6%
3/3	A12 South Ahead	27.5	66.3	97.7%
4/1	A1214 Main Road (W) Left Ahead	8.3	28.2	62.9%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	11.8	30.7	80.8 : 80.8%
5/1	Park and Ride Exit Left	0.1	39.0	1.9%
5/2	Park and Ride Exit Ahead	0.3	38.9	7.1%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	4.7	36.2	39.4%
8/2	Internal 1 Right	6.3	10.7	60.8%
8/3	Internal 1 Right	6.2	10.7	60.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	7.7	0.4%
10/2	Internal 2 Right	1.1	5.0	66.2%
10/3	Internal 2 Right Right2	1.7	7.0	76.6%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.0	18.3	61.0 : 61.0%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	11.4	Total Delay for Signalled Lanes (pcuHr):	12.56	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	40.2	Total Delay for Signalled Lanes (pcuHr):	9.60	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-16.3	Total Delay for Signalled Lanes (pcuHr):	72.79	Cycle Time (s):	75
	PRC Over All Lanes (%)	-16.3	Total Delay Over All Lanes(pcuHr):	95.60		

Scenario 30: '2034 Reference Case 5-6PM' (FG30: '34RC_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	135.6%
J25 - A12 / Main Road / P&R	-	-	-	135.6%
1/1	A12 North Left Ahead	6.2	9.9	44.7%
1/2+1/3	A12 North Ahead	7.9	9.6	60.3 : 60.3%
2/2+2/1	Main Road (E) Left Ahead	0.3	3.8	26.4 : 26.4%
3/2+3/1	A12 South Left Ahead	215.9	512.8	133.4 : 133.4%
3/3	A12 South Ahead	199.9	539.0	135.6%
4/1	A1214 Main Road (W) Left Ahead	7.7	31.2	63.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	13.2	39.4	86.0 : 86.0%
5/1	Park and Ride Exit Left	0.5	39.9	11.3%
5/2	Park and Ride Exit Ahead	0.6	39.4	12.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	4.5	22.6	48.8%
8/2	Internal 1 Right	2.3	7.4	46.9%
8/3	Internal 1 Right	3.5	8.1	47.6%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	7.1	0.7%
10/2	Internal 2 Right	0.2	2.2	19.0%
10/3	Internal 2 Right Right2	1.8	6.8	77.5%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.5	19.9	64.8 : 64.8%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	4.7	Total Delay for Signalled Lanes (pcuHr):	12.96	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	49.4	Total Delay for Signalled Lanes (pcuHr):	7.33	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-50.6	Total Delay for Signalled Lanes (pcuHr):	389.61	Cycle Time (s):	75
	PRC Over All Lanes (%)	-50.6	Total Delay Over All Lanes(pcuHr):	410.09		

Scenario 31: '2034 Operational Forecast 6-7AM' (FG31: '34OP_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	33.5%
J25 - A12 / Main Road / P&R	-	-	-	33.5%
1/1	A12 North Left Ahead	2.1	5.0	23.9%
1/2+1/3	A12 North Ahead	3.0	4.9	33.5 : 33.5%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.7	5.7 : 5.7%
3/2+3/1	A12 South Left Ahead	3.5	11.1	32.8 : 32.8%
3/3	A12 South Ahead	2.7	11.6	25.6%
4/1	A1214 Main Road (W) Left Ahead	1.9	15.3	20.6%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	2.5	15.1	32.1 : 32.1%
5/1	Park and Ride Exit Left	0.0	29.8	0.4%
5/2	Park and Ride Exit Ahead	0.0	29.4	0.7%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.6	21.8	10.8%
8/2	Internal 1 Right	1.8	17.2	31.2%
8/3	Internal 1 Right	1.8	17.3	31.0%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	5.5	0.7%
10/2	Internal 2 Right	0.4	3.6	32.8%
10/3	Internal 2 Right Right2	0.3	3.2	25.9%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	1.7	12.8	20.7 : 20.7%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	174.0	Total Delay for Signalled Lanes (pcuHr):	2.60 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	168.4	Total Delay for Signalled Lanes (pcuHr):	2.53 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	174.5	Total Delay for Signalled Lanes (pcuHr):	2.84 Cycle Time (s): 60
	PRC Over All Lanes (%)	168.4	Total Delay Over All Lanes(pcuHr):	8.00

Scenario 32: '2034 Operational Forecast 7-8AM' (FG32: '34OP_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	76.8%
J25 - A12 / Main Road / P&R	-	-	-	76.8%
1/1	A12 North Left Ahead	5.1	8.3	45.4%
1/2+1/3	A12 North Ahead	6.7	7.9	57.4 : 57.4%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.5	14.6 : 14.6%
3/2+3/1	A12 South Left Ahead	9.0	11.8	66.1 : 66.1%
3/3	A12 South Ahead	8.4	12.9	59.8%
4/1	A1214 Main Road (W) Left Ahead	6.8	20.4	59.4%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	8.0	20.2	71.3 : 71.3%
5/1	Park and Ride Exit Left	0.1	29.8	1.5%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	1.7	15.5	23.9%
8/2	Internal 1 Right	5.1	15.6	59.6%
8/3	Internal 1 Right	5.0	15.8	58.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.2	7.6	5.6%
10/2	Internal 2 Right	4.0	13.4	76.8%
10/3	Internal 2 Right Right2	3.8	12.7	74.4%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		6.1	23.1	61.8 : 61.8%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	17.2	Total Delay for Signalled Lanes (pcuHr):	11.97	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	51.1	Total Delay for Signalled Lanes (pcuHr):	6.62	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	36.3	Total Delay for Signalled Lanes (pcuHr):	8.49	Cycle Time (s):	60
	PRC Over All Lanes (%)	17.2	Total Delay Over All Lanes(pcuHr):	27.16		

Scenario 33: '2034 Operational Forecast 8-9AM' (FG33: '34OP_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	110.1%
J25 - A12 / Main Road / P&R	-	-	-	110.1%
1/1	A12 North Left Ahead	8.5	12.9	61.9%
1/2+1/3	A12 North Ahead	10.2	12.2	71.0 : 71.0%
2/2+2/1	Main Road (E) Left Ahead	0.2	4.3	24.7 : 24.7%
3/2+3/1	A12 South Left Ahead	10.1	11.2	74.5 : 74.5%
3/3	A12 South Ahead	9.3	11.8	64.0%
4/1	A1214 Main Road (W) Left Ahead	8.2	23.7	68.7%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	68.3	209.0	110.1 : 110.1%
5/1	Park and Ride Exit Left	0.1	29.9	3.0%
5/2	Park and Ride Exit Ahead	0.3	29.7	5.6%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.8	13.1	37.1%
8/2	Internal 1 Right	5.0	10.2	57.2%
8/3	Internal 1 Right	5.2	11.2	63.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.4	8.8	6.9%
10/2	Internal 2 Right	6.5	19.0	84.3%
10/3	Internal 2 Right Right2	6.4	18.9	84.2%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		7.0	33.7	71.3 : 71.3%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	-22.3	Total Delay for Signalled Lanes (pcuHr):	71.61	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	26.7	Total Delay for Signalled Lanes (pcuHr):	9.39	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	20.8	Total Delay for Signalled Lanes (pcuHr):	10.55	Cycle Time (s):	60
	PRC Over All Lanes (%)	-22.3	Total Delay Over All Lanes(pcuHr):	91.73		

Scenario 34: '2034 Operational Forecast 3-4PM' (FG34: '34OP_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	108.1%
J25 - A12 / Main Road / P&R	-	-	-	108.1%
1/1	A12 North Left Ahead	7.7	11.2	51.2%
1/2+1/3	A12 North Ahead	9.1	10.7	63.6 : 63.6%
2/2+2/1	Main Road (E) Left Ahead	1.2	4.9	46.2 : 39.4%
3/2+3/1	A12 South Left Ahead	91.4	179.2	108.1 : 108.1%
3/3	A12 South Ahead	34.8	97.0	101.1%
4/1	A1214 Main Road (W) Left Ahead	7.8	25.2	58.0%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	12.8	29.5	80.2 : 80.2%
5/1	Park and Ride Exit Left	0.1	39.0	1.9%
5/2	Park and Ride Exit Ahead	0.3	38.9	7.1%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	7.1	30.9	59.1%
8/2	Internal 1 Right	4.9	9.5	51.1%
8/3	Internal 1 Right	4.8	10.0	50.2%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	8.6	0.4%
10/2	Internal 2 Right	1.2	5.5	67.1%
10/3	Internal 2 Right Right2	2.0	8.5	79.8%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.5	16.5	59.3 : 59.3%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	12.2	Total Delay for Signalled Lanes (pcuHr):	12.29	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	41.5	Total Delay for Signalled Lanes (pcuHr):	9.62	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-20.1	Total Delay for Signalled Lanes (pcuHr):	103.53	Cycle Time (s):	75
	PRC Over All Lanes (%)	-20.1	Total Delay Over All Lanes(pcuHr):	125.91		

Scenario 35: '2034 Operational Forecast 5-6PM' (FG35: '34OP_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	133.7%
J25 - A12 / Main Road / P&R	-	-	-	133.7%
1/1	A12 North Left Ahead	6.2	9.9	44.9%
1/2+1/3	A12 North Ahead	7.9	9.6	60.3 : 60.3%
2/2+2/1	Main Road (E) Left Ahead	0.4	3.6	26.3 : 26.3%
3/2+3/1	A12 South Left Ahead	207.6	490.6	131.4 : 131.4%
3/3	A12 South Ahead	190.5	519.3	133.7%
4/1	A1214 Main Road (W) Left Ahead	7.7	31.2	63.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	13.4	40.0	86.5 : 86.5%
5/1	Park and Ride Exit Left	0.5	39.9	11.3%
5/2	Park and Ride Exit Ahead	0.6	39.4	12.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	5.0	23.1	50.6%
8/2	Internal 1 Right	2.9	7.4	46.2%
8/3	Internal 1 Right	3.6	8.2	47.2%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	7.0	0.8%
10/2	Internal 2 Right	0.2	2.2	20.7%
10/3	Internal 2 Right Right2	1.8	6.8	77.5%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.7	19.7	66.7 : 66.7%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	4.1	Total Delay for Signalled Lanes (pcuHr):	13.11	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	49.2	Total Delay for Signalled Lanes (pcuHr):	7.43	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-48.6	Total Delay for Signalled Lanes (pcuHr):	372.13	Cycle Time (s):	75
	PRC Over All Lanes (%)	-48.6	Total Delay Over All Lanes(pcuHr):	392.87		

Project and User Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	J25_Model_v12_Sens_Fixed.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 2, 40, 0

Network Results

Scenario 1: '2019 Base Year 6-7AM' (FG1: '17BY_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	67.3%
J25 - A12 / Main Road / P&R	-	-	-	67.3%
1/1	A12 North Left Ahead	1.6	4.8	19.6%
1/2+1/3	A12 North Ahead	2.6	4.7	30.2 : 30.2%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.7	5.6 : 5.6%
3/2+3/1	A12 South Left Ahead	2.6	8.9	25.9 : 25.9%
3/3	A12 South Ahead	2.0	9.3	19.2%
4/1	A1214 Main Road (W) Left Ahead	2.3	36.1	45.4%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	4.0	36.0	67.3 : 67.3%
5/1	Park and Ride Exit Left	0.0	0.0	0.0%
5/2	Park and Ride Exit Ahead	0.0	14.7	0.3%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.3	15.3	13.2%
8/2	Internal 1 Right	0.4	8.6	27.8%
8/3	Internal 1 Right	0.9	9.3	36.1%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	6.9	0.6%
10/2	Internal 2 Right	1.2	7.5	26.8%
10/3	Internal 2 Right Right2	0.9	7.3	20.7%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		2.0		17.7		24.7 : 24.7%	
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	33.8	Total Delay for Signalled Lanes (pcuHr):	5.41	Cycle Time (s):	60			
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	149.3	Total Delay for Signalled Lanes (pcuHr):	1.81	Cycle Time (s):	60			
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	247.6	Total Delay for Signalled Lanes (pcuHr):	2.30	Cycle Time (s):	60			
	PRC Over All Lanes (%)	33.8	Total Delay Over All Lanes(pcuHr):	9.56					

Scenario 2: '2019 Base Year 7-8AM' (FG2: '17BY_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	85.5%
J25 - A12 / Main Road / P&R	-	-	-	85.5%
1/1	A12 North Left Ahead	4.3	7.7	39.2%
1/2+1/3	A12 North Ahead	5.9	7.4	52.3 : 52.3%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.4	13.5 : 13.5%
3/2+3/1	A12 South Left Ahead	8.8	16.7	66.7 : 66.7%
3/3	A12 South Ahead	7.3	17.7	58.6%
4/1	A1214 Main Road (W) Left Ahead	8.1	34.8	77.7%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	10.0	34.6	85.5 : 85.5%
5/1	Park and Ride Exit Left	0.0	29.8	1.1%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.8	16.8	22.6%
8/2	Internal 1 Right	1.6	17.1	54.3%
8/3	Internal 1 Right	1.7	17.5	58.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	1.7	3.7%
10/2	Internal 2 Right	0.5	3.2	51.1%
10/3	Internal 2 Right Right2	0.5	3.1	46.2%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		5.2	16.1	44.3 : 44.3%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	5.2	Total Delay for Signalled Lanes (pcuHr):	11.59	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	53.0	Total Delay for Signalled Lanes (pcuHr):	6.24	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	35.0	Total Delay for Signalled Lanes (pcuHr):	8.51	Cycle Time (s):	60
	PRC Over All Lanes (%)	5.2	Total Delay Over All Lanes(pcuHr):	26.41		

Scenario 3: '2019 Base Year 8-9AM' (FG3: '17BY_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	88.7%
J25 - A12 / Main Road / P&R	-	-	-	88.7%
1/1	A12 North Left Ahead	7.0	12.5	55.6%
1/2+1/3	A12 North Ahead	9.0	11.9	67.1 : 67.1%
2/2+2/1	Main Road (E) Left Ahead	0.2	4.0	23.4 : 23.4%
3/2+3/1	A12 South Left Ahead	8.8	11.7	65.8 : 65.8%
3/3	A12 South Ahead	8.3	12.9	59.6%
4/1	A1214 Main Road (W) Left Ahead	5.5	19.8	51.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	13.2	32.3	88.7 : 88.7%
5/1	Park and Ride Exit Left	0.1	29.9	1.9%
5/2	Park and Ride Exit Ahead	0.2	29.6	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	1.1	11.3	22.3%
8/2	Internal 1 Right	1.8	7.7	54.8%
8/3	Internal 1 Right	3.2	9.1	57.0%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.2	7.6	5.5%
10/2	Internal 2 Right	4.1	13.1	74.6%
10/3	Internal 2 Right Right2	3.8	12.5	72.1%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		8.1	34.1	71.4 : 71.4%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	1.5	Total Delay for Signalled Lanes (pcuHr):	14.95	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	34.1	Total Delay for Signalled Lanes (pcuHr):	7.97	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	26.0	Total Delay for Signalled Lanes (pcuHr):	10.12	Cycle Time (s):	60
	PRC Over All Lanes (%)	1.5	Total Delay Over All Lanes(pcuHr):	33.21		

Scenario 4: '2019 Base Year 3-4PM' (FG4: '17BY_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	85.8%
J25 - A12 / Main Road / P&R	-	-	-	85.8%
1/1	A12 North Left Ahead	9.1	21.4	61.0%
1/2+1/3	A12 North Ahead	11.4	20.5	72.5 : 72.5%
2/2+2/1	Main Road (E) Left Ahead	0.9	4.8	30.4 : 30.4%
3/2+3/1	A12 South Left Ahead	15.8	28.2	85.8 : 85.8%
3/3	A12 South Ahead	13.5	29.2	78.0%
4/1	A1214 Main Road (W) Left Ahead	7.5	30.9	62.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	9.6	31.7	77.3 : 77.3%
5/1	Park and Ride Exit Left	0.1	27.9	0.9%
5/2	Park and Ride Exit Ahead	0.2	27.7	2.0%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.4	17.4	17.3%
8/2	Internal 1 Right	0.4	4.1	29.7%
8/3	Internal 1 Right	0.5	4.2	32.6%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	2.1	0.2%
10/2	Internal 2 Right	1.5	7.1	72.4%
10/3	Internal 2 Right Right2	1.2	6.1	67.8%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.1	22.1	53.7 : 53.7%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	16.5	Total Delay for Signalled Lanes (pcuHr):	11.44	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	24.1	Total Delay for Signalled Lanes (pcuHr):	10.25	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	4.9	Total Delay for Signalled Lanes (pcuHr):	18.44	Cycle Time (s):	75
	PRC Over All Lanes (%)	4.9	Total Delay Over All Lanes(pcuHr):	40.43		

Scenario 5: '2019 Base Year 5-6PM' (FG5: '17BY_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	84.8%
J25 - A12 / Main Road / P&R	-	-	-	84.8%
1/1	A12 North Left Ahead	10.3	34.1	75.1%
1/2+1/3	A12 North Ahead	13.6	33.0	84.8 : 84.8%
2/2+2/1	Main Road (E) Left Ahead	1.3	5.3	35.6 : 35.6%
3/2+3/1	A12 South Left Ahead	13.5	22.0	79.5 : 79.5%
3/3	A12 South Ahead	11.7	22.3	68.6%
4/1	A1214 Main Road (W) Left Ahead	5.7	28.1	50.6%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	6.9	28.0	66.7 : 66.7%
5/1	Park and Ride Exit Left	0.4	35.9	7.5%
5/2	Park and Ride Exit Ahead	0.4	35.5	7.8%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.6	9.7	18.5%
8/2	Internal 1 Right	0.2	2.1	16.3%
8/3	Internal 1 Right	0.2	2.2	23.0%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	6.0	0.8%
10/2	Internal 2 Right	1.0	4.4	60.9%
10/3	Internal 2 Right Right2	0.8	4.0	57.6%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		11.3	29.9	65.0 : 65.0%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	34.9	Total Delay for Signalled Lanes (pcuHr):	8.66	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	6.2	Total Delay for Signalled Lanes (pcuHr):	14.01	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	13.2	Total Delay for Signalled Lanes (pcuHr):	16.33	Cycle Time (s):	75
	PRC Over All Lanes (%)	6.2	Total Delay Over All Lanes(pcuHr):	39.42		

Scenario 6: '2023 Reference Case 6-7AM' (FG6: '23RC_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	45.9%
J25 - A12 / Main Road / P&R	-	-	-	45.9%
1/1	A12 North Left Ahead	2.0	5.7	22.7%
1/2+1/3	A12 North Ahead	3.2	5.6	33.5 : 33.5%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.7	5.6 : 5.6%
3/2+3/1	A12 South Left Ahead	2.3	6.4	25.8 : 25.8%
3/3	A12 South Ahead	1.7	6.6	17.4%
4/1	A1214 Main Road (W) Left Ahead	1.8	23.9	25.9%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	3.0	23.9	45.9 : 45.9%
5/1	Park and Ride Exit Left	0.0	29.8	0.4%
5/2	Park and Ride Exit Ahead	0.0	29.4	0.7%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.3	15.4	8.3%
8/2	Internal 1 Right	0.4	8.2	24.1%
8/3	Internal 1 Right	1.0	8.8	31.5%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	3.5	0.7%
10/2	Internal 2 Right	0.3	2.3	23.3%
10/3	Internal 2 Right Right2	0.2	1.9	17.1%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	2.6	21.7	36.9 : 0.0%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	96.1	Total Delay for Signalled Lanes (pcuHr):	3.28
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	168.3	Total Delay for Signalled Lanes (pcuHr):	2.08
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	144.0	Total Delay for Signalled Lanes (pcuHr):	2.23
	PRC Over All Lanes (%)	96.1	Total Delay Over All Lanes(pcuHr):	7.62
				Cycle Time (s): 60

Scenario 7: '2023 Reference Case 7-8AM' (FG7: '23RC_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	66.8%
J25 - A12 / Main Road / P&R	-	-	-	66.8%
1/1	A12 North Left Ahead	4.8	8.1	42.8%
1/2+1/3	A12 North Ahead	6.3	7.7	55.6 : 55.6%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.6	14.6 : 14.6%
3/2+3/1	A12 South Left Ahead	7.4	11.4	58.5 : 58.5%
3/3	A12 South Ahead	6.7	12.4	52.3%
4/1	A1214 Main Road (W) Left Ahead	5.9	19.3	53.4%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	6.9	19.0	66.6 : 66.6%
5/1	Park and Ride Exit Left	0.0	29.8	1.1%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	1.4	15.9	19.8%
8/2	Internal 1 Right	4.7	14.9	56.8%
8/3	Internal 1 Right	4.7	15.2	56.6%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	6.3	4.9%
10/2	Internal 2 Right	2.8	10.1	66.8%
10/3	Internal 2 Right Right2	2.3	9.6	63.2%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		6.1	21.6	60.5 : 60.5%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	34.7	Total Delay for Signalled Lanes (pcuHr):	9.26	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	58.6	Total Delay for Signalled Lanes (pcuHr):	6.14	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	48.8	Total Delay for Signalled Lanes (pcuHr):	7.37	Cycle Time (s):	60
	PRC Over All Lanes (%)	34.7	Total Delay Over All Lanes(pcuHr):	22.86		

Scenario 8: '2023 Reference Case 8-9AM' (FG8: '23RC_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	84.4%
J25 - A12 / Main Road / P&R	-	-	-	84.4%
1/1	A12 North Left Ahead	7.4	11.5	57.3%
1/2+1/3	A12 North Ahead	9.4	10.9	69.3 : 69.3%
2/2+2/1	Main Road (E) Left Ahead	0.2	4.2	24.7 : 24.7%
3/2+3/1	A12 South Left Ahead	12.2	17.8	78.1 : 78.1%
3/3	A12 South Ahead	10.9	19.9	73.6%
4/1	A1214 Main Road (W) Left Ahead	6.0	20.5	55.4%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	11.0	27.8	84.4 : 84.4%
5/1	Park and Ride Exit Left	0.1	29.9	2.3%
5/2	Park and Ride Exit Ahead	0.2	29.6	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	1.5	16.6	20.7%
8/2	Internal 1 Right	5.8	11.1	61.6%
8/3	Internal 1 Right	5.9	11.9	63.7%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	3.2	5.7%
10/2	Internal 2 Right	2.7	10.0	79.6%
10/3	Internal 2 Right Right2	2.0	8.6	75.5%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		7.7	17.8	64.3 : 64.3%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	6.6	Total Delay for Signalled Lanes (pcuHr):	12.67	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	30.0	Total Delay for Signalled Lanes (pcuHr):	8.76	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	15.3	Total Delay for Signalled Lanes (pcuHr):	12.46	Cycle Time (s):	60
	PRC Over All Lanes (%)	6.6	Total Delay Over All Lanes(pcuHr):	34.06		

Scenario 9: '2023 Reference Case 3-4PM' (FG9: '23RC_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	104.6%
J25 - A12 / Main Road / P&R	-	-	-	104.6%
1/1	A12 North Left Ahead	6.5	9.5	45.9%
1/2+1/3	A12 North Ahead	7.8	9.1	59.0 : 59.0%
2/2+2/1	Main Road (E) Left Ahead	0.8	5.2	35.6 : 35.6%
3/2+3/1	A12 South Left Ahead	45.7	113.6	104.6 : 101.8%
3/3	A12 South Ahead	31.2	117.1	102.0%
4/1	A1214 Main Road (W) Left Ahead	7.1	25.5	55.3%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	9.0	25.7	70.3 : 70.3%
5/1	Park and Ride Exit Left	0.1	39.0	2.3%
5/2	Park and Ride Exit Ahead	0.2	38.7	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	3.5	33.3	33.8%
8/2	Internal 1 Right	6.1	12.6	56.2%
8/3	Internal 1 Right	6.1	13.0	56.2%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	1.8	0.2%
10/2	Internal 2 Right	0.9	4.6	62.3%
10/3	Internal 2 Right Right2	0.9	4.6	62.5%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		7.3	10.4	48.3 : 48.3%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	27.9	Total Delay for Signalled Lanes (pcuHr):	9.32	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	52.4	Total Delay for Signalled Lanes (pcuHr):	7.94	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-16.2	Total Delay for Signalled Lanes (pcuHr):	65.06	Cycle Time (s):	75
	PRC Over All Lanes (%)	-16.2	Total Delay Over All Lanes(pcuHr):	82.66		

Scenario 10: '2023 Reference Case 5-6PM' (FG10: '23RC_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	83.0%
J25 - A12 / Main Road / P&R	-	-	-	83.0%
1/1	A12 North Left Ahead	5.6	8.7	42.3%
1/2+1/3	A12 North Ahead	7.1	8.3	55.9 : 55.9%
2/2+2/1	Main Road (E) Left Ahead	1.0	4.9	40.1 : 40.1%
3/2+3/1	A12 South Left Ahead	10.8	15.0	71.6 : 71.6%
3/3	A12 South Ahead	10.0	15.2	58.7%
4/1	A1214 Main Road (W) Left Ahead	5.2	22.4	42.2%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	6.1	22.2	57.6 : 57.6%
5/1	Park and Ride Exit Left	0.4	39.7	9.4%
5/2	Park and Ride Exit Ahead	0.5	39.2	10.1%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	3.8	24.6	48.1%
8/2	Internal 1 Right	1.6	18.2	44.5%
8/3	Internal 1 Right	1.7	18.5	49.4%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	8.5	0.8%
10/2	Internal 2 Right	4.1	11.9	65.6%
10/3	Internal 2 Right Right2	4.0	11.7	64.3%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.8	38.7	83.0 : 83.0%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	37.1	Total Delay for Signalled Lanes (pcuHr):	10.23	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	60.9	Total Delay for Signalled Lanes (pcuHr):	7.69	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	8.4	Total Delay for Signalled Lanes (pcuHr):	13.91	Cycle Time (s):	75
	PRC Over All Lanes (%)	8.4	Total Delay Over All Lanes(pcuHr):	32.22		

Scenario 11: '2023 Early Years 6-7AM' (FG11: '23EY_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	38.3%
J25 - A12 / Main Road / P&R	-	-	-	38.3%
1/1	A12 North Left Ahead	2.4	6.3	24.7%
1/2+1/3	A12 North Ahead	3.4	6.1	35.5 : 35.5%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.7	5.7 : 5.7%
3/2+3/1	A12 South Left Ahead	3.4	8.8	32.5 : 32.5%
3/3	A12 South Ahead	2.7	9.2	25.6%
4/1	A1214 Main Road (W) Left Ahead	2.0	18.8	23.3%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	2.8	18.6	38.3 : 38.3%
5/1	Park and Ride Exit Left	0.0	29.8	0.4%
5/2	Park and Ride Exit Ahead	0.0	29.4	0.7%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.3	16.0	7.9%
8/2	Internal 1 Right	0.4	11.1	22.9%
8/3	Internal 1 Right	0.5	11.3	29.1%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	4.6	0.8%
10/2	Internal 2 Right	0.4	3.0	31.2%
10/3	Internal 2 Right Right2	0.3	2.8	26.0%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	2.7	20.6	30.7 : 30.7%	
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	135.1	Total Delay for Signalled Lanes (pcuHr):	3.06	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	153.5	Total Delay for Signalled Lanes (pcuHr):	2.48	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	177.3	Total Delay for Signalled Lanes (pcuHr):	3.01	Cycle Time (s): 60
	PRC Over All Lanes (%)	135.1	Total Delay Over All Lanes(pcuHr):	8.58	

Scenario 12: '2023 Early Years 7-8AM' (FG12: '23EY_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	73.8%
J25 - A12 / Main Road / P&R	-	-	-	73.8%
1/1	A12 North Left Ahead	5.3	8.4	45.9%
1/2+1/3	A12 North Ahead	6.8	8.0	58.3 : 58.3%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.4	15.1 : 15.1%
3/2+3/1	A12 South Left Ahead	9.4	12.8	67.6 : 67.6%
3/3	A12 South Ahead	8.7	14.0	62.1%
4/1	A1214 Main Road (W) Left Ahead	6.9	22.9	62.4%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	8.2	22.7	73.8 : 73.8%
5/1	Park and Ride Exit Left	0.0	29.8	1.1%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.9	17.3	13.8%
8/2	Internal 1 Right	4.9	13.5	57.6%
8/3	Internal 1 Right	4.9	14.2	57.6%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	4.6	4.6%
10/2	Internal 2 Right	3.1	9.2	72.2%
10/3	Internal 2 Right Right2	2.9	8.7	69.8%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		6.4	21.2	64.0 : 64.0%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	21.9	Total Delay for Signalled Lanes (pcuHr):	10.86	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	54.5	Total Delay for Signalled Lanes (pcuHr):	6.20	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	33.1	Total Delay for Signalled Lanes (pcuHr):	8.80	Cycle Time (s):	60
	PRC Over All Lanes (%)	21.9	Total Delay Over All Lanes(pcuHr):	25.95		

Scenario 13: '2023 Early Years 8-9AM' (FG13: '23EY_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	91.0%
J25 - A12 / Main Road / P&R	-	-	-	91.0%
1/1	A12 North Left Ahead	8.1	12.0	60.5%
1/2+1/3	A12 North Ahead	10.1	11.4	72.0 : 72.0%
2/2+2/1	Main Road (E) Left Ahead	0.2	4.3	24.5 : 24.5%
3/2+3/1	A12 South Left Ahead	14.1	19.0	83.2 : 83.2%
3/3	A12 South Ahead	12.9	21.3	79.0%
4/1	A1214 Main Road (W) Left Ahead	7.4	23.6	65.0%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	14.1	37.1	91.0 : 91.0%
5/1	Park and Ride Exit Left	0.1	29.9	2.3%
5/2	Park and Ride Exit Ahead	0.2	29.6	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	1.6	14.6	24.6%
8/2	Internal 1 Right	5.1	10.2	61.3%
8/3	Internal 1 Right	5.2	11.3	64.2%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	3.1	5.5%
10/2	Internal 2 Right	3.3	11.7	83.7%
10/3	Internal 2 Right Right2	3.2	10.3	81.0%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	8.6	20.6	70.4 : 70.4%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	-1.1	Total Delay for Signalled Lanes (pcuHr):	16.85 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	25.0	Total Delay for Signalled Lanes (pcuHr):	9.17 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	8.2	Total Delay for Signalled Lanes (pcuHr):	14.52 Cycle Time (s): 60
	PRC Over All Lanes (%)	-1.1	Total Delay Over All Lanes(pcuHr):	40.72

Scenario 14: '2023 Early Years 3-4PM' (FG14: '23EY_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	107.2%
J25 - A12 / Main Road / P&R	-	-	-	107.2%
1/1	A12 North Left Ahead	7.7	9.7	51.7%
1/2+1/3	A12 North Ahead	8.8	9.2	64.4 : 64.4%
2/2+2/1	Main Road (E) Left Ahead	3.5	18.2	73.9 : 73.9%
3/2+3/1	A12 South Left Ahead	55.6	129.4	107.2 : 101.5%
3/3	A12 South Ahead	43.1	165.6	105.8%
4/1	A1214 Main Road (W) Left Ahead	7.1	23.4	53.0%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	8.7	23.3	67.4 : 67.4%
5/1	Park and Ride Exit Left	0.1	39.0	2.3%
5/2	Park and Ride Exit Ahead	0.3	38.8	5.3%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	3.5	35.0	34.6%
8/2	Internal 1 Right	6.4	16.6	60.1%
8/3	Internal 1 Right	6.4	16.9	59.9%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	1.9	0.2%
10/2	Internal 2 Right	1.2	5.8	68.6%
10/3	Internal 2 Right Right2	1.2	5.7	68.5%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.4	12.2	61.5 : 61.5%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	31.2	Total Delay for Signalled Lanes (pcuHr):	9.33	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	39.7	Total Delay for Signalled Lanes (pcuHr):	9.24	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-19.2	Total Delay for Signalled Lanes (pcuHr):	85.46	Cycle Time (s):	75
	PRC Over All Lanes (%)	-19.2	Total Delay Over All Lanes(pcuHr):	105.69		

Scenario 15: '2023 Early Years 5-6PM' (FG15: '23EY_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	83.3%
J25 - A12 / Main Road / P&R	-	-	-	83.3%
1/1	A12 North Left Ahead	6.8	9.7	47.8%
1/2+1/3	A12 North Ahead	8.2	9.3	61.6 : 61.6%
2/2+2/1	Main Road (E) Left Ahead	0.6	3.4	26.8 : 26.8%
3/2+3/1	A12 South Left Ahead	11.1	15.1	72.5 : 72.5%
3/3	A12 South Ahead	10.1	15.3	59.4%
4/1	A1214 Main Road (W) Left Ahead	5.4	23.5	44.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	6.4	23.3	59.8 : 59.8%
5/1	Park and Ride Exit Left	0.4	39.8	9.9%
5/2	Park and Ride Exit Ahead	0.5	39.2	10.6%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	3.8	22.6	46.0%
8/2	Internal 1 Right	1.5	17.1	42.5%
8/3	Internal 1 Right	1.6	17.2	47.1%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	8.3	0.8%
10/2	Internal 2 Right	4.7	12.4	64.8%
10/3	Internal 2 Right Right2	4.6	12.2	63.3%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		8.9	36.8	83.3 : 83.3%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	38.9	Total Delay for Signalled Lanes (pcuHr):	10.84	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	46.0	Total Delay for Signalled Lanes (pcuHr):	8.30	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	8.0	Total Delay for Signalled Lanes (pcuHr):	13.86	Cycle Time (s):	75
	PRC Over All Lanes (%)	8.0	Total Delay Over All Lanes(pcuHr):	33.22		

Scenario 16: '2028 Reference Case 6-7AM' (FG16: '28RC_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	35.3%
J25 - A12 / Main Road / P&R	-	-	-	35.3%
1/1	A12 North Left Ahead	2.1	5.4	24.0%
1/2+1/3	A12 North Ahead	3.0	5.2	32.8 : 32.8%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.7	5.7 : 5.7%
3/2+3/1	A12 South Left Ahead	2.1	5.1	24.1 : 24.1%
3/3	A12 South Ahead	1.6	5.4	17.5%
4/1	A1214 Main Road (W) Left Ahead	1.7	16.7	19.4%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	2.4	16.6	33.0 : 33.0%
5/1	Park and Ride Exit Left	0.0	0.0	0.0%
5/2	Park and Ride Exit Ahead	0.0	29.4	0.7%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.2	39.5	2.7%
8/2	Internal 1 Right	2.0	14.6	31.9%
8/3	Internal 1 Right	2.0	14.5	31.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	7.2	0.8%
10/2	Internal 2 Right	1.4	7.0	28.1%
10/3	Internal 2 Right Right2	0.9	6.8	22.9%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		2.1	25.2	35.3 : 35.3%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	172.7	Total Delay for Signalled Lanes (pcuHr):	3.14	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	174.3	Total Delay for Signalled Lanes (pcuHr):	2.41	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	155.1	Total Delay for Signalled Lanes (pcuHr):	1.90	Cycle Time (s):	60
	PRC Over All Lanes (%)	155.1	Total Delay Over All Lanes(pcuHr):	7.48		

Scenario 17: '2028 Reference Case 7-8AM' (FG17: '28RC_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	70.1%
J25 - A12 / Main Road / P&R	-	-	-	70.1%
1/1	A12 North Left Ahead	5.8	9.2	49.1%
1/2+1/3	A12 North Ahead	7.4	8.8	60.4 : 60.4%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.7	15.0 : 15.0%
3/2+3/1	A12 South Left Ahead	8.0	11.8	61.7 : 61.7%
3/3	A12 South Ahead	7.2	12.8	55.0%
4/1	A1214 Main Road (W) Left Ahead	6.5	20.0	57.1%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	7.3	19.6	70.1 : 70.1%
5/1	Park and Ride Exit Left	0.0	29.8	1.1%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.4	33.3	4.6%
8/2	Internal 1 Right	5.9	15.8	63.8%
8/3	Internal 1 Right	5.8	15.8	63.4%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	6.3	5.3%
10/2	Internal 2 Right	3.0	10.6	69.9%
10/3	Internal 2 Right Right2	2.8	10.2	66.7%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	5.6	20.3	56.8 : 56.8%	
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	28.4	Total Delay for Signalled Lanes (pcuHr):	10.30	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	41.0	Total Delay for Signalled Lanes (pcuHr):	7.28	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	45.9	Total Delay for Signalled Lanes (pcuHr):	7.71	Cycle Time (s): 60
	PRC Over All Lanes (%)	28.4	Total Delay Over All Lanes(pcuHr):	25.38	

Scenario 18: '2028 Reference Case 8-9AM' (FG18: '28RC_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	93.2%
J25 - A12 / Main Road / P&R	-	-	-	93.2%
1/1	A12 North Left Ahead	7.0	11.8	55.4%
1/2+1/3	A12 North Ahead	8.9	11.2	66.4 : 66.4%
2/2+2/1	Main Road (E) Left Ahead	0.2	4.2	24.7 : 24.7%
3/2+3/1	A12 South Left Ahead	10.6	12.8	72.8 : 72.8%
3/3	A12 South Ahead	10.0	14.4	67.1%
4/1	A1214 Main Road (W) Left Ahead	5.4	17.8	49.3%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	17.3	38.4	93.2 : 93.2%
5/1	Park and Ride Exit Left	0.1	29.9	2.3%
5/2	Park and Ride Exit Ahead	0.2	29.6	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.1	12.9	30.6%
8/2	Internal 1 Right	5.2	10.8	63.2%
8/3	Internal 1 Right	5.3	12.1	65.0%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.2	8.1	6.3%
10/2	Internal 2 Right	7.0	22.4	88.1%
10/3	Internal 2 Right Right2	6.6	21.1	87.0%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		7.3	29.0	66.3 : 66.3%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	-3.6	Total Delay for Signalled Lanes (pcuHr):	21.74	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	35.6	Total Delay for Signalled Lanes (pcuHr):	8.72	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	23.6	Total Delay for Signalled Lanes (pcuHr):	11.13	Cycle Time (s):	60
	PRC Over All Lanes (%)	-3.6	Total Delay Over All Lanes(pcuHr):	41.75		

Scenario 19: '2028 Reference Case 3-4PM' (FG19: '28RC_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	116.6%
J25 - A12 / Main Road / P&R	-	-	-	116.6%
1/1	A12 North Left Ahead	7.4	11.6	49.9%
1/2+1/3	A12 North Ahead	8.8	11.1	62.8 : 62.8%
2/2+2/1	Main Road (E) Left Ahead	0.9	5.9	37.5 : 37.5%
3/2+3/1	A12 South Left Ahead	110.3	247.5	108.2 : 116.6%
3/3	A12 South Ahead	50.6	197.5	108.1%
4/1	A1214 Main Road (W) Left Ahead	7.5	27.0	58.1%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	9.7	27.6	74.4 : 74.4%
5/1	Park and Ride Exit Left	0.1	39.0	2.3%
5/2	Park and Ride Exit Ahead	0.3	38.8	5.3%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.4	23.5	18.5%
8/2	Internal 1 Right	1.3	9.7	55.8%
8/3	Internal 1 Right	1.4	9.8	56.3%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	2.8	0.2%
10/2	Internal 2 Right	1.4	5.6	62.8%
10/3	Internal 2 Right Right2	1.4	5.6	63.2%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.3	24.3	49.9 : 49.9%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	21.0	Total Delay for Signalled Lanes (pcuHr):	10.58	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	43.3	Total Delay for Signalled Lanes (pcuHr):	7.79	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-29.6	Total Delay for Signalled Lanes (pcuHr):	145.93	Cycle Time (s):	75
	PRC Over All Lanes (%)	-29.6	Total Delay Over All Lanes(pcuHr):	164.68		

Scenario 20: '2028 Reference Case 5-6PM' (FG20: '28RC_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	121.7%
J25 - A12 / Main Road / P&R	-	-	-	121.7%
1/1	A12 North Left Ahead	5.6	10.6	41.3%
1/2+1/3	A12 North Ahead	7.3	10.3	56.3 : 56.3%
2/2+2/1	Main Road (E) Left Ahead	0.5	3.3	25.9 : 25.9%
3/2+3/1	A12 South Left Ahead	159.6	371.2	121.7 : 121.7%
3/3	A12 South Ahead	47.1	159.1	105.7%
4/1	A1214 Main Road (W) Left Ahead	6.3	26.6	52.4%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	7.7	26.6	67.9 : 67.9%
5/1	Park and Ride Exit Left	0.4	39.8	9.9%
5/2	Park and Ride Exit Ahead	0.5	39.2	10.1%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	3.0	36.9	23.3%
8/2	Internal 1 Right	1.1	8.3	48.5%
8/3	Internal 1 Right	1.2	8.1	48.9%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	6.5	0.7%
10/2	Internal 2 Right	0.7	3.0	42.2%
10/3	Internal 2 Right Right2	1.4	5.2	69.0%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.2	15.9	54.2 : 54.2%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	30.5	Total Delay for Signalled Lanes (pcuHr):	8.99	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	59.9	Total Delay for Signalled Lanes (pcuHr):	7.10	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-35.3	Total Delay for Signalled Lanes (pcuHr):	187.15	Cycle Time (s):	75
	PRC Over All Lanes (%)	-35.3	Total Delay Over All Lanes(pcuHr):	203.44		

Scenario 21: '2028 Peak Construction 6-7AM' (FG21: '28PC_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	37.9%
J25 - A12 / Main Road / P&R	-	-	-	37.9%
1/1	A12 North Left Ahead	2.0	5.3	22.9%
1/2+1/3	A12 North Ahead	2.9	5.2	32.2 : 32.2%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.7	5.6 : 5.6%
3/2+3/1	A12 South Left Ahead	4.2	11.5	37.8 : 37.8%
3/3	A12 South Ahead	3.7	12.3	33.7%
4/1	A1214 Main Road (W) Left Ahead	2.1	15.5	22.7%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	2.8	15.3	33.8 : 33.8%
5/1	Park and Ride Exit Left	0.0	0.0	0.0%
5/2	Park and Ride Exit Ahead	0.0	29.4	0.7%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.5	20.7	9.3%
8/2	Internal 1 Right	1.8	15.4	28.3%
8/3	Internal 1 Right	1.7	15.5	27.7%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	5.1	0.9%
10/2	Internal 2 Right	0.5	3.7	37.9%
10/3	Internal 2 Right Right2	0.4	3.5	34.0%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		1.6	12.4	19.4 : 19.4%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	137.8	Total Delay for Signalled Lanes (pcuHr):	2.90	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	179.3	Total Delay for Signalled Lanes (pcuHr):	2.38	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	138.1	Total Delay for Signalled Lanes (pcuHr):	3.32	Cycle Time (s):	60
	PRC Over All Lanes (%)	137.8	Total Delay Over All Lanes(pcuHr):	8.64		

Scenario 22: '2028 Peak Construction 7-8AM' (FG22: '28PC_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	76.5%
J25 - A12 / Main Road / P&R	-	-	-	76.5%
1/1	A12 North Left Ahead	5.1	9.3	44.7%
1/2+1/3	A12 North Ahead	6.8	8.9	56.8 : 56.8%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.5	14.2 : 14.2%
3/2+3/1	A12 South Left Ahead	8.4	9.8	63.8 : 63.8%
3/3	A12 South Ahead	7.8	10.7	57.3%
4/1	A1214 Main Road (W) Left Ahead	7.4	25.0	66.6%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	8.8	24.7	76.5 : 76.5%
5/1	Park and Ride Exit Left	0.0	29.8	1.1%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.8	12.9	14.9%
8/2	Internal 1 Right	3.5	8.7	49.3%
8/3	Internal 1 Right	3.6	9.3	49.7%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.2	6.3	4.6%
10/2	Internal 2 Right	3.7	10.8	71.5%
10/3	Internal 2 Right Right2	3.5	10.4	69.8%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	6.7	31.7	70.2 : 70.2%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	17.6	Total Delay for Signalled Lanes (pcuHr):	12.32 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	58.5	Total Delay for Signalled Lanes (pcuHr):	5.49 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	28.2	Total Delay for Signalled Lanes (pcuHr):	8.14 Cycle Time (s): 60
	PRC Over All Lanes (%)	17.6	Total Delay Over All Lanes(pcuHr):	26.03

Scenario 23: '2028 Peak Construction 8-9AM' (FG23: '28PC_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	94.9%
J25 - A12 / Main Road / P&R	-	-	-	94.9%
1/1	A12 North Left Ahead	7.2	11.9	56.1%
1/2+1/3	A12 North Ahead	9.0	11.3	67.1 : 67.1%
2/2+2/1	Main Road (E) Left Ahead	0.3	3.9	24.4 : 24.4%
3/2+3/1	A12 South Left Ahead	14.3	19.3	83.8 : 83.9%
3/3	A12 South Ahead	13.4	22.3	80.9%
4/1	A1214 Main Road (W) Left Ahead	5.7	19.0	51.4%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	18.7	44.9	94.9 : 94.9%
5/1	Park and Ride Exit Left	0.1	29.9	2.3%
5/2	Park and Ride Exit Ahead	0.2	29.6	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.3	12.4	34.0%
8/2	Internal 1 Right	4.6	9.6	58.8%
8/3	Internal 1 Right	5.1	10.9	63.2%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	5.3	6.0%
10/2	Internal 2 Right	6.2	21.3	90.6%
10/3	Internal 2 Right Right2	5.6	19.1	89.1%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		6.8	18.8	59.0 : 59.0%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	-5.4	Total Delay for Signalled Lanes (pcuHr):	23.18	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	34.2	Total Delay for Signalled Lanes (pcuHr):	8.50	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	7.3	Total Delay for Signalled Lanes (pcuHr):	14.41	Cycle Time (s):	60
	PRC Over All Lanes (%)	-5.4	Total Delay Over All Lanes(pcuHr):	46.27		

Scenario 24: '2028 Peak Construction 3-4PM' (FG24: '28PC_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	91.6%
J25 - A12 / Main Road / P&R	-	-	-	91.6%
1/1	A12 North Left Ahead	6.1	8.9	44.5%
1/2+1/3	A12 North Ahead	7.4	8.5	58.8 : 58.8%
2/2+2/1	Main Road (E) Left Ahead	1.0	5.9	41.5 : 41.5%
3/2+3/1	A12 South Left Ahead	19.2	32.0	91.6 : 91.6%
3/3	A12 South Ahead	17.2	33.4	86.1%
4/1	A1214 Main Road (W) Left Ahead	6.9	24.1	52.6%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	8.3	24.0	66.2 : 66.2%
5/1	Park and Ride Exit Left	0.1	39.0	2.3%
5/2	Park and Ride Exit Ahead	0.3	38.8	5.3%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	3.0	21.5	36.8%
8/2	Internal 1 Right	2.2	21.7	54.2%
8/3	Internal 1 Right	2.1	21.2	53.7%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	5.3	0.2%
10/2	Internal 2 Right	3.1	10.0	73.6%
10/3	Internal 2 Right Right2	3.0	9.9	73.5%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.5	26.5	66.4 : 66.4%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	22.4	Total Delay for Signalled Lanes (pcuHr):	11.15	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	53.1	Total Delay for Signalled Lanes (pcuHr):	8.36	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-1.8	Total Delay for Signalled Lanes (pcuHr):	24.34	Cycle Time (s):	75
	PRC Over All Lanes (%)	-1.8	Total Delay Over All Lanes(pcuHr):	44.26		

Scenario 25: '2028 Peak Construction 5-6PM' (FG25: '28PC_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	93.2%
J25 - A12 / Main Road / P&R	-	-	-	93.2%
1/1	A12 North Left Ahead	5.2	7.9	39.7%
1/2+1/3	A12 North Ahead	6.6	7.7	54.8 : 54.8%
2/2+2/1	Main Road (E) Left Ahead	0.6	3.1	28.7 : 25.7%
3/2+3/1	A12 South Left Ahead	21.6	28.9	93.2 : 93.2%
3/3	A12 South Ahead	14.9	20.1	75.1%
4/1	A1214 Main Road (W) Left Ahead	5.8	24.9	47.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	6.9	24.6	60.5 : 60.5%
5/1	Park and Ride Exit Left	0.4	39.8	9.9%
5/2	Park and Ride Exit Ahead	0.5	39.2	10.6%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	3.9	25.1	50.7%
8/2	Internal 1 Right	1.5	19.9	43.8%
8/3	Internal 1 Right	1.4	18.8	43.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	9.5	0.8%
10/2	Internal 2 Right	3.1	9.5	52.1%
10/3	Internal 2 Right Right2	5.3	13.2	75.9%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.5	36.3	81.9 : 81.9%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	18.6	Total Delay for Signalled Lanes (pcuHr):	10.89	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	64.4	Total Delay for Signalled Lanes (pcuHr):	7.27	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-3.6	Total Delay for Signalled Lanes (pcuHr):	21.57	Cycle Time (s):	75
	PRC Over All Lanes (%)	-3.6	Total Delay Over All Lanes(pcuHr):	39.94		

Scenario 26: '2034 Reference Case 6-7AM' (FG26: '34RC_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	33.9%
J25 - A12 / Main Road / P&R	-	-	-	33.9%
1/1	A12 North Left Ahead	2.2	5.4	24.9%
1/2+1/3	A12 North Ahead	3.2	5.3	33.9 : 33.9%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.8	5.7 : 5.7%
3/2+3/1	A12 South Left Ahead	2.3	6.0	25.7 : 25.7%
3/3	A12 South Ahead	1.9	6.3	19.5%
4/1	A1214 Main Road (W) Left Ahead	1.7	15.2	19.1%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	2.4	15.0	31.8 : 31.8%
5/1	Park and Ride Exit Left	0.0	0.0	0.0%
5/2	Park and Ride Exit Ahead	0.0	29.4	0.7%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.2	40.3	2.7%
8/2	Internal 1 Right	2.1	16.0	32.4%
8/3	Internal 1 Right	2.0	15.9	31.5%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	7.8	0.9%
10/2	Internal 2 Right	1.5	7.7	30.9%
10/3	Internal 2 Right Right2	1.0	7.4	25.8%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	2.1	22.2	32.1 : 32.1%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	182.9	Total Delay for Signalled Lanes (pcuHr):	3.18 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	165.2	Total Delay for Signalled Lanes (pcuHr):	2.57 Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	180.0	Total Delay for Signalled Lanes (pcuHr):	2.06 Cycle Time (s): 60
	PRC Over All Lanes (%)	165.2	Total Delay Over All Lanes(pcuHr):	7.84

Scenario 27: '2034 Reference Case 7-8AM' (FG27: '34RC_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	74.7%
J25 - A12 / Main Road / P&R	-	-	-	74.7%
1/1	A12 North Left Ahead	6.8	11.0	53.9%
1/2+1/3	A12 North Ahead	8.5	10.5	64.2 : 64.2%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.8	15.2 : 15.2%
3/2+3/1	A12 South Left Ahead	7.7	9.3	61.2 : 61.2%
3/3	A12 South Ahead	7.0	10.1	53.3%
4/1	A1214 Main Road (W) Left Ahead	6.7	22.6	61.3%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	8.1	22.6	74.7 : 74.7%
5/1	Park and Ride Exit Left	0.0	29.8	1.1%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.4	25.0	4.3%
8/2	Internal 1 Right	1.5	11.1	57.3%
8/3	Internal 1 Right	1.5	11.1	58.1%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.2	6.9	5.1%
10/2	Internal 2 Right	4.1	11.2	69.8%
10/3	Internal 2 Right Right2	3.5	10.7	67.3%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		6.4	34.9	67.3 : 67.3%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	20.4	Total Delay for Signalled Lanes (pcuHr):	11.70	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	40.3	Total Delay for Signalled Lanes (pcuHr):	7.25	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	33.7	Total Delay for Signalled Lanes (pcuHr):	8.05	Cycle Time (s):	60
	PRC Over All Lanes (%)	20.4	Total Delay Over All Lanes(pcuHr):	27.09		

Scenario 28: '2034 Reference Case 8-9AM' (FG28: '34RC_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	98.9%
J25 - A12 / Main Road / P&R	-	-	-	98.9%
1/1	A12 North Left Ahead	8.5	13.6	62.2%
1/2+1/3	A12 North Ahead	10.2	12.9	70.9 : 70.9%
2/2+2/1	Main Road (E) Left Ahead	0.2	4.4	25.1 : 25.1%
3/2+3/1	A12 South Left Ahead	8.2	9.6	68.6 : 68.6%
3/3	A12 South Ahead	7.8	10.1	57.4%
4/1	A1214 Main Road (W) Left Ahead	5.3	17.7	48.8%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	26.4	64.8	98.9 : 98.9%
5/1	Park and Ride Exit Left	0.1	29.9	3.0%
5/2	Park and Ride Exit Ahead	0.2	29.6	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	2.3	11.8	34.2%
8/2	Internal 1 Right	4.6	9.6	60.1%
8/3	Internal 1 Right	5.1	10.8	64.0%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.3	10.0	6.6%
10/2	Internal 2 Right	7.2	20.8	83.9%
10/3	Internal 2 Right Right2	6.6	20.4	83.4%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		6.7	38.2	71.8 : 71.8%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	-9.9	Total Delay for Signalled Lanes (pcuHr):	28.66	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	26.9	Total Delay for Signalled Lanes (pcuHr):	9.50	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	25.4	Total Delay for Signalled Lanes (pcuHr):	9.24	Cycle Time (s):	60
	PRC Over All Lanes (%)	-9.9	Total Delay Over All Lanes(pcuHr):	47.58		

Scenario 29: '2034 Reference Case 3-4PM' (FG29: '34RC_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	92.6%
J25 - A12 / Main Road / P&R	-	-	-	92.6%
1/1	A12 North Left Ahead	7.8	10.8	51.9%
1/2+1/3	A12 North Ahead	9.1	10.2	63.7 : 63.7%
2/2+2/1	Main Road (E) Left Ahead	1.7	9.7	54.9 : 54.9%
3/2+3/1	A12 South Left Ahead	20.3	30.9	92.6 : 92.6%
3/3	A12 South Ahead	16.4	27.4	82.2%
4/1	A1214 Main Road (W) Left Ahead	7.1	25.5	55.1%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	9.6	26.4	73.5 : 73.5%
5/1	Park and Ride Exit Left	0.1	39.0	1.9%
5/2	Park and Ride Exit Ahead	0.3	38.9	6.6%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	3.3	41.3	28.4%
8/2	Internal 1 Right	7.4	13.8	63.0%
8/3	Internal 1 Right	7.4	13.7	62.9%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	9.9	0.3%
10/2	Internal 2 Right	1.5	6.2	71.6%
10/3	Internal 2 Right Right2	1.5	6.7	74.6%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.6	22.4	68.1 : 68.1%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	20.7	Total Delay for Signalled Lanes (pcuHr):	10.94	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	41.3	Total Delay for Signalled Lanes (pcuHr):	9.48	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-2.9	Total Delay for Signalled Lanes (pcuHr):	22.56	Cycle Time (s):	75
	PRC Over All Lanes (%)	-2.9	Total Delay Over All Lanes(pcuHr):	43.75		

Scenario 30: '2034 Reference Case 5-6PM' (FG30: '34RC_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	110.2%
J25 - A12 / Main Road / P&R	-	-	-	110.2%
1/1	A12 North Left Ahead	5.6	9.1	41.8%
1/2+1/3	A12 North Ahead	7.1	8.8	56.2 : 56.2%
2/2+2/1	Main Road (E) Left Ahead	0.7	3.6	31.7 : 27.6%
3/2+3/1	A12 South Left Ahead	98.5	212.2	110.2 : 110.2%
3/3	A12 South Ahead	24.9	50.8	95.2%
4/1	A1214 Main Road (W) Left Ahead	6.8	27.3	55.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	8.2	27.1	68.3 : 68.3%
5/1	Park and Ride Exit Left	0.5	39.8	10.3%
5/2	Park and Ride Exit Ahead	0.5	39.3	11.5%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	4.7	31.9	43.6%
8/2	Internal 1 Right	5.0	10.5	49.1%
8/3	Internal 1 Right	5.0	10.8	48.4%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	5.7	0.7%
10/2	Internal 2 Right	0.4	2.8	39.2%
10/3	Internal 2 Right Right2	1.8	7.0	77.4%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		9.9	19.6	63.6 : 63.6%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	16.3	Total Delay for Signalled Lanes (pcuHr):	9.69	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	60.2	Total Delay for Signalled Lanes (pcuHr):	7.35	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-22.5	Total Delay for Signalled Lanes (pcuHr):	97.22	Cycle Time (s):	75
	PRC Over All Lanes (%)	-22.5	Total Delay Over All Lanes(pcuHr):	114.52		

Scenario 31: '2034 Operational Forecast 6-7AM' (FG31: '34OP_6-7AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	33.1%
J25 - A12 / Main Road / P&R	-	-	-	33.1%
1/1	A12 North Left Ahead	2.1	5.4	23.9%
1/2+1/3	A12 North Ahead	3.0	5.2	33.1 : 33.1%
2/2+2/1	Main Road (E) Left Ahead	0.0	2.7	5.7 : 5.7%
3/2+3/1	A12 South Left Ahead	3.4	11.0	31.9 : 31.9%
3/3	A12 South Ahead	2.6	11.5	24.6%
4/1	A1214 Main Road (W) Left Ahead	1.8	15.2	19.9%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	2.4	15.0	31.3 : 31.3%
5/1	Park and Ride Exit Left	0.0	0.0	0.0%
5/2	Park and Ride Exit Ahead	0.0	29.4	0.7%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	0.5	21.0	9.3%
8/2	Internal 1 Right	1.8	15.5	28.3%
8/3	Internal 1 Right	1.7	15.5	28.0%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	5.1	0.9%
10/2	Internal 2 Right	0.4	3.5	31.9%
10/3	Internal 2 Right Right2	0.3	3.2	24.9%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		1.6	12.4	19.6 : 19.6%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	181.7	Total Delay for Signalled Lanes (pcuHr):	2.50	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	172.2	Total Delay for Signalled Lanes (pcuHr):	2.44	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	182.3	Total Delay for Signalled Lanes (pcuHr):	2.71	Cycle Time (s):	60
	PRC Over All Lanes (%)	172.2	Total Delay Over All Lanes(pcuHr):	7.69		

Scenario 32: '2034 Operational Forecast 7-8AM' (FG32: '34OP_7-8AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	71.7%
J25 - A12 / Main Road / P&R	-	-	-	71.7%
1/1	A12 North Left Ahead	5.0	8.2	44.3%
1/2+1/3	A12 North Ahead	6.6	7.8	55.9 : 55.9%
2/2+2/1	Main Road (E) Left Ahead	0.1	3.5	14.2 : 14.2%
3/2+3/1	A12 South Left Ahead	8.6	11.6	64.6 : 64.6%
3/3	A12 South Ahead	7.9	12.7	58.2%
4/1	A1214 Main Road (W) Left Ahead	6.4	22.1	58.9%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	7.7	22.0	71.7 : 71.7%
5/1	Park and Ride Exit Left	0.0	29.8	1.1%
5/2	Park and Ride Exit Ahead	0.1	29.4	1.4%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	1.1	16.3	16.6%
8/2	Internal 1 Right	4.9	13.8	57.6%
8/3	Internal 1 Right	4.9	14.2	57.4%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	5.4	4.9%
10/2	Internal 2 Right	2.9	9.6	70.1%
10/3	Internal 2 Right Right2	2.8	9.2	67.5%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2	Internal 3 Ahead Right	5.2	20.7	55.4 : 55.4%	
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	25.6	Total Delay for Signalled Lanes (pcuHr):	10.44	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	56.4	Total Delay for Signalled Lanes (pcuHr):	5.97	Cycle Time (s): 60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	39.3	Total Delay for Signalled Lanes (pcuHr):	7.74	Cycle Time (s): 60
	PRC Over All Lanes (%)	25.6	Total Delay Over All Lanes(pcuHr):	24.24	

Scenario 33: '2034 Operational Forecast 8-9AM' (FG33: '34OP_8-9AM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	101.0%
J25 - A12 / Main Road / P&R	-	-	-	101.0%
1/1	A12 North Left Ahead	7.8	11.7	58.9%
1/2+1/3	A12 North Ahead	9.5	11.1	68.8 : 68.8%
2/2+2/1	Main Road (E) Left Ahead	0.4	4.0	25.0 : 25.0%
3/2+3/1	A12 South Left Ahead	13.4	18.2	81.8 : 81.8%
3/3	A12 South Ahead	13.1	21.7	79.8%
4/1	A1214 Main Road (W) Left Ahead	4.8	17.2	44.9%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	32.8	84.4	101.0 : 101.0%
5/1	Park and Ride Exit Left	0.1	29.9	3.0%
5/2	Park and Ride Exit Ahead	0.2	29.6	4.9%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	3.6	14.4	47.6%
8/2	Internal 1 Right	5.2	12.0	61.3%
8/3	Internal 1 Right	6.0	14.4	69.7%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.2	6.2	6.7%
10/2	Internal 2 Right	7.5	25.1	91.8%
10/3	Internal 2 Right Right2	7.1	23.8	91.1%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		6.1	17.1	56.2 : 56.2%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	-12.2	Total Delay for Signalled Lanes (pcuHr):	36.56	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	29.1	Total Delay for Signalled Lanes (pcuHr):	9.68	Cycle Time (s):	60
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	10.1	Total Delay for Signalled Lanes (pcuHr):	13.61	Cycle Time (s):	60
	PRC Over All Lanes (%)	-12.2	Total Delay Over All Lanes(pcuHr):	60.05		

Scenario 34: '2034 Operational Forecast 3-4PM' (FG34: '34OP_3-4PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	98.9%
J25 - A12 / Main Road / P&R	-	-	-	98.9%
1/1	A12 North Left Ahead	7.1	9.8	48.5%
1/2+1/3	A12 North Ahead	8.2	9.4	60.8 : 60.8%
2/2+2/1	Main Road (E) Left Ahead	1.6	7.6	51.7 : 51.7%
3/2+3/1	A12 South Left Ahead	32.0	58.2	98.9 : 98.9%
3/3	A12 South Ahead	21.5	46.4	93.1%
4/1	A1214 Main Road (W) Left Ahead	7.1	26.6	56.5%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	9.1	27.0	71.5 : 71.5%
5/1	Park and Ride Exit Left	0.1	39.0	1.9%
5/2	Park and Ride Exit Ahead	0.3	38.8	6.2%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	4.6	30.9	42.6%
8/2	Internal 1 Right	5.6	11.5	54.3%
8/3	Internal 1 Right	5.6	11.8	53.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.0	9.9	0.3%
10/2	Internal 2 Right	1.4	5.8	70.2%
10/3	Internal 2 Right Right2	1.4	6.1	73.0%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.4	20.9	61.0 : 61.0%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	23.3	Total Delay for Signalled Lanes (pcuHr):	10.43	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	48.1	Total Delay for Signalled Lanes (pcuHr):	8.15	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-9.9	Total Delay for Signalled Lanes (pcuHr):	38.40	Cycle Time (s):	75
	PRC Over All Lanes (%)	-9.9	Total Delay Over All Lanes(pcuHr):	57.64		

Scenario 35: '2034 Operational Forecast 5-6PM' (FG35: '34OP_5-6PM', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Mean Max Queue (pcu)	Av. Delay Per PCU (s/pcu)	Deg Sat (%)
Network	-	-	-	109.3%
J25 - A12 / Main Road / P&R	-	-	-	109.3%
1/1	A12 North Left Ahead	5.6	9.1	42.0%
1/2+1/3	A12 North Ahead	7.1	8.8	56.0 : 56.0%
2/2+2/1	Main Road (E) Left Ahead	1.4	6.4	48.0 : 48.0%
3/2+3/1	A12 South Left Ahead	90.0	193.4	109.3 : 109.3%
3/3	A12 South Ahead	32.0	69.8	98.9%
4/1	A1214 Main Road (W) Left Ahead	6.5	28.1	55.1%
4/2+4/3	A1214 Main Road (W) Ahead Ahead2	10.2	31.2	76.2 : 76.2%
5/1	Park and Ride Exit Left	0.5	39.8	10.3%
5/2	Park and Ride Exit Ahead	0.5	39.3	11.5%
6/1	Park and Ride Entry	0.0	0.0	0.0%
7/1	A1214 Main Road Exit	0.0	0.0	0.0%
8/1	Internal 1 Ahead	5.4	28.9	52.7%
8/2	Internal 1 Right	3.5	8.9	48.0%
8/3	Internal 1 Right	3.7	9.3	46.8%
9/1	A12 North Exit	0.0	0.0	0.0%
9/2	A12 North Exit	0.0	0.0	0.0%
10/1	Internal 2 Ahead	0.1	5.9	0.8%
10/2	Internal 2 Right	7.6	11.8	35.1%
10/3	Internal 2 Right Right2	21.5	18.7	80.8%
11/1	Main Road (E) Exit	0.0	0.0	0.0%
12/1	Internal 4 Ahead	0.0	0.0	0.0%
12/2	Internal 4 Ahead	0.0	0.0	0.0%
12/3	Internal 4 Right	0.0	0.0	0.0%
13/1	A12 South Exit	0.0	0.0	0.0%
13/2	A12 South Exit	0.0	0.0	0.0%

J25_Model_Report

14/1+14/2		Internal 3 Ahead Right		10.7	19.9	70.8 : 70.8%
C1 - PEED TSC SERIES 3	Stream: 1 PRC for Signalled Lanes (%)	11.4	Total Delay for Signalled Lanes (pcuHr):	14.70	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 2 PRC for Signalled Lanes (%)	60.7	Total Delay for Signalled Lanes (pcuHr):	7.26	Cycle Time (s):	75
C1 - PEED TSC SERIES 3	Stream: 3 PRC for Signalled Lanes (%)	-21.5	Total Delay for Signalled Lanes (pcuHr):	94.37	Cycle Time (s):	75
	PRC Over All Lanes (%)	-21.5	Total Delay Over All Lanes(pcuHr):	116.88		

Junctions 9									
ARCADY 9 - Roundabout Module									
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Report generation date: 13/03/2020 14:47:33

- »2019 Base Year, 6-7 AM
- »2019 Base Year, 7-8 AM
- »2019 Base Year, 8-9 AM
- »2019 Base Year, 3-4 PM
- »2019 Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
- »2023 Reference Case, 8-9 AM
- »2023 Reference Case, 3-4 PM
- »2023 Reference Case, 5-6 PM
- »2023 Early Years, 6-7 AM
- »2023 Early Years, 7-8 AM
- »2023 Early Years, 8-9 AM
- »2023 Early Years, 3-4 PM
- »2023 Early Years, 5-6 PM
- »2028 Reference Case, 6-7 AM
- »2028 Reference Case, 7-8 AM
- »2028 Reference Case, 8-9 AM
- »2028 Reference Case, 3-4 PM
- »2028 Reference Case, 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case, 6-7 AM
- »2034 Reference Case, 7-8 AM
- »2034 Reference Case, 8-9 AM
- »2034 Reference Case, 3-4 PM
- »2034 Reference Case, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North		0.7	3.04	0.41	A		2.6	6.40	0.72	A		11.8	25.40	0.93	D		4.4	10.95	0.82	B		2.0	5.37	0.67	A
B - A12 West	D1	0.6	3.14	0.37	A	D2	7.4	17.69	0.89	C	D3	13.3	30.83	0.95	D	D4	14.3	32.68	0.95	D	D5	8.2	18.93	0.90	C
C - B1438 East		0.1	4.40	0.12	A		0.7	8.68	0.41	A		1.9	18.95	0.67	C		2.6	20.66	0.74	C		2.1	14.74	0.68	B
2023 Reference Case																									
A - A12 North		0.8	3.24	0.45	A		11.8	28.55	0.95	D		34.5	65.32	1.01	F		20.6	47.88	0.99	E		11.0	27.14	0.94	D
B - A12 West	D6	0.7	3.27	0.40	A	D7	27.7	56.16	1.01	F	D8	35.8	70.50	1.01	F	D9	64.7	114.63	1.07	F	D10	27.2	54.16	1.01	F
C - B1438 East		0.2	4.81	0.15	A		3.6	36.45	0.81	E		24.2	142.99	1.06	F		20.2	113.37	1.03	F		11.4	65.74	0.97	F
2023 Early Years																									
A - A12 North		0.8	3.27	0.46	A		19.6	47.28	0.98	E		32.2	62.01	1.00	F		25.7	59.82	1.00	F		13.8	34.08	0.96	D
B - A12 West	D11	0.9	3.76	0.47	A	D12	105.8	180.82	1.12	F	D13	90.4	157.07	1.09	F	D14	85.2	150.76	1.10	F	D15	35.9	68.48	1.03	F
C - B1438 East		0.2	4.87	0.15	A		5.4	54.79	0.88	F		38.9	209.92	1.13	F		34.8	174.85	1.10	F		35.7	162.42	1.09	F
2028 Reference Case																									
A - A12 North		0.8	3.16	0.44	A		30.1	69.40	1.01	F		13.8	29.65	0.95	D		24.8	58.24	1.00	F		19.8	48.51	0.98	E
B - A12 West	D16	0.7	3.40	0.42	A	D17	100.8	177.58	1.12	F	D18	118.4	204.10	1.12	F	D19	93.5	159.61	1.11	F	D20	70.9	122.69	1.08	F
C - B1438 East		0.2	4.75	0.15	A		4.8	68.67	0.87	F		1.9	19.21	0.66	C		7.8	72.88	0.93	F		10.6	74.22	0.96	F
2028 Peak Construction																									
A - A12 North		0.8	3.19	0.44	A		3.3	8.31	0.77	A		14.3	31.33	0.95	D		25.0	59.43	1.00	F		15.8	40.54	0.97	E
B - A12 West	D21	1.2	4.43	0.55	A	D22	128.4	233.58	1.13	F	D23	139.8	265.51	1.15	F	D24	87.9	155.76	1.10	F	D25	59.6	104.91	1.06	F
C - B1438 East		0.2	4.84	0.16	A		0.9	10.31	0.46	B		2.4	22.38	0.72	C		14.1	94.75	0.99	F		18.7	97.49	1.02	F
2034 Reference Case																									
A - A12 North		0.9	3.29	0.46	A		22.0	53.05	0.99	F		52.8	99.20	1.05	F		30.2	69.75	1.01	F		17.3	43.05	0.97	E
B - A12 West	D26	0.8	3.59	0.45	A	D27	112.4	192.10	1.12	F	D28	173.9	348.84	1.19	F	D29	130.3	254.04	1.15	F	D30	89.4	147.90	1.09	F
C - B1438 East		0.2	4.94	0.16	A		5.1	59.35	0.87	F		17.0	118.21	1.02	F		25.7	143.74	1.06	F		30.0	140.57	1.07	F
2034 Operational Led																									
A - A12 North		0.9	3.30	0.46	A		20.9	50.92	0.98	F		55.3	103.39	1.05	F		30.2	69.86	1.01	F		17.6	43.67	0.97	E
B - A12 West	D31	0.8	3.60	0.45	A	D32	114.4	195.68	1.13	F	D33	170.6	346.76	1.19	F	D34	132.4	259.86	1.15	F	D35	91.7	151.39	1.10	F

C - B1438 East	0.2	4.95	0.16	A	4.7	55.14	0.86	F	19.3	128.98	1.03	F	25.4	142.11	1.06	F	29.3	138.50	1.06	F
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There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / B1438
Location	52° 5'2.99"N, 1°17'16.92"E
Site number	26
Date	01/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	A12 West	
C	B1438 East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	8.10	8.30	4.8	26.8	78.0	29.0	
B - A12 West	6.70	9.60	28.6	21.5	78.0	35.8	
C - B1438 East	2.90	8.30	25.8	20.6	78.0	42.0	

Exit Restrictions

Arm	Exit restriction present	Linked exit restriction present	Maximum capacity (PCU/hr)
A - A12 North	✓		1680
B - A12 West			
C - B1438 East			

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-300
B - A12 West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-650
C - B1438 East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-400

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.607	2248
B - A12 West	0.614	1999
C - B1438 East	0.481	1383

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	760	100.000
B - A12 West		ONE HOUR	✓	600	100.000
C - B1438 East		ONE HOUR	✓	106	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	729	29
	B - A12 West	530	0	70
	C - B1438 East	23	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	9	0
	B - A12 West	10	0	7
	C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.41	3.04	0.7	2.5	A	697	1046
B - A12 West	0.37	3.14	0.6	2.6	A	551	826
C - B1438 East	0.12	4.40	0.1	0.5	A	97	146

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	572	143	53	2037	0.281	571	417	0.0	0.4	2.454	A
B - A12 West	452	113	19	1812	0.249	450	610	0.0	0.3	2.642	A
C - B1438 East	80	20	549	1065	0.075	79	74	0.0	0.1	3.651	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	683	171	63	2030	0.337	683	499	0.4	0.5	2.671	A
B - A12 West	539	135	22	1809	0.298	539	729	0.3	0.4	2.833	A
C - B1438 East	95	24	657	1010	0.094	95	89	0.1	0.1	3.933	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	837	209	77	2022	0.414	836	610	0.5	0.7	3.034	A
B - A12 West	661	165	27	1807	0.366	660	893	0.4	0.6	3.138	A
C - B1438 East	117	29	804	935	0.125	117	109	0.1	0.1	4.397	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	837	209	77	2022	0.414	837	611	0.7	0.7	3.036	A
B - A12 West	661	165	28	1807	0.366	661	894	0.6	0.6	3.140	A
C - B1438 East	117	29	805	935	0.125	117	109	0.1	0.1	4.399	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	683	171	63	2030	0.337	684	499	0.7	0.5	2.677	A
B - A12 West	539	135	23	1809	0.298	540	731	0.6	0.4	2.836	A
C - B1438 East	95	24	658	1010	0.094	95	89	0.1	0.1	3.937	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	572	143	53	2036	0.281	573	418	0.5	0.4	2.459	A
B - A12 West	452	113	19	1812	0.249	452	612	0.4	0.3	2.650	A
C - B1438 East	80	20	551	1064	0.075	80	75	0.1	0.1	3.658	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - A12 West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - B1438 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.50	0.50	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.42	0.00	0.00	0.42	0.42			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.70	0.03	0.25	0.70	0.70			N/A	N/A
B - A12 West	0.57	0.03	0.25	0.57	0.57			N/A	N/A
C - B1438 East	0.14	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.70	0.03	0.28	0.70	2.47			N/A	N/A
B - A12 West	0.57	0.03	0.29	1.24	2.64			N/A	N/A
C - B1438 East	0.14	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.51	0.51	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - A12 West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - B1438 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	12.06	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1327	100.000
B - A12 West		ONE HOUR	✓	1436	100.000
C - B1438 East		ONE HOUR	✓	257	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	11	1207	109
B - A12 West	1236	1	199
C - B1438 East	109	147	1

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	0	4	4
B - A12 West	8	0	5
C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.72	6.40	2.6	5.3	A	1218	1827
B - A12 West	0.89	17.69	7.4	37.8	C	1318	1977
C - B1438 East	0.41	8.68	0.7	3.2	A	236	354

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	999	250	150	2066	0.484	995	1015	0.0	0.9	3.351	A
B - A12 West	1081	270	91	1803	0.600	1075	1016	0.0	1.5	4.909	A
C - B1438 East	193	48	914	908	0.213	192	232	0.0	0.3	5.026	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1193	298	180	2048	0.583	1191	1215	0.9	1.4	4.193	A
B - A12 West	1291	323	109	1792	0.720	1287	1216	1.5	2.5	7.063	A
C - B1438 East	231	58	1094	819	0.282	231	277	0.3	0.4	6.108	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1461	365	219	2024	0.722	1456	1477	1.4	2.5	6.288	A
B - A12 West	1581	395	133	1778	0.889	1563	1487	2.5	6.9	15.592	C
C - B1438 East	283	71	1338	700	0.404	282	337	0.4	0.7	8.593	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1461	365	221	2023	0.722	1461	1491	2.5	2.6	6.400	A
B - A12 West	1581	395	133	1778	0.889	1579	1492	6.9	7.4	17.692	C
C - B1438 East	283	71	1342	698	0.406	283	340	0.7	0.7	8.678	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1193	298	183	2046	0.583	1198	1236	2.6	1.4	4.265	A
B - A12 West	1291	323	109	1792	0.720	1310	1223	7.4	2.6	7.746	A
C - B1438 East	231	58	1100	816	0.283	232	281	0.7	0.4	6.174	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	999	250	152	2065	0.484	1001	1025	1.4	0.9	3.387	A
B - A12 West	1081	270	91	1802	0.600	1086	1022	2.6	1.5	5.053	A
C - B1438 East	193	48	919	905	0.214	194	233	0.4	0.3	5.064	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.93	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.48	0.59	1.39	1.82	1.94			N/A	N/A
C - B1438 East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.38	0.05	0.49	3.44	5.26			N/A	N/A
B - A12 West	2.51	0.05	0.47	6.92	11.54			N/A	N/A
C - B1438 East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.53	0.03	0.27	2.53	3.40			N/A	N/A
B - A12 West	6.93	0.04	0.39	17.37	37.78			N/A	N/A
C - B1438 East	0.67	0.03	0.26	0.67	0.67			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.57	0.03	0.26	2.57	2.57			N/A	N/A
B - A12 West	7.40	0.03	0.32	8.92	35.32			N/A	N/A
C - B1438 East	0.68	0.03	0.30	1.43	3.20			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.41	0.10	1.13	2.70	3.57			N/A	N/A
B - A12 West	2.65	0.05	0.46	7.36	12.54			N/A	N/A
C - B1438 East	0.40	0.00	0.00	0.40	0.40			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.94	0.05	0.55	1.93	2.84			N/A	N/A
B - A12 West	1.52	0.03	0.33	3.34	7.86			N/A	N/A
C - B1438 East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	27.16	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1616	100.000
B - A12 West		ONE HOUR	✓	1503	100.000
C - B1438 East		ONE HOUR	✓	342	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	13	1401	202
B - A12 West	1170	2	331
C - B1438 East	152	190	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	8	6	4
B - A12 West	8	0	5
C - B1438 East	4	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.93	25.40	11.8	64.9	D	1483	2224
B - A12 West	0.95	30.83	13.3	71.8	D	1379	2069
C - B1438 East	0.67	18.95	1.9	8.1	C	314	471

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1217	304	249	1974	0.616	1210	999	0.0	1.6	4.677	A
B - A12 West	1132	283	123	1786	0.634	1125	1193	0.0	1.7	5.394	A
C - B1438 East	257	64	1060	805	0.320	256	399	0.0	0.5	6.527	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1453	363	298	1944	0.747	1448	1195	1.6	2.9	7.172	A
B - A12 West	1351	338	148	1771	0.763	1346	1427	1.7	3.1	8.352	A
C - B1438 East	307	77	1268	704	0.437	306	477	0.5	0.8	9.023	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1779	445	359	1908	0.933	1749	1442	2.9	10.3	19.839	C
B - A12 West	1655	414	180	1752	0.945	1622	1726	3.1	11.4	23.246	C
C - B1438 East	377	94	1533	575	0.654	372	576	0.8	1.8	17.394	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1779	445	365	1904	0.934	1773	1464	10.3	11.8	25.405	D
B - A12 West	1655	414	181	1751	0.945	1647	1749	11.4	13.3	30.831	D
C - B1438 East	377	94	1554	565	0.666	376	584	1.8	1.9	18.948	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1453	363	308	1938	0.749	1488	1233	11.8	3.1	8.566	A
B - A12 West	1351	338	151	1769	0.764	1391	1465	13.3	3.4	10.441	B
C - B1438 East	307	77	1303	687	0.448	312	492	1.9	0.8	9.704	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1217	304	252	1972	0.617	1222	1011	3.1	1.6	4.840	A
B - A12 West	1132	283	125	1785	0.634	1138	1205	3.4	1.8	5.620	A
C - B1438 East	257	64	1071	800	0.322	259	403	0.8	0.5	6.670	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.58	0.55	1.47	2.10	2.64			N/A	N/A
B - A12 West	1.70	0.56	1.11	2.43	2.83			N/A	N/A
C - B1438 East	0.47	0.00	0.00	0.47	0.47			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.87	0.05	0.45	7.97	13.73			N/A	N/A
B - A12 West	3.10	0.05	0.49	8.70	14.46			N/A	N/A
C - B1438 East	0.76	0.08	0.79	1.32	1.32			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.33	0.06	1.02	30.14	52.10			N/A	N/A
B - A12 West	11.41	0.07	1.48	33.33	53.88			N/A	N/A
C - B1438 East	1.80	0.03	0.29	1.80	7.24			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.78	0.04	0.41	29.44	64.85			N/A	N/A
B - A12 West	13.29	0.05	0.47	37.18	71.77			N/A	N/A
C - B1438 East	1.92	0.03	0.29	1.92	8.10			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.09	0.04	0.43	8.61	15.38			N/A	N/A
B - A12 West	3.37	0.04	0.43	9.33	17.03			N/A	N/A
C - B1438 East	0.83	0.06	0.66	1.49	1.93			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.63	0.03	0.31	2.80	8.37			N/A	N/A
B - A12 West	1.76	0.03	0.31	2.89	8.98			N/A	N/A
C - B1438 East	0.48	0.04	0.36	1.40	1.50			N/A	N/A

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	22.23	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1337	100.000
B - A12 West		ONE HOUR	✓	1511	100.000
C - B1438 East		ONE HOUR	✓	432	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1187	144
	B - A12 West	1255	1	255
	C - B1438 East	189	243	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	5
	B - A12 West	6	0	1
	C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	10.95	4.4	12.8	B	1227	1840
B - A12 West	0.95	32.68	14.3	75.3	D	1387	2080
C - B1438 East	0.74	20.66	2.6	12.3	C	396	595

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1007	252	192	2011	0.500	1003	1085	0.0	1.0	3.557	A
B - A12 West	1138	284	146	1807	0.630	1131	1073	0.0	1.7	5.276	A
C - B1438 East	325	81	895	902	0.361	323	299	0.0	0.6	6.196	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1202	300	229	1989	0.604	1200	1298	1.0	1.5	4.548	A
B - A12 West	1358	340	175	1789	0.759	1353	1284	1.7	3.0	8.146	A
C - B1438 East	388	97	1072	815	0.477	387	358	0.6	0.9	8.394	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1472	368	276	1962	0.750	1466	1568	1.5	2.9	7.183	A
B - A12 West	1664	416	213	1766	0.942	1631	1568	3.0	11.1	22.617	C
C - B1438 East	476	119	1310	697	0.683	471	433	0.9	2.0	15.657	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1472	368	280	1789	0.823	1466	1585	2.9	4.4	10.946	B
B - A12 West	1664	416	214	1744	0.954	1651	1569	11.1	14.3	32.684	D
C - B1438 East	476	119	1309	645	0.738	473	437	2.0	2.6	20.659	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1202	300	238	1984	0.606	1213	1343	4.4	1.6	4.735	A
B - A12 West	1358	340	178	1787	0.760	1402	1300	14.3	3.3	10.357	B
C - B1438 East	388	97	1083	809	0.480	395	367	2.6	0.9	8.843	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1007	252	194	2010	0.501	1009	1097	1.6	1.0	3.602	A
B - A12 West	1138	284	147	1806	0.630	1144	1080	3.3	1.7	5.491	A
C - B1438 East	325	81	901	899	0.362	327	302	0.9	0.6	6.306	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.67	0.56	1.08	2.35	2.79			N/A	N/A
C - B1438 East	0.56	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.51	0.05	0.48	3.86	6.05			N/A	N/A
B - A12 West	3.04	0.05	0.48	8.53	14.25			N/A	N/A
C - B1438 East	0.90	0.07	0.82	1.50	1.88			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.91	0.03	0.28	2.91	6.75			N/A	N/A
B - A12 West	11.13	0.07	1.21	32.61	53.42			N/A	N/A
C - B1438 East	2.04	0.03	0.29	2.04	8.47			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.37	0.03	0.29	4.37	12.80			N/A	N/A
B - A12 West	14.29	0.05	0.70	40.99	75.26			N/A	N/A
C - B1438 East	2.63	0.03	0.30	2.97	12.31			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.08	1.08	3.32	4.57			N/A	N/A
B - A12 West	3.30	0.04	0.43	9.14	16.64			N/A	N/A
C - B1438 East	0.94	0.06	0.68	1.83	2.58			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.05	0.46	2.36	3.61			N/A	N/A
B - A12 West	1.73	0.03	0.31	2.86	8.83			N/A	N/A
C - B1438 East	0.57	0.04	0.37	1.14	1.89			N/A	N/A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	13.03	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1252	100.000
B - A12 West		ONE HOUR	✓	1487	100.000
C - B1438 East		ONE HOUR	✓	479	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1102	143
	B - A12 West	1260	2	225
	C - B1438 East	191	288	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	2	3
	B - A12 West	3	0	0
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.67	5.37	2.0	3.8	A	1149	1723
B - A12 West	0.90	18.93	8.2	41.3	C	1364	2047
C - B1438 East	0.68	14.74	2.1	7.9	B	440	659

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	943	236	170	2096	0.450	939	1092	0.0	0.8	3.103	A
B - A12 West	1119	280	148	1862	0.601	1114	1044	0.0	1.5	4.773	A
C - B1438 East	361	90	834	960	0.376	358	276	0.0	0.6	5.959	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1126	281	203	2076	0.542	1124	1306	0.8	1.2	3.777	A
B - A12 West	1337	334	177	1844	0.725	1332	1249	1.5	2.6	6.975	A
C - B1438 East	431	108	997	880	0.489	429	330	0.6	0.9	7.959	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1378	345	247	2050	0.672	1375	1587	1.2	2.0	5.305	A
B - A12 West	1637	409	216	1820	0.899	1617	1527	2.6	7.6	16.316	C
C - B1438 East	527	132	1220	772	0.683	523	402	0.9	2.1	14.192	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1378	345	250	2049	0.673	1378	1603	2.0	2.0	5.368	A
B - A12 West	1637	409	218	1819	0.900	1635	1532	7.6	8.2	18.934	C
C - B1438 East	527	132	1223	771	0.684	527	405	2.1	2.1	14.737	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1126	281	207	2074	0.543	1129	1331	2.0	1.2	3.822	A
B - A12 West	1337	334	180	1843	0.725	1359	1257	8.2	2.7	7.753	A
C - B1438 East	431	108	1002	878	0.490	435	335	2.1	1.0	8.209	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	943	236	172	2095	0.450	944	1102	1.2	0.8	3.133	A
B - A12 West	1119	280	150	1861	0.602	1124	1050	2.7	1.5	4.917	A
C - B1438 East	361	90	838	957	0.377	362	278	1.0	0.6	6.062	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.81	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.49	0.58	1.40	1.85	1.98			N/A	N/A
C - B1438 East	0.60	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.17	0.05	0.63	2.66	3.85			N/A	N/A
B - A12 West	2.56	0.05	0.46	7.10	11.99			N/A	N/A
C - B1438 East	0.94	0.07	0.84	1.64	1.99			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.02	0.03	0.27	2.02	2.02			N/A	N/A
B - A12 West	7.57	0.04	0.41	20.04	41.19			N/A	N/A
C - B1438 East	2.05	0.03	0.29	2.05	7.92			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.04	0.03	0.26	2.04	2.04			N/A	N/A
B - A12 West	8.17	0.03	0.33	12.23	41.31			N/A	N/A
C - B1438 East	2.11	0.03	0.28	2.11	6.37			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.15	1.11	1.83	2.26			N/A	N/A
B - A12 West	2.72	0.04	0.45	7.55	12.97			N/A	N/A
C - B1438 East	0.98	0.06	0.72	1.88	2.66			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.82	0.06	0.72	1.38	1.82			N/A	N/A
B - A12 West	1.53	0.03	0.33	3.19	7.95			N/A	N/A
C - B1438 East	0.61	0.04	0.38	1.26	1.95			N/A	N/A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	838	100.000
B - A12 West		ONE HOUR	✓	659	100.000
C - B1438 East		ONE HOUR	✓	116	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	812	24
	B - A12 West	586	0	73
	C - B1438 East	30	86	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	1
	B - A12 West	8	0	7
	C - B1438 East	3	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.45	3.24	0.8	1.7	A	769	1153
B - A12 West	0.40	3.27	0.7	2.6	A	605	907
C - B1438 East	0.15	4.81	0.2	0.5	A	106	160

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	631	158	55	2050	0.308	629	464	0.0	0.4	2.530	A
B - A12 West	496	124	24	1832	0.271	495	675	0.0	0.4	2.691	A
C - B1438 East	87	22	611	1018	0.086	87	73	0.0	0.1	3.865	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	753	188	65	2044	0.369	753	555	0.4	0.6	2.787	A
B - A12 West	592	148	28	1829	0.324	592	807	0.4	0.5	2.911	A
C - B1438 East	104	26	731	958	0.109	104	87	0.1	0.1	4.216	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	923	231	80	2035	0.453	922	680	0.6	0.8	3.231	A
B - A12 West	726	181	35	1825	0.398	725	988	0.5	0.7	3.270	A
C - B1438 East	128	32	895	877	0.146	128	106	0.1	0.2	4.805	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	923	231	80	2035	0.453	923	680	0.8	0.8	3.236	A
B - A12 West	726	181	35	1825	0.398	726	989	0.7	0.7	3.273	A
C - B1438 East	128	32	896	876	0.146	128	106	0.2	0.2	4.810	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	753	188	65	2043	0.369	754	556	0.8	0.6	2.796	A
B - A12 West	592	148	28	1829	0.324	593	809	0.7	0.5	2.914	A
C - B1438 East	104	26	733	957	0.109	105	87	0.2	0.1	4.222	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	631	158	55	2050	0.308	631	466	0.6	0.4	2.538	A
B - A12 West	496	124	24	1831	0.271	497	677	0.5	0.4	2.699	A
C - B1438 East	87	22	613	1016	0.086	87	73	0.1	0.1	3.876	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - A12 West	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C - B1438 East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.58	0.08	0.78	1.36	1.43			N/A	N/A
B - A12 West	0.48	0.00	0.00	0.48	0.48			N/A	N/A
C - B1438 East	0.12	0.00	0.00	0.12	0.12			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.82	0.03	0.25	0.82	0.82			N/A	N/A
B - A12 West	0.66	0.03	0.25	0.66	0.66			N/A	N/A
C - B1438 East	0.17	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.83	0.03	0.27	0.83	1.72			N/A	N/A
B - A12 West	0.66	0.03	0.28	0.86	2.61			N/A	N/A
C - B1438 East	0.17	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.59	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.48	0.00	0.00	0.48	0.48			N/A	N/A
C - B1438 East	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.45	0.00	0.00	0.45	0.45			N/A	N/A
B - A12 West	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C - B1438 East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	42.60	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1374	100.000
B - A12 West		ONE HOUR	✓	1535	100.000
C - B1438 East		ONE HOUR	✓	341	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1280	83
	B - A12 West	1329	1	205
	C - B1438 East	119	221	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	5
	B - A12 West	8	0	6
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	28.55	11.8	63.6	D	1261	1892
B - A12 West	1.01	56.16	27.7	101.9	F	1409	2113
C - B1438 East	0.81	36.45	3.6	19.1	E	313	469

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1035	259	155	2040	0.507	1030	1092	0.0	1.0	3.552	A
B - A12 West	1156	289	98	1796	0.644	1149	1126	0.0	1.8	5.505	A
C - B1438 East	257	64	969	880	0.292	255	216	0.0	0.4	5.746	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1235	309	186	2021	0.611	1233	1306	1.0	1.6	4.558	A
B - A12 West	1380	345	117	1785	0.773	1374	1348	1.8	3.3	8.644	A
C - B1438 East	307	77	1160	785	0.391	306	259	0.4	0.6	7.500	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1513	378	222	1711	0.884	1493	1562	1.6	6.6	15.295	C
B - A12 West	1690	423	142	1736	0.974	1641	1631	3.3	15.5	29.114	D
C - B1438 East	375	94	1404	532	0.705	369	311	0.6	2.2	21.311	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1513	378	222	1599	0.946	1492	1562	6.6	11.8	28.549	D
B - A12 West	1690	423	142	1676	1.008	1641	1631	15.5	27.7	56.164	F
C - B1438 East	375	94	1403	463	0.812	370	311	2.2	3.6	36.448	E

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1235	309	199	2013	0.614	1276	1399	11.8	1.6	5.158	A
B - A12 West	1380	345	122	1782	0.775	1477	1397	27.7	3.6	15.460	C
C - B1438 East	307	77	1200	765	0.401	318	275	3.6	0.7	8.277	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1035	259	157	2039	0.508	1037	1105	1.6	1.0	3.604	A
B - A12 West	1156	289	99	1795	0.644	1163	1134	3.6	1.8	5.755	A
C - B1438 East	257	64	975	877	0.293	258	219	0.7	0.4	5.825	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.55	1.01	1.42	1.47			N/A	N/A
B - A12 West	1.78	0.52	1.13	2.71	3.20			N/A	N/A
C - B1438 East	0.41	0.00	0.00	0.41	0.41			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.55	0.04	0.37	3.98	7.62			N/A	N/A
B - A12 West	3.28	0.05	0.48	9.23	15.55			N/A	N/A
C - B1438 East	0.63	0.05	0.54	1.14	1.14			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.64	0.04	0.39	16.61	36.17			N/A	N/A
B - A12 West	15.48	0.14	5.65	42.53	61.91			N/A	N/A
C - B1438 East	2.22	0.03	0.31	3.00	10.86			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.82	0.05	0.47	33.04	63.64			N/A	N/A
B - A12 West	27.75	0.29	13.37	72.79	101.88			N/A	N/A
C - B1438 East	3.64	0.04	0.40	9.80	19.12			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.61	0.04	0.42	4.28	7.27			N/A	N/A
B - A12 West	3.62	0.04	0.41	9.86	18.71			N/A	N/A
C - B1438 East	0.68	0.05	0.45	1.24	1.82			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.03	0.33	2.35	5.17			N/A	N/A
B - A12 West	1.84	0.03	0.30	2.47	8.94			N/A	N/A
C - B1438 East	0.42	0.03	0.33	1.32	1.38			N/A	N/A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	77.82	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1680	100.000
B - A12 West		ONE HOUR	✓	1608	100.000
C - B1438 East		ONE HOUR	✓	525	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	13	1475	192
B - A12 West	1164	2	442
C - B1438 East	162	363	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	8	7	5
B - A12 West	10	0	2
C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	65.32	34.5	113.3	F	1542	2312
B - A12 West	1.01	70.50	35.8	112.6	F	1476	2214
C - B1438 East	1.06	142.99	24.2	63.9	F	482	723

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1265	316	332	1915	0.660	1257	1001	0.0	1.9	5.410	A
B - A12 West	1211	303	130	1777	0.681	1202	1376	0.0	2.1	6.177	A
C - B1438 East	395	99	1115	790	0.500	391	474	0.0	1.0	8.941	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1510	378	397	1878	0.804	1502	1196	1.9	3.9	9.392	A
B - A12 West	1446	361	156	1762	0.821	1437	1644	2.1	4.3	10.786	B
C - B1438 East	472	118	1332	681	0.693	467	567	1.0	2.1	16.478	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1850	462	467	1837	1.007	1773	1402	3.9	23.1	36.763	E
B - A12 West	1771	443	177	1749	1.012	1692	1925	4.3	24.0	39.717	E
C - B1438 East	578	145	1572	561	1.030	530	668	2.1	14.1	73.205	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1850	462	476	1832	1.010	1804	1427	23.1	34.5	65.325	F
B - A12 West	1771	443	180	1748	1.013	1723	1958	24.0	35.8	70.496	F
C - B1438 East	578	145	1600	547	1.056	538	680	14.1	24.2	142.990	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1510	378	433	1857	0.813	1629	1318	34.5	4.7	22.930	C
B - A12 West	1446	361	184	1746	0.828	1567	1815	35.8	5.3	29.752	D
C - B1438 East	472	118	1445	625	0.755	554	618	24.2	3.6	71.286	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1265	316	338	1912	0.662	1276	1020	4.7	2.0	5.753	A
B - A12 West	1211	303	135	1774	0.682	1223	1402	5.3	2.2	6.675	A
C - B1438 East	395	99	1131	782	0.505	406	482	3.6	1.0	9.817	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.91	0.26	1.13	3.28	4.04			N/A	N/A
B - A12 West	2.09	0.33	1.31	3.61	4.48			N/A	N/A
C - B1438 East	0.98	0.17	1.00	1.30	1.68			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.91	0.05	0.58	11.09	18.48			N/A	N/A
B - A12 West	4.29	0.06	0.96	12.15	19.48			N/A	N/A
C - B1438 East	2.13	0.05	0.66	5.66	8.79			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	23.14	0.76	14.38	55.09	73.25			N/A	N/A
B - A12 West	23.97	1.06	15.70	55.62	73.04			N/A	N/A
C - B1438 East	14.09	1.08	9.94	30.52	39.10			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	34.51	0.86	20.69	84.31	113.26			N/A	N/A
B - A12 West	35.78	1.25	22.77	85.01	112.64			N/A	N/A
C - B1438 East	24.17	2.05	18.27	50.67	63.86			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.71	0.05	0.45	13.29	24.12			N/A	N/A
B - A12 West	5.34	0.05	0.48	15.24	27.08			N/A	N/A
C - B1438 East	3.63	0.05	0.54	10.26	17.05			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.99	0.03	0.30	1.99	8.79			N/A	N/A
B - A12 West	2.20	0.03	0.30	2.31	10.09			N/A	N/A
C - B1438 East	1.04	0.03	0.28	1.04	2.74			N/A	N/A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	88.01	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1412	100.000
B - A12 West		ONE HOUR	✓	1630	100.000
C - B1438 East		ONE HOUR	✓	562	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1285	121
	B - A12 West	1343	1	286
	C - B1438 East	186	376	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	7	6
	B - A12 West	7	0	2
	C - B1438 East	4	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.99	47.88	20.6	88.2	E	1296	1944
B - A12 West	1.07	114.63	64.7	138.9	F	1496	2244
C - B1438 East	1.03	113.37	20.2	61.6	F	516	774

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1063	266	215	1981	0.537	1059	1148	0.0	1.1	3.884	A
B - A12 West	1227	307	144	1800	0.682	1219	1244	0.0	2.1	6.113	A
C - B1438 East	423	106	968	871	0.486	420	305	0.0	0.9	7.915	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1270	317	257	1957	0.649	1267	1372	1.1	1.8	5.197	A
B - A12 West	1465	366	172	1783	0.822	1456	1489	2.1	4.3	10.744	B
C - B1438 East	506	126	1159	775	0.653	502	365	0.9	1.8	13.036	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1555	389	295	1618	0.961	1510	1578	1.8	13.1	26.535	D
B - A12 West	1795	449	199	1712	1.048	1675	1762	4.3	34.3	51.467	F
C - B1438 East	619	155	1381	623	0.994	580	424	1.8	11.7	58.280	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1555	389	295	1576	0.987	1525	1578	13.1	20.6	47.881	E
B - A12 West	1795	449	200	1680	1.068	1673	1780	34.3	64.7	114.630	F
C - B1438 East	619	155	1395	600	1.032	585	425	11.7	20.2	113.374	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1270	317	296	1525	0.833	1330	1578	20.6	5.5	22.614	C
B - A12 West	1465	366	194	1703	0.861	1680	1592	64.7	11.1	87.115	F
C - B1438 East	506	126	1217	646	0.783	569	409	20.2	4.2	61.197	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1063	266	222	1976	0.538	1080	1190	5.5	1.2	4.094	A
B - A12 West	1227	307	149	1796	0.683	1263	1275	11.1	2.2	7.190	A
C - B1438 East	423	106	988	861	0.492	436	315	4.2	1.0	8.733	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.51	1.10	1.53	1.79			N/A	N/A
B - A12 West	2.10	0.20	1.21	3.87	4.92			N/A	N/A
C - B1438 East	0.93	0.31	0.99	1.21	1.21			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.82	0.04	0.36	4.55	9.38			N/A	N/A
B - A12 West	4.34	0.05	0.77	12.35	20.26			N/A	N/A
C - B1438 East	1.81	0.05	0.48	4.78	7.65			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	13.12	0.11	3.72	37.03	55.56			N/A	N/A
B - A12 West	34.26	4.95	27.79	67.50	83.04			N/A	N/A
C - B1438 East	11.70	0.35	6.83	27.97	37.50			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	20.60	0.12	5.89	58.61	88.16			N/A	N/A
B - A12 West	64.74	15.79	56.59	116.59	138.86			N/A	N/A
C - B1438 East	20.19	0.88	13.12	46.82	61.55			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.47	0.30	3.35	12.05	15.81			N/A	N/A
B - A12 West	11.12	0.21	5.55	28.14	38.90			N/A	N/A
C - B1438 East	4.23	0.09	1.32	11.12	16.19			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.18	0.03	0.30	1.61	5.69			N/A	N/A
B - A12 West	2.21	0.03	0.29	2.21	9.11			N/A	N/A
C - B1438 East	0.99	0.03	0.28	0.99	3.42			N/A	N/A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	45.55	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1349	100.000
B - A12 West		ONE HOUR	✓	1563	100.000
C - B1438 East		ONE HOUR	✓	573	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1225	116
	B - A12 West	1328	2	233
	C - B1438 East	183	391	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	3	4
	B - A12 West	4	0	2
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.94	27.14	11.0	59.9	D	1238	1856
B - A12 West	1.01	54.16	27.2	102.0	F	1434	2151
C - B1438 East	0.97	65.74	11.4	50.3	F	526	789

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1015	254	176	2070	0.491	1011	1135	0.0	1.0	3.388	A
B - A12 West	1177	294	142	1847	0.637	1170	1212	0.0	1.7	5.260	A
C - B1438 East	431	108	926	911	0.474	428	261	0.0	0.9	7.398	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1212	303	210	2049	0.592	1210	1358	1.0	1.4	4.282	A
B - A12 West	1405	351	169	1831	0.767	1399	1451	1.7	3.2	8.232	A
C - B1438 East	515	129	1108	822	0.627	512	313	0.9	1.6	11.512	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1485	371	252	1700	0.874	1466	1624	1.4	6.1	14.406	B
B - A12 West	1721	430	202	1773	0.971	1673	1750	3.2	15.1	27.959	D
C - B1438 East	631	158	1342	693	0.911	610	376	1.6	6.9	36.919	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1485	371	251	1579	0.940	1465	1624	6.1	11.0	27.138	D
B - A12 West	1721	430	203	1709	1.007	1672	1751	15.1	27.2	54.159	F
C - B1438 East	631	158	1341	652	0.968	613	375	6.9	11.4	65.745	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1212	303	225	2040	0.594	1251	1457	11.0	1.5	4.779	A
B - A12 West	1405	351	183	1822	0.771	1500	1515	27.2	3.5	14.391	B
C - B1438 East	515	129	1145	804	0.641	553	331	11.4	1.9	16.432	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1015	254	178	2069	0.491	1017	1150	1.5	1.0	3.430	A
B - A12 West	1177	294	144	1846	0.637	1184	1223	3.5	1.8	5.489	A
C - B1438 East	431	108	931	909	0.475	435	264	1.9	0.9	7.667	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.73	0.51	1.08	2.63	3.02			N/A	N/A
C - B1438 East	0.89	0.54	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.43	0.04	0.37	3.67	6.96			N/A	N/A
B - A12 West	3.18	0.05	0.47	8.91	15.21			N/A	N/A
C - B1438 East	1.63	0.05	0.56	4.12	6.35			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.11	0.04	0.37	14.30	33.48			N/A	N/A
B - A12 West	15.07	0.13	5.03	41.84	61.56			N/A	N/A
C - B1438 East	6.85	0.07	1.03	19.62	30.89			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.03	0.04	0.45	30.21	59.94			N/A	N/A
B - A12 West	27.21	0.26	12.51	72.27	101.98			N/A	N/A
C - B1438 East	11.38	0.09	2.49	32.66	50.35			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.48	0.04	0.43	3.87	6.43			N/A	N/A
B - A12 West	3.53	0.04	0.41	9.65	18.12			N/A	N/A
C - B1438 East	1.86	0.04	0.39	4.93	9.12			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.03	0.34	2.26	4.72			N/A	N/A
B - A12 West	1.79	0.03	0.30	2.38	8.68			N/A	N/A
C - B1438 East	0.92	0.03	0.29	1.46	4.20			N/A	N/A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	851	100.000
B - A12 West		ONE HOUR	✓	758	100.000
C - B1438 East		ONE HOUR	✓	120	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	825	23
	B - A12 West	685	0	73
	C - B1438 East	33	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	1
	B - A12 West	11	0	7
	C - B1438 East	3	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.46	3.27	0.8	1.6	A	781	1171
B - A12 West	0.47	3.76	0.9	1.5	A	696	1043
C - B1438 East	0.15	4.87	0.2	0.5	A	110	165

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	640	160	55	2052	0.312	639	541	0.0	0.5	2.543	A
B - A12 West	571	143	26	1798	0.317	569	685	0.0	0.5	2.924	A
C - B1438 East	90	23	621	1014	0.089	90	72	0.0	0.1	3.891	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	765	191	65	2046	0.374	764	647	0.5	0.6	2.807	A
B - A12 West	681	170	31	1795	0.380	681	819	0.5	0.6	3.228	A
C - B1438 East	108	27	743	954	0.113	107	86	0.1	0.1	4.254	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	937	234	80	2037	0.460	936	792	0.6	0.8	3.265	A
B - A12 West	835	209	39	1791	0.466	834	1003	0.6	0.9	3.755	A
C - B1438 East	132	33	910	871	0.151	132	106	0.1	0.2	4.867	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	937	234	80	2037	0.460	937	793	0.8	0.8	3.271	A
B - A12 West	835	209	39	1791	0.466	835	1004	0.9	0.9	3.761	A
C - B1438 East	132	33	911	871	0.151	132	106	0.2	0.2	4.872	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	765	191	65	2046	0.374	766	649	0.8	0.6	2.816	A
B - A12 West	681	170	32	1795	0.380	682	821	0.9	0.6	3.239	A
C - B1438 East	108	27	745	953	0.113	108	86	0.2	0.1	4.259	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	640	160	55	2052	0.312	641	543	0.6	0.5	2.553	A
B - A12 West	571	143	26	1798	0.317	571	687	0.6	0.5	2.934	A
C - B1438 East	90	23	623	1013	0.089	90	72	0.1	0.1	3.902	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.45	0.00	0.00	0.45	0.45			N/A	N/A
B - A12 West	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.59	0.09	0.79	1.36	1.43			N/A	N/A
B - A12 West	0.61	0.09	0.82	1.36	1.43			N/A	N/A
C - B1438 East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.03	0.25	0.85	0.85			N/A	N/A
B - A12 West	0.87	0.03	0.25	0.87	0.87			N/A	N/A
C - B1438 East	0.18	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.03	0.27	0.85	1.58			N/A	N/A
B - A12 West	0.87	0.03	0.27	0.87	1.54			N/A	N/A
C - B1438 East	0.18	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.60	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.62	0.55	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - A12 West	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	116.01	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1395	100.000
B - A12 West		ONE HOUR	✓	1712	100.000
C - B1438 East		ONE HOUR	✓	347	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1321	62
	B - A12 West	1401	1	311
	C - B1438 East	114	232	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	7
	B - A12 West	12	0	4
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.98	47.28	19.6	86.5	E	1280	1920
B - A12 West	1.12	180.82	105.8	179.9	F	1571	2357
C - B1438 East	0.88	54.79	5.4	27.3	F	319	478

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1050	262	234	1990	0.528	1046	1139	0.0	1.1	3.794	A
B - A12 West	1289	322	94	1755	0.734	1278	1165	0.0	2.7	7.393	A
C - B1438 East	261	65	1000	865	0.302	260	279	0.0	0.4	5.934	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1254	313	278	1963	0.639	1251	1358	1.1	1.7	5.036	A
B - A12 West	1539	385	113	1745	0.882	1524	1394	2.7	6.6	15.306	C
C - B1438 East	312	78	1196	766	0.407	311	333	0.4	0.7	7.890	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1535	384	309	1586	0.968	1487	1514	1.7	14.0	28.094	D
B - A12 West	1885	471	134	1706	1.105	1689	1656	6.6	55.8	75.915	F
C - B1438 East	382	96	1421	457	0.837	369	374	0.7	4.0	36.573	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1535	384	308	1567	0.980	1513	1514	14.0	19.6	47.282	E
B - A12 West	1885	471	137	1688	1.117	1685	1686	55.8	105.8	178.684	F
C - B1438 East	382	96	1446	435	0.878	377	375	4.0	5.4	54.793	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1254	313	311	1565	0.801	1315	1513	19.6	4.3	17.405	C
B - A12 West	1539	385	119	1721	0.894	1705	1467	105.8	64.4	180.823	F
C - B1438 East	312	78	1257	541	0.577	328	369	5.4	1.4	18.043	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1050	262	280	1962	0.535	1063	1351	4.3	1.2	4.055	A
B - A12 West	1289	322	96	1754	0.735	1535	1185	64.4	2.9	38.756	E
C - B1438 East	261	65	1016	856	0.305	265	327	1.4	0.4	6.130	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.45	1.08	1.46	1.75			N/A	N/A
B - A12 West	2.68	0.16	1.44	5.64	7.44			N/A	N/A
C - B1438 East	0.43	0.00	0.00	0.43	0.43			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.74	0.04	0.35	4.24	9.00			N/A	N/A
B - A12 West	6.57	0.08	1.70	18.21	27.33			N/A	N/A
C - B1438 East	0.68	0.04	0.42	1.38	1.98			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	13.95	0.13	4.78	38.57	56.57			N/A	N/A
B - A12 West	55.78	19.44	51.01	91.48	105.86			N/A	N/A
C - B1438 East	4.04	0.05	0.45	11.39	20.38			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	19.65	0.11	4.93	56.59	86.48			N/A	N/A
B - A12 West	105.76	48.29	100.09	159.66	179.94			N/A	N/A
C - B1438 East	5.43	0.05	0.49	15.56	27.28			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.31	0.13	1.92	10.50	14.54			N/A	N/A
B - A12 West	64.39	34.69	61.81	90.74	100.31			N/A	N/A
C - B1438 East	1.42	0.08	1.03	2.90	3.96			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.16	0.03	0.30	1.59	5.63			N/A	N/A
B - A12 West	2.95	0.03	0.29	2.95	12.12			N/A	N/A
C - B1438 East	0.44	0.03	0.30	1.25	1.93			N/A	N/A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	123.81	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1673	100.000
B - A12 West		ONE HOUR	✓	1683	100.000
C - B1438 East		ONE HOUR	✓	557	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	13	1467	194
B - A12 West	1239	2	442
C - B1438 East	170	388	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	8	8	5
B - A12 West	14	0	2
C - B1438 East	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	62.01	32.2	110.9	F	1536	2303
B - A12 West	1.09	157.07	90.4	164.9	F	1545	2317
C - B1438 East	1.13	209.92	38.9	79.0	F	511	767

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1260	315	332	1900	0.663	1252	1061	0.0	1.9	5.492	A
B - A12 West	1267	317	136	1722	0.736	1257	1388	0.0	2.7	7.573	A
C - B1438 East	420	105	1109	792	0.530	415	475	0.0	1.1	9.439	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1504	376	395	1864	0.807	1496	1264	1.9	4.0	9.587	A
B - A12 West	1513	378	162	1707	0.887	1497	1658	2.7	6.8	16.028	C
C - B1438 East	501	125	1325	683	0.734	495	566	1.1	2.6	18.649	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1842	461	443	1836	1.003	1769	1414	4.0	22.2	35.888	E
B - A12 West	1853	463	178	1698	1.092	1678	1929	6.8	50.6	71.205	F
C - B1438 East	614	153	1567	560	1.096	541	646	2.6	20.8	96.556	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1842	461	447	1834	1.005	1803	1426	22.2	32.2	62.010	F
B - A12 West	1853	463	179	1697	1.092	1694	1959	50.6	90.4	157.067	F
C - B1438 East	614	153	1596	545	1.126	541	654	20.8	38.9	209.924	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1504	376	440	1838	0.819	1614	1427	32.2	4.9	22.533	C
B - A12 West	1513	378	199	1686	0.898	1667	1843	90.4	52.0	155.369	F
C - B1438 East	501	125	1429	630	0.796	614	625	38.9	10.7	152.335	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1260	315	386	1869	0.674	1271	1226	4.9	2.1	6.132	A
B - A12 West	1267	317	149	1714	0.739	1463	1434	52.0	3.0	27.867	D
C - B1438 East	420	105	1126	784	0.535	458	531	10.7	1.2	12.323	B

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.93	0.27	1.16	3.31	4.07			N/A	N/A
B - A12 West	2.70	0.18	1.51	5.57	7.27			N/A	N/A
C - B1438 East	1.10	0.11	1.01	1.79	2.24			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.97	0.05	0.66	11.28	18.61			N/A	N/A
B - A12 West	6.78	0.09	2.03	18.49	27.26			N/A	N/A
C - B1438 East	2.56	0.05	0.74	6.94	10.88			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	22.24	0.58	13.29	53.92	72.34			N/A	N/A
B - A12 West	50.60	15.55	45.53	85.84	100.39			N/A	N/A
C - B1438 East	20.84	3.86	17.41	38.74	46.83			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	32.22	0.49	17.80	81.22	110.94			N/A	N/A
B - A12 West	90.44	35.30	84.05	143.97	164.93			N/A	N/A
C - B1438 East	38.92	11.03	34.59	67.15	79.01			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.89	0.05	0.46	13.87	24.89			N/A	N/A
B - A12 West	51.99	23.55	48.97	78.17	88.11			N/A	N/A
C - B1438 East	10.69	0.82	7.42	23.03	29.55			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.11	0.03	0.30	2.38	9.85			N/A	N/A
B - A12 West	2.99	0.03	0.30	2.99	12.97			N/A	N/A
C - B1438 East	1.18	0.03	0.27	1.18	2.01			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	118.94	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1399	100.000
B - A12 West		ONE HOUR	✓	1631	100.000
C - B1438 East		ONE HOUR	✓	599	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1276	117
	B - A12 West	1350	1	280
	C - B1438 East	187	413	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	9	6
	B - A12 West	9	0	2
	C - B1438 East	4	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	59.82	25.7	95.2	F	1284	1926
B - A12 West	1.10	150.76	85.2	158.0	F	1496	2244
C - B1438 East	1.10	174.85	34.8	76.9	F	550	825

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1053	263	210	1942	0.542	1049	1153	0.0	1.2	4.009	A
B - A12 West	1228	307	144	1763	0.696	1219	1265	0.0	2.2	6.509	A
C - B1438 East	451	113	962	864	0.522	447	297	0.0	1.1	8.549	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1258	314	251	1919	0.655	1255	1377	1.2	1.9	5.400	A
B - A12 West	1466	366	172	1747	0.839	1456	1513	2.2	4.8	11.953	B
C - B1438 East	539	135	1151	766	0.703	534	355	1.1	2.2	15.216	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1540	385	281	1559	0.988	1479	1545	1.9	17.1	32.911	D
B - A12 West	1795	449	192	1660	1.082	1635	1760	4.8	45.0	64.674	F
C - B1438 East	660	165	1357	620	1.064	595	404	2.2	18.5	80.409	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1540	385	281	1542	0.999	1506	1545	17.1	25.7	59.823	F
B - A12 West	1795	449	192	1638	1.096	1635	1784	45.0	85.2	150.761	F
C - B1438 East	660	165	1381	600	1.099	595	406	18.5	34.8	174.846	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1258	314	279	1407	0.894	1319	1546	25.7	10.5	45.754	E
B - A12 West	1466	366	205	1639	0.895	1620	1644	85.2	46.7	148.032	F
C - B1438 East	539	135	1209	658	0.819	639	388	34.8	9.6	132.191	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1053	263	242	1924	0.548	1090	1319	10.5	1.2	4.510	A
B - A12 West	1228	307	156	1756	0.699	1405	1329	46.7	2.4	16.926	C
C - B1438 East	451	113	1000	844	0.535	485	332	9.6	1.2	10.954	B

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.17	0.33	1.12	1.65	1.88			N/A	N/A
B - A12 West	2.24	0.16	1.20	4.46	5.79			N/A	N/A
C - B1438 East	1.07	0.14	1.03	1.63	1.91			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.87	0.04	0.35	4.58	9.74			N/A	N/A
B - A12 West	4.83	0.06	0.98	13.78	22.25			N/A	N/A
C - B1438 East	2.25	0.05	0.49	6.10	9.88			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	17.14	0.26	8.65	43.89	60.77			N/A	N/A
B - A12 West	44.97	11.98	39.69	78.99	93.47			N/A	N/A
C - B1438 East	18.54	2.22	14.64	36.79	45.53			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	25.67	0.26	12.04	67.72	95.17			N/A	N/A
B - A12 West	85.15	31.78	78.69	137.37	158.00			N/A	N/A
C - B1438 East	34.76	7.35	29.71	63.95	76.86			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.45	2.22	8.78	18.23	21.73			N/A	N/A
B - A12 West	46.72	23.06	44.36	67.91	75.83			N/A	N/A
C - B1438 East	9.59	0.76	6.66	20.56	26.35			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.22	0.03	0.29	1.27	5.57			N/A	N/A
B - A12 West	2.41	0.03	0.29	2.41	9.36			N/A	N/A
C - B1438 East	1.18	0.03	0.28	1.18	3.01			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	72.16	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1345	100.000
B - A12 West		ONE HOUR	✓	1580	100.000
C - B1438 East		ONE HOUR	✓	658	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1240	97
	B - A12 West	1344	2	234
	C - B1438 East	183	475	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	5
	B - A12 West	4	0	2
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.96	34.08	13.8	70.6	D	1234	1851
B - A12 West	1.03	68.48	35.9	111.2	F	1450	2175
C - B1438 East	1.09	162.42	35.7	80.2	F	604	906

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1012	253	177	2021	0.501	1008	1147	0.0	1.0	3.544	A
B - A12 West	1190	297	142	1837	0.648	1182	1285	0.0	1.8	5.443	A
C - B1438 East	495	124	937	894	0.554	490	248	0.0	1.2	8.815	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1209	302	211	2000	0.604	1207	1372	1.0	1.5	4.524	A
B - A12 West	1420	355	169	1820	0.780	1414	1538	1.8	3.4	8.729	A
C - B1438 East	591	148	1121	802	0.738	586	297	1.2	2.6	16.259	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1480	370	250	1630	0.908	1454	1615	1.5	8.0	18.356	C
B - A12 West	1740	435	190	1749	0.994	1675	1817	3.4	19.5	33.912	D
C - B1438 East	724	181	1351	683	1.061	657	354	2.6	19.6	77.561	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1480	370	250	1541	0.961	1457	1615	8.0	13.8	34.081	D
B - A12 West	1740	435	191	1697	1.025	1674	1822	19.5	35.9	68.481	F
C - B1438 East	724	181	1354	666	1.088	660	354	19.6	35.7	162.416	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1209	302	231	1988	0.608	1258	1523	13.8	1.6	5.260	A
B - A12 West	1420	355	207	1797	0.790	1548	1681	35.9	4.0	21.489	C
C - B1438 East	591	148	1169	778	0.761	719	321	35.7	3.8	86.269	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1012	253	179	2019	0.501	1014	1165	1.6	1.0	3.593	A
B - A12 West	1190	297	146	1834	0.649	1198	1302	4.0	1.9	5.734	A
C - B1438 East	495	124	943	891	0.556	506	251	3.8	1.3	9.570	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.54	1.01	1.43	1.48			N/A	N/A
B - A12 West	1.81	0.37	1.11	2.87	3.58			N/A	N/A
C - B1438 East	1.21	0.16	1.12	1.85	2.32			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.51	0.04	0.36	3.79	7.56			N/A	N/A
B - A12 West	3.41	0.05	0.48	9.61	16.36			N/A	N/A
C - B1438 East	2.64	0.05	0.72	7.17	11.29			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.99	0.05	0.47	22.51	41.92			N/A	N/A
B - A12 West	19.52	0.33	10.43	49.26	67.55			N/A	N/A
C - B1438 East	19.60	2.35	15.49	38.98	48.27			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	13.85	0.06	1.22	40.58	70.63			N/A	N/A
B - A12 West	35.92	1.40	23.32	84.37	111.19			N/A	N/A
C - B1438 East	35.70	7.13	30.28	66.49	80.21			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.57	0.04	0.39	4.13	7.43			N/A	N/A
B - A12 West	4.02	0.04	0.43	11.10	20.71			N/A	N/A
C - B1438 East	3.83	0.04	0.43	10.67	19.57			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.03	0.32	2.02	5.07			N/A	N/A
B - A12 West	1.88	0.03	0.30	2.01	8.69			N/A	N/A
C - B1438 East	1.28	0.03	0.28	1.28	3.30			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	814	100.000
B - A12 West		ONE HOUR	✓	697	100.000
C - B1438 East		ONE HOUR	✓	121	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	787	25
	B - A12 West	622	0	76
	C - B1438 East	33	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	1
	B - A12 West	8	0	7
	C - B1438 East	3	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.44	3.16	0.8	2.0	A	747	1120
B - A12 West	0.42	3.40	0.7	2.4	A	640	960
C - B1438 East	0.15	4.75	0.2	0.5	A	111	167

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	613	153	57	2050	0.299	611	493	0.0	0.4	2.498	A
B - A12 West	525	131	26	1833	0.286	523	657	0.0	0.4	2.744	A
C - B1438 East	91	23	592	1028	0.089	91	76	0.0	0.1	3.840	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	731	183	68	2043	0.358	731	590	0.4	0.6	2.741	A
B - A12 West	627	157	31	1830	0.343	626	786	0.4	0.5	2.988	A
C - B1438 East	109	27	708	970	0.112	109	90	0.1	0.1	4.179	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	896	224	83	2034	0.440	895	722	0.6	0.8	3.157	A
B - A12 West	768	192	38	1826	0.420	767	962	0.5	0.7	3.398	A
C - B1438 East	133	33	867	891	0.149	133	111	0.1	0.2	4.747	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	896	224	83	2034	0.440	896	723	0.8	0.8	3.162	A
B - A12 West	768	192	38	1826	0.420	768	963	0.7	0.7	3.400	A
C - B1438 East	133	33	868	891	0.150	133	111	0.2	0.2	4.752	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	731	183	68	2043	0.358	732	591	0.8	0.6	2.747	A
B - A12 West	627	157	31	1830	0.343	628	788	0.7	0.5	2.995	A
C - B1438 East	109	27	710	969	0.112	109	91	0.2	0.1	4.186	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	613	153	57	2050	0.299	613	495	0.6	0.4	2.505	A
B - A12 West	525	131	26	1833	0.286	525	659	0.5	0.4	2.755	A
C - B1438 East	91	23	594	1027	0.089	91	76	0.1	0.1	3.848	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - A12 West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.07	0.75	1.35	1.42			N/A	N/A
B - A12 West	0.52	0.52	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.78	0.03	0.25	0.78	0.78			N/A	N/A
B - A12 West	0.72	0.03	0.25	0.72	0.72			N/A	N/A
C - B1438 East	0.17	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.78	0.03	0.27	0.78	1.96			N/A	N/A
B - A12 West	0.72	0.03	0.28	0.72	2.36			N/A	N/A
C - B1438 East	0.18	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.52	0.52	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - A12 West	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	124.38	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1396	100.000
B - A12 West		ONE HOUR	✓	1652	100.000
C - B1438 East		ONE HOUR	✓	247	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1385	0
	B - A12 West	1439	1	213
	C - B1438 East	125	121	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	0
	B - A12 West	8	0	6
	C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	69.40	30.1	99.6	F	1281	1921
B - A12 West	1.12	177.56	100.8	173.3	F	1516	2274
C - B1438 East	0.87	68.67	4.8	22.2	F	227	341

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1051	263	160	2038	0.516	1046	1177	0.0	1.1	3.617	A
B - A12 West	1244	311	103	1793	0.694	1235	1130	0.0	2.2	6.356	A
C - B1438 East	186	47	1047	836	0.223	185	160	0.0	0.3	5.524	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1255	314	192	2019	0.621	1252	1407	1.1	1.6	4.682	A
B - A12 West	1485	371	123	1781	0.834	1476	1352	2.2	4.7	11.419	B
C - B1438 East	222	56	1253	734	0.303	222	191	0.3	0.4	7.025	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1537	384	212	1529	1.005	1463	1562	1.6	20.1	36.934	E
B - A12 West	1819	455	144	1650	1.103	1629	1579	4.7	52.2	72.360	F
C - B1438 East	272	68	1464	331	0.823	260	211	0.4	3.6	44.917	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1537	384	211	1524	1.009	1496	1562	20.1	30.1	69.401	F
B - A12 West	1819	455	148	1627	1.118	1625	1617	52.2	100.8	175.967	F
C - B1438 East	272	68	1497	313	0.869	267	210	3.6	4.8	68.665	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1255	314	214	1397	0.898	1329	1561	30.1	11.4	55.364	F
B - A12 West	1485	371	129	1662	0.894	1645	1434	100.8	60.8	177.556	F
C - B1438 East	222	56	1330	327	0.680	232	213	4.8	2.3	40.974	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1051	263	192	2019	0.520	1092	1394	11.4	1.1	4.060	A
B - A12 West	1244	311	108	1790	0.695	1478	1179	60.8	2.4	24.320	C
C - B1438 East	186	47	1093	813	0.229	194	191	2.3	0.3	5.895	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.23	1.05	1.45	1.76			N/A	N/A
B - A12 West	2.21	0.13	1.10	4.58	5.99			N/A	N/A
C - B1438 East	0.28	0.00	0.00	0.28	0.28			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.03	0.33	3.52	8.45			N/A	N/A
B - A12 West	4.68	0.05	0.71	13.39	22.28			N/A	N/A
C - B1438 East	0.43	0.04	0.36	1.28	1.47			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	20.10	0.66	12.43	47.82	63.61			N/A	N/A
B - A12 West	52.21	17.38	47.47	86.72	100.79			N/A	N/A
C - B1438 East	3.56	0.04	0.44	9.94	17.89			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	30.11	0.68	17.71	73.92	99.61			N/A	N/A
B - A12 West	100.83	45.01	95.17	153.43	173.35			N/A	N/A
C - B1438 East	4.82	0.06	0.98	13.75	22.20			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.43	3.41	10.01	18.56	21.61			N/A	N/A
B - A12 West	60.85	35.67	58.83	82.59	90.32			N/A	N/A
C - B1438 East	2.35	0.77	1.74	3.15	3.72			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.03	0.29	1.42	4.77			N/A	N/A
B - A12 West	2.37	0.03	0.29	2.37	8.34			N/A	N/A
C - B1438 East	0.30	0.03	0.29	0.97	1.16			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	112.61	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1616	100.000
B - A12 West		ONE HOUR	✓	1791	100.000
C - B1438 East		ONE HOUR	✓	333	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1425	177
	B - A12 West	1398	2	391
	C - B1438 East	153	180	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	7	5
	B - A12 West	8	0	2
	C - B1438 East	4	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	29.65	13.8	74.4	D	1483	2224
B - A12 West	1.12	204.10	118.4	194.4	F	1644	2465
C - B1438 East	0.66	19.21	1.9	8.2	C	306	458

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1217	304	293	1933	0.629	1210	1167	0.0	1.7	4.936	A
B - A12 West	1348	337	124	1793	0.752	1337	1204	0.0	2.9	7.703	A
C - B1438 East	251	63	1078	802	0.313	249	425	0.0	0.5	6.490	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1453	363	349	1900	0.764	1447	1390	1.7	3.1	7.836	A
B - A12 West	1610	403	148	1778	0.905	1590	1440	2.9	7.9	17.480	C
C - B1438 East	299	75	1290	697	0.430	298	506	0.5	0.7	9.010	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1779	445	383	1881	0.946	1745	1543	3.1	11.8	22.294	C
B - A12 West	1972	493	180	1759	1.121	1746	1737	7.9	64.5	83.709	F
C - B1438 East	367	92	1555	565	0.650	363	573	0.7	1.8	17.495	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1779	445	386	1879	0.947	1771	1553	11.8	13.8	29.648	D
B - A12 West	1972	493	182	1758	1.122	1757	1763	64.5	118.4	193.331	F
C - B1438 East	367	92	1579	553	0.664	366	578	1.8	1.9	19.212	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1453	363	387	1878	0.773	1493	1526	13.8	3.6	10.267	B
B - A12 West	1610	403	151	1777	0.906	1762	1484	118.4	80.5	204.096	F
C - B1438 East	299	75	1331	676	0.443	304	549	1.9	0.8	9.785	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1217	304	364	1892	0.643	1223	1419	3.6	1.8	5.441	A
B - A12 West	1348	337	125	1792	0.752	1657	1218	80.5	3.4	65.981	F
C - B1438 East	251	63	1091	796	0.315	252	496	0.8	0.5	6.642	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.67	0.53	1.05	2.46	2.87			N/A	N/A
B - A12 West	2.93	0.15	1.52	6.40	8.55			N/A	N/A
C - B1438 East	0.45	0.00	0.00	0.45	0.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.13	0.05	0.47	8.79	14.88			N/A	N/A
B - A12 West	7.95	0.11	2.88	21.30	30.77			N/A	N/A
C - B1438 East	0.74	0.08	0.78	1.14	1.14			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.80	0.07	1.47	34.53	56.05			N/A	N/A
B - A12 West	64.53	25.82	60.04	101.56	116.00			N/A	N/A
C - B1438 East	1.76	0.03	0.29	1.76	6.97			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	13.75	0.05	0.47	38.35	74.44			N/A	N/A
B - A12 West	118.42	>199	>199	>199	>199			N/A	N/A
C - B1438 East	1.89	0.03	0.29	1.89	8.17			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.56	0.04	0.45	9.97	17.75			N/A	N/A
B - A12 West	80.50	46.61	77.88	110.16	120.69			N/A	N/A
C - B1438 East	0.81	0.06	0.67	1.43	1.87			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.83	0.03	0.32	3.22	9.47			N/A	N/A
B - A12 West	3.35	0.03	0.30	3.35	14.42			N/A	N/A
C - B1438 East	0.47	0.04	0.36	1.37	1.41			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	109.27	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1394	100.000
B - A12 West		ONE HOUR	✓	1682	100.000
C - B1438 East		ONE HOUR	✓	372	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1347	41
	B - A12 West	1395	1	286
	C - B1438 East	174	198	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	18
	B - A12 West	7	0	2
	C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	58.24	24.8	94.0	F	1279	1918
B - A12 West	1.11	159.61	93.5	167.2	F	1543	2315
C - B1438 East	0.93	72.88	7.8	35.1	F	341	511

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1049	262	215	1987	0.528	1045	1177	0.0	1.1	3.803	A
B - A12 West	1266	317	135	1807	0.701	1257	1158	0.0	2.3	6.443	A
C - B1438 East	280	70	1015	841	0.333	278	244	0.0	0.5	6.376	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1253	313	256	1963	0.638	1250	1406	1.1	1.7	5.032	A
B - A12 West	1512	378	161	1791	0.844	1501	1386	2.3	5.0	11.979	B
C - B1438 East	334	84	1215	742	0.450	333	292	0.5	0.8	8.777	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1534	384	286	1557	0.986	1475	1580	1.7	16.7	32.200	D
B - A12 West	1852	463	189	1700	1.089	1677	1634	5.0	48.6	67.146	F
C - B1438 East	409	102	1433	459	0.891	391	328	0.8	5.4	44.534	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1534	384	285	1539	0.997	1502	1580	16.7	24.8	58.240	F
B - A12 West	1852	463	194	1675	1.105	1672	1665	48.6	93.5	159.607	F
C - B1438 East	409	102	1459	439	0.932	400	328	5.4	7.8	72.876	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1253	313	290	1443	0.868	1321	1580	24.8	7.7	36.173	E
B - A12 West	1512	378	172	1716	0.881	1698	1466	93.5	47.0	150.624	F
C - B1438 East	334	84	1284	467	0.715	354	327	7.8	2.8	35.991	E

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1049	262	247	1969	0.533	1075	1338	7.7	1.2	4.147	A
B - A12 West	1266	317	140	1804	0.702	1444	1194	47.0	2.4	16.388	C
C - B1438 East	280	70	1045	826	0.339	289	277	2.8	0.5	6.815	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.11	0.32	1.08	1.52	1.79			N/A	N/A
B - A12 West	2.29	0.15	1.20	4.65	6.05			N/A	N/A
C - B1438 East	0.49	0.00	0.00	0.49	0.49			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.74	0.03	0.34	4.09	9.02			N/A	N/A
B - A12 West	5.00	0.06	1.01	14.27	23.04			N/A	N/A
C - B1438 East	0.81	0.04	0.41	1.82	2.84			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	16.66	0.24	8.11	43.11	60.06			N/A	N/A
B - A12 West	48.62	14.31	43.50	83.37	97.86			N/A	N/A
C - B1438 East	5.44	0.06	1.32	15.42	24.20			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	24.84	0.23	11.08	66.31	93.97			N/A	N/A
B - A12 West	93.51	38.18	87.36	146.64	167.18			N/A	N/A
C - B1438 East	7.82	0.07	1.33	22.43	35.14			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.72	1.19	5.89	14.81	18.29			N/A	N/A
B - A12 West	46.98	22.63	44.50	68.92	77.15			N/A	N/A
C - B1438 East	2.76	0.28	1.72	5.28	6.72			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.03	0.29	1.22	5.27			N/A	N/A
B - A12 West	2.44	0.03	0.29	2.44	9.13			N/A	N/A
C - B1438 East	0.52	0.03	0.29	1.12	2.31			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	87.33	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1348	100.000
B - A12 West		ONE HOUR	✓	1658	100.000
C - B1438 East		ONE HOUR	✓	485	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1223	119
	B - A12 West	1385	2	271
	C - B1438 East	190	294	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	3	4
	B - A12 West	4	0	2
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.98	48.51	19.8	84.7	E	1237	1856
B - A12 West	1.08	122.69	70.9	145.4	F	1521	2282
C - B1438 East	0.96	74.22	10.6	45.3	F	445	667

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1015	254	204	2052	0.495	1011	1183	0.0	1.0	3.445	A
B - A12 West	1248	312	148	1844	0.677	1240	1139	0.0	2.1	5.878	A
C - B1438 East	365	91	924	911	0.401	362	291	0.0	0.7	6.529	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1212	303	244	2029	0.598	1210	1415	1.0	1.5	4.387	A
B - A12 West	1490	373	177	1827	0.816	1482	1363	2.1	4.2	10.190	B
C - B1438 East	436	109	1106	822	0.530	434	348	0.7	1.1	9.233	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1485	371	279	1545	0.961	1439	1623	1.5	12.9	26.979	D
B - A12 West	1825	456	208	1728	1.056	1694	1617	4.2	37.1	53.687	F
C - B1438 East	534	133	1315	580	0.921	511	403	1.1	6.9	42.751	E

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1485	371	278	1508	0.985	1457	1623	12.9	19.8	48.507	E
B - A12 West	1825	456	211	1695	1.077	1690	1638	37.1	70.9	122.690	F
C - B1438 East	534	133	1331	554	0.963	519	404	6.9	10.6	74.217	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1212	303	282	1431	0.847	1266	1623	19.8	6.2	26.433	D
B - A12 West	1490	373	189	1740	0.857	1716	1433	70.9	14.6	94.114	F
C - B1438 East	436	109	1157	582	0.749	465	391	10.6	3.3	36.187	E

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1015	254	213	2047	0.496	1036	1237	6.2	1.0	3.634	A
B - A12 West	1248	312	153	1841	0.678	1298	1169	14.6	2.2	7.229	A
C - B1438 East	365	91	947	900	0.406	376	303	3.3	0.7	7.000	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.50	1.01	1.27	1.27			N/A	N/A
B - A12 West	2.05	0.18	1.13	3.85	4.92			N/A	N/A
C - B1438 East	0.66	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.47	0.03	0.34	3.35	7.56			N/A	N/A
B - A12 West	4.18	0.05	0.55	11.91	20.02			N/A	N/A
C - B1438 East	1.10	0.04	0.42	2.74	4.43			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	12.86	0.11	3.76	36.18	54.09			N/A	N/A
B - A12 West	37.06	6.50	30.89	70.75	86.07			N/A	N/A
C - B1438 East	6.93	0.08	1.68	19.34	29.24			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	19.80	0.12	5.64	56.32	84.73			N/A	N/A
B - A12 West	70.93	20.12	63.29	123.43	145.42			N/A	N/A
C - B1438 East	10.65	0.09	2.79	30.03	45.30			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.23	1.07	4.77	11.56	14.16			N/A	N/A
B - A12 West	14.57	0.91	9.93	32.43	42.00			N/A	N/A
C - B1438 East	3.32	0.18	1.83	7.15	9.47			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.03	0.30	1.41	4.81			N/A	N/A
B - A12 West	2.15	0.03	0.29	2.15	8.49			N/A	N/A
C - B1438 East	0.69	0.03	0.29	1.21	3.03			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	820	100.000
B - A12 West		ONE HOUR	✓	905	100.000
C - B1438 East		ONE HOUR	✓	132	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	793	25
	B - A12 West	829	0	76
	C - B1438 East	44	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	1
	B - A12 West	9	0	7
	C - B1438 East	2	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.44	3.19	0.8	1.9	A	753	1129
B - A12 West	0.55	4.43	1.2	1.5	A	830	1245
C - B1438 East	0.16	4.84	0.2	0.5	A	121	182

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	618	154	57	2049	0.301	616	657	0.0	0.4	2.509	A
B - A12 West	681	170	35	1818	0.375	679	662	0.0	0.6	3.154	A
C - B1438 East	100	25	597	1029	0.097	99	76	0.0	0.1	3.871	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	737	184	68	2042	0.361	737	786	0.4	0.6	2.756	A
B - A12 West	813	203	41	1814	0.448	813	792	0.6	0.8	3.592	A
C - B1438 East	119	30	714	970	0.123	119	91	0.1	0.1	4.228	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	903	226	83	2033	0.444	902	962	0.6	0.8	3.181	A
B - A12 West	996	249	51	1808	0.551	995	969	0.8	1.2	4.414	A
C - B1438 East	146	36	874	890	0.164	146	111	0.1	0.2	4.831	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	903	226	83	2033	0.444	903	964	0.8	0.8	3.186	A
B - A12 West	996	249	51	1808	0.551	996	970	1.2	1.2	4.432	A
C - B1438 East	146	36	875	890	0.164	146	111	0.2	0.2	4.836	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	737	184	68	2042	0.361	738	788	0.8	0.6	2.763	A
B - A12 West	813	203	41	1814	0.448	815	793	1.2	0.8	3.612	A
C - B1438 East	119	30	716	970	0.123	119	91	0.2	0.1	4.234	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	618	154	57	2048	0.301	618	660	0.6	0.4	2.519	A
B - A12 West	681	170	35	1818	0.375	682	664	0.8	0.6	3.172	A
C - B1438 East	100	25	599	1028	0.097	100	76	0.1	0.1	3.881	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - A12 West	0.60	0.55	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.56	0.08	0.76	1.35	1.43			N/A	N/A
B - A12 West	0.81	0.08	0.83	1.48	1.48			N/A	N/A
C - B1438 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.79	0.03	0.25	0.79	0.79			N/A	N/A
B - A12 West	1.21	0.03	0.26	1.21	1.21			N/A	N/A
C - B1438 East	0.19	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.03	0.27	0.80	1.89			N/A	N/A
B - A12 West	1.22	0.03	0.26	1.22	1.22			N/A	N/A
C - B1438 East	0.20	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.82	0.51	0.98	1.40	1.45			N/A	N/A
C - B1438 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - A12 West	0.60	0.08	0.78	1.36	1.43			N/A	N/A
C - B1438 East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	129.65	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1338	100.000
B - A12 West		ONE HOUR	✓	1787	100.000
C - B1438 East		ONE HOUR	✓	275	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1278	49
	B - A12 West	1396	1	390
	C - B1438 East	115	159	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	9
	B - A12 West	12	0	3
	C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	8.31	3.3	10.3	A	1228	1842
B - A12 West	1.13	233.58	128.4	200.0	F	1640	2460
C - B1438 East	0.46	10.31	0.9	3.8	B	253	379

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1007	252	293	1958	0.515	1003	1135	0.0	1.1	3.754	A
B - A12 West	1345	336	95	1760	0.764	1333	1078	0.0	3.1	8.204	A
C - B1438 East	207	52	967	877	0.236	206	328	0.0	0.3	5.353	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1203	301	348	1925	0.625	1201	1350	1.1	1.6	4.953	A
B - A12 West	1606	402	114	1749	0.918	1583	1290	3.1	8.9	19.418	C
C - B1438 East	247	62	1158	783	0.316	247	391	0.3	0.5	6.712	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1473	368	379	1907	0.773	1467	1484	1.6	3.3	8.062	A
B - A12 West	1967	492	139	1735	1.134	1724	1576	8.9	69.8	91.071	F
C - B1438 East	303	76	1414	655	0.463	302	431	0.5	0.8	10.135	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1473	368	381	1905	0.773	1473	1492	3.3	3.3	8.310	A
B - A12 West	1967	492	140	1735	1.134	1733	1583	69.8	128.4	211.552	F
C - B1438 East	303	76	1420	652	0.465	303	433	0.8	0.9	10.306	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1203	301	381	1905	0.631	1209	1469	3.3	1.7	5.218	A
B - A12 West	1606	402	115	1749	0.919	1735	1300	128.4	96.2	233.583	F
C - B1438 East	247	62	1166	778	0.318	249	424	0.9	0.5	6.818	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1007	252	376	1908	0.528	1010	1434	1.7	1.1	4.019	A
B - A12 West	1345	336	96	1759	0.765	1714	1086	96.2	4.1	101.964	F
C - B1438 East	207	52	974	874	0.237	208	412	0.5	0.3	5.411	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	3.12	0.15	1.60	6.91	9.28			N/A	N/A
C - B1438 East	0.31	0.00	0.00	0.31	0.31			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.64	0.05	0.47	4.29	6.82			N/A	N/A
B - A12 West	8.89	0.15	3.83	23.14	32.69			N/A	N/A
C - B1438 East	0.46	0.00	0.00	0.46	0.46			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.27	0.03	0.29	3.27	10.34			N/A	N/A
B - A12 West	69.84	30.23	65.59	107.16	121.48			N/A	N/A
C - B1438 East	0.84	0.03	0.26	0.84	0.84			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.34	0.03	0.27	3.34	3.34			N/A	N/A
B - A12 West	128.40	>199	>199	>199	>199			N/A	N/A
C - B1438 East	0.86	0.03	0.29	1.31	3.77			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.74	0.07	1.04	3.98	5.70			N/A	N/A
B - A12 West	96.20	58.95	93.60	128.50	139.77			N/A	N/A
C - B1438 East	0.47	0.04	0.39	1.23	1.36			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.04	0.44	2.78	4.42			N/A	N/A
B - A12 West	4.09	0.03	0.31	5.64	20.15			N/A	N/A
C - B1438 East	0.31	0.03	0.26	0.47	0.49			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	143.93	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1594	100.000
B - A12 West		ONE HOUR	✓	1781	100.000
C - B1438 East		ONE HOUR	✓	366	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1402	179
	B - A12 West	1337	2	442
	C - B1438 East	155	211	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	8	5
	B - A12 West	13	0	2
	C - B1438 East	4	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	31.33	14.3	76.3	D	1463	2194
B - A12 West	1.15	265.51	139.8	200.0	F	1635	2452
C - B1438 East	0.72	22.38	2.4	11.0	C	336	504

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1200	300	331	1901	0.631	1193	1123	0.0	1.7	5.041	A
B - A12 West	1341	335	126	1740	0.771	1328	1209	0.0	3.2	8.496	A
C - B1438 East	276	69	1061	808	0.341	274	463	0.0	0.5	6.708	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1433	358	393	1865	0.768	1427	1333	1.7	3.2	8.097	A
B - A12 West	1601	400	151	1726	0.928	1576	1446	3.2	9.7	21.048	C
C - B1438 East	329	82	1268	704	0.467	328	551	0.5	0.9	9.532	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1755	439	423	1848	0.950	1719	1457	3.2	12.2	23.248	C
B - A12 West	1961	490	183	1707	1.149	1698	1743	9.7	75.7	99.214	F
C - B1438 East	403	101	1528	574	0.702	398	614	0.9	2.2	19.870	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1755	439	425	1847	0.950	1746	1465	12.2	14.3	31.333	D
B - A12 West	1961	490	185	1706	1.150	1705	1770	75.7	139.8	232.841	F
C - B1438 East	403	101	1552	562	0.718	402	619	2.2	2.4	22.384	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1433	358	426	1846	0.776	1476	1439	14.3	3.6	10.765	B
B - A12 West	1601	400	154	1724	0.929	1711	1493	139.8	112.4	265.513	F
C - B1438 East	329	82	1312	682	0.482	335	590	2.4	1.0	10.536	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1200	300	430	1844	0.651	1207	1422	3.6	1.9	5.710	A
B - A12 West	1341	335	127	1739	0.771	1724	1223	112.4	16.7	138.440	F
C - B1438 East	276	69	1073	802	0.344	277	563	1.0	0.5	6.883	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.69	0.53	1.05	2.51	2.91			N/A	N/A
B - A12 West	3.23	0.11	1.42	7.62	10.50			N/A	N/A
C - B1438 East	0.51	0.51	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.19	0.05	0.48	8.96	15.09			N/A	N/A
B - A12 West	9.70	0.17	4.43	25.03	35.08			N/A	N/A
C - B1438 East	0.86	0.07	0.79	1.41	1.82			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	12.20	0.07	1.86	35.61	56.84			N/A	N/A
B - A12 West	75.65	35.05	71.61	113.38	127.62			N/A	N/A
C - B1438 East	2.20	0.03	0.31	2.88	10.68			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	14.35	0.05	0.51	40.75	76.33			N/A	N/A
B - A12 West	139.83	>199	>199	>199	>199			N/A	N/A
C - B1438 East	2.41	0.03	0.30	2.48	10.99			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.62	0.04	0.44	10.14	18.24			N/A	N/A
B - A12 West	112.36	65.96	108.99	153.20	167.57			N/A	N/A
C - B1438 East	0.95	0.05	0.60	1.92	2.79			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.90	0.03	0.32	3.41	9.84			N/A	N/A
B - A12 West	16.72	0.43	9.78	40.58	54.58			N/A	N/A
C - B1438 East	0.53	0.03	0.34	1.06	1.94			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	109.49	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1369	100.000
B - A12 West		ONE HOUR	✓	1622	100.000
C - B1438 East		ONE HOUR	✓	493	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1247	117
	B - A12 West	1344	1	277
	C - B1438 East	179	315	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	9	6
	B - A12 West	10	0	2
	C - B1438 East	4	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	59.43	25.0	93.5	F	1257	1885
B - A12 West	1.10	155.76	87.9	160.5	F	1489	2233
C - B1438 East	0.99	94.75	14.1	51.6	F	453	679

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1031	258	208	1957	0.527	1027	1142	0.0	1.1	3.859	A
B - A12 West	1221	305	138	1757	0.695	1212	1170	0.0	2.2	6.512	A
C - B1438 East	371	93	940	875	0.424	368	294	0.0	0.7	7.066	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1231	308	248	1933	0.637	1229	1365	1.1	1.7	5.088	A
B - A12 West	1458	365	165	1741	0.838	1448	1401	2.2	4.8	11.896	B
C - B1438 East	443	111	1125	781	0.568	441	352	0.7	1.3	10.537	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1508	377	278	1529	0.986	1448	1536	1.7	16.6	32.635	D
B - A12 West	1786	447	192	1646	1.085	1622	1646	4.8	45.8	65.963	F
C - B1438 East	543	136	1326	564	0.963	512	400	1.3	9.0	52.448	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1508	377	277	1510	0.998	1474	1536	16.6	25.0	59.435	F
B - A12 West	1786	447	196	1621	1.102	1618	1677	45.8	87.9	155.761	F
C - B1438 East	543	136	1350	546	0.995	523	402	9.0	14.1	94.750	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1231	308	280	1402	0.878	1296	1535	25.0	8.6	40.353	E
B - A12 West	1458	365	180	1654	0.881	1636	1488	87.9	43.5	148.424	F
C - B1438 East	443	111	1187	553	0.802	481	390	14.1	4.8	58.759	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1031	258	237	1940	0.532	1061	1293	8.6	1.1	4.237	A
B - A12 West	1221	305	145	1753	0.697	1386	1214	43.5	2.4	15.328	C
C - B1438 East	371	93	971	859	0.432	387	327	4.8	0.8	7.887	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.33	1.08	1.51	1.78			N/A	N/A
B - A12 West	2.23	0.16	1.18	4.45	5.79			N/A	N/A
C - B1438 East	0.73	0.39	0.97	1.39	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.73	0.03	0.35	4.07	8.96			N/A	N/A
B - A12 West	4.78	0.06	0.94	13.63	22.09			N/A	N/A
C - B1438 East	1.28	0.04	0.43	3.28	5.40			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	16.60	0.24	8.16	42.81	59.53			N/A	N/A
B - A12 West	45.78	12.64	40.60	79.71	94.03			N/A	N/A
C - B1438 East	9.01	0.16	4.06	23.21	32.55			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	24.96	0.25	11.43	66.24	93.49			N/A	N/A
B - A12 West	87.89	34.23	81.66	140.05	160.54			N/A	N/A
C - B1438 East	14.10	0.20	6.53	36.76	51.56			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.62	1.28	6.93	15.73	19.06			N/A	N/A
B - A12 West	43.52	20.15	41.02	64.75	72.82			N/A	N/A
C - B1438 East	4.80	0.38	3.09	10.02	12.92			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.15	0.03	0.29	1.20	5.23			N/A	N/A
B - A12 West	2.38	0.03	0.29	2.38	9.00			N/A	N/A
C - B1438 East	0.77	0.03	0.28	0.91	2.99			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	79.76	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1295	100.000
B - A12 West		ONE HOUR	✓	1639	100.000
C - B1438 East		ONE HOUR	✓	607	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1165	123
	B - A12 West	1356	2	281
	C - B1438 East	192	414	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	4
	B - A12 West	5	0	1
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	40.54	15.8	75.3	E	1188	1782
B - A12 West	1.06	104.91	59.6	134.6	F	1504	2256
C - B1438 East	1.02	97.49	18.7	61.9	F	557	835

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	975	244	211	1999	0.488	971	1163	0.0	0.9	3.491	A
B - A12 West	1234	308	149	1830	0.674	1226	1184	0.0	2.0	5.878	A
C - B1438 East	457	114	880	921	0.496	453	302	0.0	1.0	7.625	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1164	291	253	1975	0.590	1162	1390	0.9	1.4	4.420	A
B - A12 West	1473	368	178	1813	0.813	1465	1417	2.0	4.1	10.115	B
C - B1438 East	545	136	1053	834	0.654	542	362	1.0	1.8	12.181	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1426	356	292	1522	0.937	1391	1610	1.4	10.2	23.185	C
B - A12 West	1804	451	208	1736	1.039	1694	1684	4.1	31.6	47.816	E
C - B1438 East	668	167	1261	682	0.980	631	423	1.8	11.0	51.657	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1426	356	292	1470	0.970	1403	1610	10.2	15.8	40.539	E
B - A12 West	1804	451	210	1701	1.061	1692	1699	31.6	59.6	104.913	F
C - B1438 East	668	167	1272	656	1.018	637	423	11.0	18.7	97.490	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1164	291	292	1952	0.596	1221	1600	15.8	1.5	5.320	A
B - A12 West	1473	368	200	1799	0.819	1691	1518	59.6	5.2	55.899	F
C - B1438 East	545	136	1107	807	0.676	611	406	18.7	2.2	24.364	C

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	975	244	215	1997	0.488	977	1183	1.5	1.0	3.537	A
B - A12 West	1234	308	152	1829	0.675	1246	1196	5.2	2.1	6.310	A
C - B1438 East	457	114	886	919	0.497	462	306	2.2	1.0	7.956	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.95	0.53	1.00	1.43	1.48			N/A	N/A
B - A12 West	2.03	0.22	1.17	3.69	4.67			N/A	N/A
C - B1438 East	0.97	0.47	1.01	1.27	1.27			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.42	0.03	0.34	3.41	7.24			N/A	N/A
B - A12 West	4.10	0.05	0.61	11.68	19.47			N/A	N/A
C - B1438 East	1.82	0.05	0.47	4.83	7.75			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.16	0.07	1.23	29.61	47.95			N/A	N/A
B - A12 West	31.57	3.47	24.69	64.62	80.62			N/A	N/A
C - B1438 East	11.03	0.23	5.68	27.60	37.91			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	15.80	0.07	2.11	46.45	75.28			N/A	N/A
B - A12 West	59.63	12.17	50.86	111.55	134.60			N/A	N/A
C - B1438 East	18.70	0.42	10.77	45.81	61.86			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.50	0.04	0.37	3.82	7.35			N/A	N/A
B - A12 West	5.23	0.04	0.45	14.68	27.01			N/A	N/A
C - B1438 East	2.21	0.04	0.37	5.71	11.40			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.03	0.31	1.66	4.80			N/A	N/A
B - A12 West	2.12	0.03	0.29	2.12	8.82			N/A	N/A
C - B1438 East	1.01	0.03	0.28	1.01	3.79			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	856	100.000
B - A12 West		ONE HOUR	✓	750	100.000
C - B1438 East		ONE HOUR	✓	128	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	828	26
	B - A12 West	669	0	81
	C - B1438 East	37	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	1
	B - A12 West	8	0	6
	C - B1438 East	3	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.46	3.29	0.9	1.5	A	785	1178
B - A12 West	0.45	3.59	0.8	1.8	A	688	1032
C - B1438 East	0.16	4.94	0.2	0.5	A	117	176

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	644	161	60	2051	0.314	642	532	0.0	0.5	2.552	A
B - A12 West	564	141	29	1836	0.308	563	690	0.0	0.4	2.825	A
C - B1438 East	96	24	623	1013	0.095	96	80	0.0	0.1	3.923	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	769	192	72	2044	0.376	769	636	0.5	0.6	2.821	A
B - A12 West	674	169	35	1832	0.368	674	825	0.4	0.6	3.105	A
C - B1438 East	115	29	746	952	0.121	115	95	0.1	0.1	4.299	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	942	236	89	2034	0.463	941	779	0.6	0.9	3.290	A
B - A12 West	826	206	43	1828	0.452	825	1011	0.6	0.8	3.586	A
C - B1438 East	141	35	913	869	0.162	141	117	0.1	0.2	4.938	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	942	236	89	2034	0.463	942	780	0.9	0.9	3.295	A
B - A12 West	826	206	43	1828	0.452	826	1012	0.8	0.8	3.591	A
C - B1438 East	141	35	914	869	0.162	141	117	0.2	0.2	4.943	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	769	192	72	2044	0.376	770	638	0.9	0.6	2.830	A
B - A12 West	674	169	35	1832	0.368	675	827	0.8	0.6	3.113	A
C - B1438 East	115	29	747	952	0.121	115	96	0.2	0.1	4.305	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	644	161	61	2051	0.314	645	534	0.6	0.5	2.560	A
B - A12 West	564	141	29	1835	0.308	565	693	0.6	0.4	2.836	A
C - B1438 East	96	24	625	1012	0.095	96	80	0.1	0.1	3.932	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - A12 West	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.60	0.09	0.80	1.36	1.43			N/A	N/A
B - A12 West	0.58	0.09	0.80	1.36	1.43			N/A	N/A
C - B1438 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.03	0.25	0.86	0.86			N/A	N/A
B - A12 West	0.82	0.03	0.25	0.82	0.82			N/A	N/A
C - B1438 East	0.19	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.03	0.27	0.86	1.52			N/A	N/A
B - A12 West	0.82	0.03	0.27	0.82	1.79			N/A	N/A
C - B1438 East	0.19	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.61	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.59	0.55	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - A12 West	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C - B1438 East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	125.50	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1382	100.000
B - A12 West		ONE HOUR	✓	1753	100.000
C - B1438 East		ONE HOUR	✓	301	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1371	0
	B - A12 West	1468	1	284
	C - B1438 East	117	183	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	4	0
	B - A12 West	7	0	5
	C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.99	53.05	22.0	89.8	F	1268	1902
B - A12 West	1.12	192.10	112.4	187.4	F	1609	2413
C - B1438 East	0.87	59.35	5.1	24.8	F	277	415

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1040	260	213	2027	0.513	1036	1193	0.0	1.0	3.620	A
B - A12 West	1320	330	97	1816	0.727	1310	1166	0.0	2.6	6.971	A
C - B1438 East	227	57	1037	848	0.268	225	213	0.0	0.4	5.767	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1242	311	255	2002	0.621	1240	1423	1.0	1.6	4.713	A
B - A12 West	1576	394	116	1805	0.873	1562	1395	2.6	6.1	14.032	B
C - B1438 East	271	68	1241	748	0.362	270	254	0.4	0.6	7.521	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1521	380	280	1553	0.979	1466	1576	1.6	15.6	30.734	D
B - A12 West	1930	483	137	1737	1.111	1720	1649	6.1	58.8	77.157	F
C - B1438 East	332	83	1467	400	0.830	319	279	0.6	3.8	39.725	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1521	380	280	1541	0.987	1496	1576	15.6	22.0	53.051	F
B - A12 West	1930	483	140	1718	1.124	1716	1684	58.8	112.4	185.441	F
C - B1438 East	332	83	1497	381	0.871	327	279	3.8	5.1	59.346	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1242	311	283	1456	0.853	1304	1575	22.0	6.6	29.140	D
B - A12 West	1576	394	122	1752	0.900	1737	1467	112.4	72.3	192.101	F
C - B1438 East	271	68	1305	429	0.631	284	282	5.1	1.8	26.640	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1040	260	260	1998	0.521	1062	1437	6.6	1.1	3.937	A
B - A12 West	1320	330	100	1814	0.727	1598	1196	72.3	2.8	43.310	E
C - B1438 East	227	57	1063	835	0.272	233	259	1.8	0.4	6.029	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.35	1.05	1.31	1.67			N/A	N/A
B - A12 West	2.58	0.14	1.32	5.53	7.33			N/A	N/A
C - B1438 East	0.36	0.00	0.00	0.36	0.36			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.61	0.03	0.34	3.70	8.36			N/A	N/A
B - A12 West	6.15	0.07	1.17	17.35	26.75			N/A	N/A
C - B1438 East	0.56	0.04	0.40	1.47	1.61			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	15.59	0.19	6.86	41.33	58.53			N/A	N/A
B - A12 West	58.79	21.62	54.13	94.91	109.28			N/A	N/A
C - B1438 East	3.82	0.04	0.45	10.74	19.22			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	22.00	0.15	7.74	61.20	89.76			N/A	N/A
B - A12 West	112.37	>199	>199	>199	>199			N/A	N/A
C - B1438 East	5.09	0.05	0.59	14.60	24.83			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.61	0.85	4.84	12.97	16.22			N/A	N/A
B - A12 West	72.26	42.60	69.97	97.99	107.11			N/A	N/A
C - B1438 East	1.82	0.28	1.07	2.98	3.79			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.10	0.03	0.30	1.33	5.16			N/A	N/A
B - A12 West	2.83	0.03	0.29	2.83	11.01			N/A	N/A
C - B1438 East	0.38	0.03	0.30	1.14	1.63			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	219.00	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1629	100.000
B - A12 West		ONE HOUR	✓	1850	100.000
C - B1438 East		ONE HOUR	✓	468	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1386	230
	B - A12 West	1496	2	352
	C - B1438 East	170	298	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	6	4
	B - A12 West	7	0	3
	C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	99.20	52.8	128.7	F	1495	2242
B - A12 West	1.19	348.84	173.9	200.0	F	1698	2547
C - B1438 East	1.02	118.21	17.0	54.4	F	430	644

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1227	307	264	1964	0.624	1220	1252	0.0	1.6	4.795	A
B - A12 West	1393	348	137	1797	0.775	1380	1261	0.0	3.3	8.382	A
C - B1438 East	352	88	1049	824	0.428	349	435	0.0	0.7	7.543	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1465	366	313	1935	0.757	1459	1486	1.6	3.0	7.470	A
B - A12 West	1663	416	164	1781	0.934	1635	1509	3.3	10.3	21.446	C
C - B1438 East	421	105	1254	722	0.583	418	518	0.7	1.4	11.775	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1794	448	328	1710	1.049	1670	1572	3.0	33.9	49.517	E
B - A12 West	2037	509	187	1720	1.185	1713	1726	10.3	91.4	115.112	F
C - B1438 East	515	129	1436	518	0.995	478	562	1.4	10.7	63.549	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1794	448	327	1729	1.037	1718	1572	33.9	52.8	99.195	F
B - A12 West	2037	509	192	1708	1.193	1707	1775	91.4	173.9	284.226	F
C - B1438 East	515	129	1477	506	1.019	490	568	10.7	17.0	118.214	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1465	366	329	1661	0.882	1631	1572	52.8	11.3	76.184	F
B - A12 West	1663	416	184	1727	0.963	1717	1687	173.9	160.4	348.841	F
C - B1438 East	421	105	1402	524	0.803	469	558	17.0	5.0	75.654	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1227	307	338	1617	0.759	1259	1571	11.3	3.3	10.879	B
B - A12 West	1393	348	144	1776	0.784	1765	1306	160.4	67.3	233.952	F
C - B1438 East	352	88	1083	640	0.550	367	514	5.0	1.3	13.878	B

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.64	0.13	1.30	3.00	3.94			N/A	N/A
B - A12 West	3.31	0.06	0.94	9.11	14.23			N/A	N/A
C - B1438 East	0.74	0.18	0.92	1.39	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.01	0.04	0.39	7.99	15.71			N/A	N/A
B - A12 West	10.34	0.12	3.67	28.14	40.95			N/A	N/A
C - B1438 East	1.36	0.04	0.42	3.53	5.84			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	33.92	5.00	27.59	66.62	81.87			N/A	N/A
B - A12 West	91.40	47.13	87.54	131.58	146.28			N/A	N/A
C - B1438 East	10.70	0.36	6.37	25.27	33.71			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	52.84	7.82	43.07	104.59	128.70			N/A	N/A
B - A12 West	173.91	>199	>199	>199	>199			N/A	N/A
C - B1438 East	17.00	0.49	10.25	40.70	54.39			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.33	0.20	5.49	28.91	40.16			N/A	N/A
B - A12 West	160.41	>199	>199	>199	>199			N/A	N/A
C - B1438 East	5.02	0.17	2.60	11.86	16.07			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.27	0.04	0.37	8.32	17.49			N/A	N/A
B - A12 West	67.34	35.17	64.47	96.17	106.73			N/A	N/A
C - B1438 East	1.26	0.03	0.31	2.32	6.47			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	167.31	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1405	100.000
B - A12 West		ONE HOUR	✓	1734	100.000
C - B1438 East		ONE HOUR	✓	559	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1280	119
	B - A12 West	1425	1	308
	C - B1438 East	212	347	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	6
	B - A12 West	6	0	2
	C - B1438 East	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	69.75	30.2	100.3	F	1289	1934
B - A12 West	1.15	254.04	130.3	200.0	F	1591	2387
C - B1438 East	1.06	143.74	25.7	66.7	F	513	769

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1058	264	231	1984	0.533	1053	1227	0.0	1.1	3.848	A
B - A12 West	1306	326	163	1796	0.727	1295	1219	0.0	2.6	7.052	A
C - B1438 East	421	105	965	876	0.480	417	319	0.0	0.9	7.785	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1263	316	276	1958	0.645	1260	1463	1.1	1.8	5.138	A
B - A12 West	1559	390	195	1777	0.877	1544	1459	2.6	6.3	14.598	B
C - B1438 East	502	126	1155	781	0.643	499	381	0.9	1.7	12.623	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1547	387	297	1534	1.009	1470	1586	1.8	21.0	38.111	E
B - A12 West	1909	477	220	1677	1.139	1664	1690	6.3	67.7	89.102	F
C - B1438 East	615	154	1347	594	1.035	562	420	1.7	14.9	70.898	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1547	387	296	1537	1.006	1510	1586	21.0	30.2	69.755	F
B - A12 West	1909	477	223	1660	1.150	1659	1732	67.7	130.3	220.649	F
C - B1438 East	615	154	1383	581	1.058	572	423	14.9	25.7	143.743	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1263	316	296	1412	0.894	1341	1586	30.2	10.8	53.517	F
B - A12 West	1559	390	223	1672	0.932	1659	1579	130.3	105.2	254.039	F
C - B1438 East	502	126	1228	597	0.841	574	408	25.7	7.8	112.542	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1058	264	306	1941	0.545	1096	1583	10.8	1.2	4.458	A
B - A12 West	1306	326	175	1789	0.730	1714	1278	105.2	3.1	101.189	F
C - B1438 East	421	105	1005	856	0.491	448	397	7.8	1.0	9.408	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.22	1.09	1.64	1.89			N/A	N/A
B - A12 West	2.59	0.11	1.17	5.79	7.85			N/A	N/A
C - B1438 East	0.91	0.18	0.96	1.42	1.42			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.79	0.03	0.34	4.07	9.32			N/A	N/A
B - A12 West	6.34	0.07	1.19	17.92	27.69			N/A	N/A
C - B1438 East	1.74	0.04	0.44	4.65	7.78			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	20.99	0.84	13.44	49.07	64.73			N/A	N/A
B - A12 West	67.74	29.23	63.58	103.96	117.84			N/A	N/A
C - B1438 East	14.93	1.29	10.77	31.94	40.72			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	30.23	0.67	17.71	74.37	100.31			N/A	N/A
B - A12 West	130.28	>199	>199	>199	>199			N/A	N/A
C - B1438 East	25.70	2.47	19.74	53.17	66.66			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.84	2.34	9.14	18.88	22.49			N/A	N/A
B - A12 West	105.21	72.43	103.30	132.65	141.87			N/A	N/A
C - B1438 East	7.83	0.74	5.51	16.30	20.72			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.21	0.03	0.29	1.50	5.31			N/A	N/A
B - A12 West	3.13	0.03	0.29	3.13	12.81			N/A	N/A
C - B1438 East	0.98	0.03	0.28	0.98	2.84			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	108.56	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1361	100.000
B - A12 West		ONE HOUR	✓	1738	100.000
C - B1438 East		ONE HOUR	✓	654	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1219	135
	B - A12 West	1407	2	329
	C - B1438 East	213	441	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	2	3
	B - A12 West	3	0	1
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	43.05	17.3	80.7	E	1249	1873
B - A12 West	1.09	147.90	89.4	164.8	F	1594	2392
C - B1438 East	1.07	140.57	30.0	74.8	F	600	900

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1025	256	247	2047	0.500	1021	1215	0.0	1.0	3.494	A
B - A12 West	1308	327	164	1850	0.707	1299	1245	0.0	2.4	6.421	A
C - B1438 East	492	123	921	918	0.536	488	347	0.0	1.1	8.280	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1223	306	295	2019	0.606	1221	1451	1.0	1.5	4.503	A
B - A12 West	1562	390	196	1831	0.853	1550	1489	2.4	5.3	12.330	B
C - B1438 East	588	147	1102	830	0.708	583	414	1.1	2.3	14.295	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1498	375	332	1570	0.955	1456	1637	1.5	12.2	25.622	D
B - A12 West	1913	478	223	1771	1.080	1746	1753	5.3	47.1	63.559	F
C - B1438 East	720	180	1314	694	1.037	662	475	2.3	16.8	68.201	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1498	375	332	1540	0.973	1478	1637	12.2	17.3	43.049	E
B - A12 West	1913	478	225	1747	1.095	1744	1776	47.1	89.4	147.896	F
C - B1438 East	720	180	1333	676	1.065	667	476	16.8	30.0	140.569	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1223	306	331	1436	0.852	1267	1637	17.3	6.4	24.772	C
B - A12 West	1562	390	228	1759	0.888	1740	1596	89.4	44.9	140.712	F
C - B1438 East	588	147	1144	708	0.830	680	455	30.0	7.0	103.249	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1025	256	281	2027	0.505	1046	1369	6.4	1.0	3.750	A
B - A12 West	1308	327	173	1845	0.709	1478	1287	44.9	2.5	15.461	C
C - B1438 East	492	123	944	907	0.543	516	383	7.0	1.2	9.724	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.51	1.02	1.36	1.36			N/A	N/A
B - A12 West	2.35	0.16	1.26	4.77	6.24			N/A	N/A
C - B1438 East	1.13	0.20	1.09	1.66	1.91			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.52	0.03	0.34	3.58	7.83			N/A	N/A
B - A12 West	5.33	0.06	1.23	15.17	24.03			N/A	N/A
C - B1438 East	2.30	0.05	0.50	6.26	10.04			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	12.15	0.09	2.90	34.73	53.06			N/A	N/A
B - A12 West	47.08	12.72	41.65	82.45	97.42			N/A	N/A
C - B1438 East	16.81	1.07	12.32	35.69	45.31			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	17.33	0.08	2.96	50.81	80.68			N/A	N/A
B - A12 West	89.39	33.89	82.78	143.53	164.83			N/A	N/A
C - B1438 East	30.01	3.72	23.85	60.32	74.76			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.44	1.18	4.98	11.83	14.47			N/A	N/A
B - A12 West	44.88	20.42	42.24	67.21	75.70			N/A	N/A
C - B1438 East	7.00	0.19	3.59	17.09	23.35			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.03	0.30	1.59	5.07			N/A	N/A
B - A12 West	2.52	0.03	0.29	2.52	9.91			N/A	N/A
C - B1438 East	1.21	0.03	0.28	1.21	3.76			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	857	100.000
B - A12 West		ONE HOUR	✓	751	100.000
C - B1438 East		ONE HOUR	✓	128	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	829	26
	B - A12 West	670	0	81
	C - B1438 East	37	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	1
	B - A12 West	8	0	6
	C - B1438 East	3	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.46	3.30	0.9	1.5	A	786	1179
B - A12 West	0.45	3.60	0.8	1.8	A	689	1034
C - B1438 East	0.16	4.95	0.2	0.5	A	117	176

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	645	161	60	2051	0.314	643	532	0.0	0.5	2.553	A
B - A12 West	565	141	29	1836	0.308	564	691	0.0	0.4	2.826	A
C - B1438 East	96	24	624	1013	0.095	96	80	0.0	0.1	3.925	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	770	193	72	2044	0.377	770	637	0.5	0.6	2.823	A
B - A12 West	675	169	35	1832	0.368	675	827	0.4	0.6	3.108	A
C - B1438 East	115	29	747	952	0.121	115	95	0.1	0.1	4.301	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	943	236	89	2034	0.464	942	780	0.6	0.9	3.293	A
B - A12 West	827	207	43	1828	0.452	826	1012	0.6	0.8	3.590	A
C - B1438 East	141	35	914	869	0.162	141	117	0.1	0.2	4.942	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	943	236	89	2034	0.464	943	781	0.9	0.9	3.298	A
B - A12 West	827	207	43	1828	0.452	827	1013	0.8	0.8	3.596	A
C - B1438 East	141	35	915	868	0.162	141	117	0.2	0.2	4.948	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	770	193	72	2044	0.377	771	639	0.9	0.6	2.832	A
B - A12 West	675	169	35	1832	0.368	676	828	0.8	0.6	3.115	A
C - B1438 East	115	29	748	951	0.121	115	96	0.2	0.1	4.309	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	645	161	61	2051	0.314	646	535	0.6	0.5	2.561	A
B - A12 West	565	141	29	1835	0.308	566	693	0.6	0.4	2.836	A
C - B1438 East	96	24	626	1011	0.095	96	80	0.1	0.1	3.934	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - A12 West	0.44	0.00	0.00	0.44	0.44			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.60	0.09	0.80	1.36	1.43			N/A	N/A
B - A12 West	0.58	0.09	0.80	1.36	1.43			N/A	N/A
C - B1438 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.03	0.25	0.86	0.86			N/A	N/A
B - A12 West	0.82	0.03	0.25	0.82	0.82			N/A	N/A
C - B1438 East	0.19	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.03	0.27	0.86	1.50			N/A	N/A
B - A12 West	0.82	0.03	0.27	0.82	1.78			N/A	N/A
C - B1438 East	0.19	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.61	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.59	0.55	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - A12 West	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C - B1438 East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	126.53	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1372	100.000
B - A12 West		ONE HOUR	✓	1763	100.000
C - B1438 East		ONE HOUR	✓	302	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1319	42
	B - A12 West	1468	1	294
	C - B1438 East	117	184	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	4	10
	B - A12 West	7	0	5
	C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.98	50.92	20.9	87.8	F	1259	1888
B - A12 West	1.13	195.68	114.4	189.6	F	1617	2426
C - B1438 East	0.86	55.14	4.7	23.6	F	277	416

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1033	258	221	2019	0.512	1029	1192	0.0	1.0	3.621	A
B - A12 West	1327	332	97	1814	0.731	1316	1127	0.0	2.6	7.090	A
C - B1438 East	228	57	998	868	0.262	226	251	0.0	0.4	5.599	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1233	308	263	1993	0.619	1231	1422	1.0	1.6	4.711	A
B - A12 West	1585	396	116	1803	0.879	1570	1349	2.6	6.4	14.544	B
C - B1438 East	272	68	1194	771	0.352	271	300	0.4	0.5	7.188	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1510	378	290	1549	0.975	1457	1574	1.6	14.9	29.904	D
B - A12 West	1941	485	137	1743	1.113	1727	1597	6.4	59.9	78.342	F
C - B1438 East	333	83	1414	407	0.817	320	333	0.5	3.6	37.504	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1510	378	289	1535	0.984	1487	1574	14.9	20.9	50.916	F
B - A12 West	1941	485	140	1725	1.125	1723	1630	59.9	114.4	187.939	F
C - B1438 East	333	83	1442	387	0.859	328	334	3.6	4.7	55.140	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1233	308	293	1471	0.838	1294	1573	20.9	5.8	24.879	C
B - A12 West	1585	396	122	1759	0.901	1744	1418	114.4	74.5	195.683	F
C - B1438 East	272	68	1255	454	0.599	284	331	4.7	1.6	22.631	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1033	258	271	1988	0.519	1051	1442	5.8	1.1	3.918	A
B - A12 West	1327	332	99	1813	0.732	1613	1153	74.5	2.9	48.019	E
C - B1438 East	228	57	1020	857	0.266	232	302	1.6	0.4	5.809	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.38	1.04	1.26	1.64			N/A	N/A
B - A12 West	2.64	0.14	1.36	5.68	7.56			N/A	N/A
C - B1438 East	0.35	0.00	0.00	0.35	0.35			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.60	0.03	0.34	3.71	8.29			N/A	N/A
B - A12 West	6.42	0.08	1.41	17.99	27.44			N/A	N/A
C - B1438 East	0.54	0.04	0.39	1.43	1.48			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	14.92	0.16	6.07	40.13	57.49			N/A	N/A
B - A12 West	59.95	22.45	55.32	96.26	110.65			N/A	N/A
C - B1438 East	3.60	0.04	0.42	9.86	18.43			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	20.86	0.13	6.49	58.93	87.83			N/A	N/A
B - A12 West	114.39	>199	>199	>199	>199			N/A	N/A
C - B1438 East	4.75	0.05	0.48	13.54	23.57			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	5.75	0.52	3.87	11.92	15.24			N/A	N/A
B - A12 West	74.52	44.08	72.19	100.92	110.25			N/A	N/A
C - B1438 East	1.57	0.19	1.35	2.66	3.30			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.09	0.03	0.30	1.40	5.19			N/A	N/A
B - A12 West	2.92	0.03	0.29	2.92	11.54			N/A	N/A
C - B1438 East	0.36	0.03	0.30	1.16	1.55			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	220.12	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1630	100.000
B - A12 West		ONE HOUR	✓	1830	100.000
C - B1438 East		ONE HOUR	✓	480	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1381	237
	B - A12 West	1492	2	336
	C - B1438 East	171	309	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	6	4
	B - A12 West	7	0	3
	C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	103.39	55.3	131.5	F	1496	2244
B - A12 West	1.19	346.76	170.6	200.0	F	1679	2518
C - B1438 East	1.03	128.98	19.3	57.5	F	441	661

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1228	307	252	1970	0.623	1221	1250	0.0	1.6	4.765	A
B - A12 West	1377	344	138	1792	0.768	1365	1266	0.0	3.2	8.187	A
C - B1438 East	362	90	1045	825	0.438	359	428	0.0	0.8	7.667	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1466	366	299	1942	0.755	1460	1485	1.6	3.0	7.385	A
B - A12 West	1645	411	165	1776	0.926	1619	1514	3.2	9.6	20.240	C
C - B1438 East	432	108	1250	723	0.597	429	509	0.8	1.4	12.135	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1795	449	313	1704	1.054	1666	1569	3.0	35.3	51.049	F
B - A12 West	2014	504	187	1702	1.183	1695	1726	9.6	89.4	113.375	F
C - B1438 East	529	132	1426	524	1.010	487	553	1.4	11.8	67.279	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1795	449	312	1725	1.040	1715	1569	35.3	55.3	103.387	F
B - A12 West	2014	504	192	1690	1.192	1690	1775	89.4	170.6	281.701	F
C - B1438 East	529	132	1468	512	1.033	499	559	11.8	19.3	128.976	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1466	366	313	1664	0.881	1638	1569	55.3	12.3	80.577	F
B - A12 West	1645	411	186	1706	0.964	1696	1700	170.6	157.7	346.760	F
C - B1438 East	432	108	1402	525	0.823	485	549	19.3	6.1	92.547	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1228	307	322	1527	0.804	1259	1568	12.3	4.4	14.782	B
B - A12 West	1377	344	145	1756	0.784	1745	1312	157.7	65.8	232.354	F
C - B1438 East	362	90	1078	583	0.620	379	503	6.1	1.7	18.979	C

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.63	0.10	1.24	3.20	4.27			N/A	N/A
B - A12 West	3.19	0.06	0.89	8.78	13.76			N/A	N/A
C - B1438 East	0.77	0.15	0.91	1.40	1.46			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.98	0.04	0.38	7.75	15.72			N/A	N/A
B - A12 West	9.56	0.10	2.86	26.55	39.41			N/A	N/A
C - B1438 East	1.44	0.04	0.42	3.76	6.33			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	35.32	5.82	29.19	68.17	83.28			N/A	N/A
B - A12 West	89.42	45.66	85.55	129.19	143.77			N/A	N/A
C - B1438 East	11.80	0.58	7.63	26.84	35.17			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	55.34	9.16	45.84	107.55	131.48			N/A	N/A
B - A12 West	170.62	>199	>199	>199	>199			N/A	N/A
C - B1438 East	19.26	0.97	12.80	44.01	57.51			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	12.29	0.14	4.59	33.37	48.27			N/A	N/A
B - A12 West	157.70	>199	>199	>199	>199			N/A	N/A
C - B1438 East	6.07	0.18	3.13	14.63	19.91			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.37	0.05	0.47	12.41	21.69			N/A	N/A
B - A12 West	65.85	34.26	63.01	94.15	104.52			N/A	N/A
C - B1438 East	1.71	0.03	0.35	4.10	8.85			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	169.99	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1404	100.000
B - A12 West		ONE HOUR	✓	1739	100.000
C - B1438 East		ONE HOUR	✓	560	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1273	125
	B - A12 West	1427	1	311
	C - B1438 East	212	348	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	6
	B - A12 West	6	0	2
	C - B1438 East	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	69.86	30.2	100.9	F	1288	1932
B - A12 West	1.15	259.86	132.4	200.0	F	1596	2394
C - B1438 East	1.06	142.11	25.4	66.7	F	514	771

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1057	264	233	1983	0.533	1052	1229	0.0	1.1	3.849	A
B - A12 West	1309	327	163	1796	0.729	1299	1214	0.0	2.6	7.102	A
C - B1438 East	422	105	959	879	0.480	418	326	0.0	0.9	7.753	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1262	316	278	1957	0.645	1260	1465	1.1	1.8	5.140	A
B - A12 West	1563	391	195	1777	0.880	1548	1453	2.6	6.5	14.821	B
C - B1438 East	503	126	1148	784	0.642	500	389	0.9	1.7	12.523	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1546	386	299	1532	1.009	1469	1586	1.8	21.0	38.193	E
B - A12 West	1915	479	220	1678	1.141	1665	1683	6.5	68.9	90.326	F
C - B1438 East	617	154	1339	596	1.034	564	429	1.7	14.8	70.359	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1546	386	298	1536	1.006	1509	1586	21.0	30.2	69.865	F
B - A12 West	1915	479	224	1662	1.152	1660	1726	68.9	132.4	223.940	F
C - B1438 East	617	154	1375	584	1.056	574	432	14.8	25.4	142.110	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	316	298	1412	0.894	1340	1586	30.2	10.7	53.289	F
B - A12 West	1563	391	223	1674	0.934	1661	1572	132.4	107.9	259.855	F
C - B1438 East	503	126	1221	599	0.841	574	417	25.4	7.8	111.195	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1057	264	308	1511	0.700	1090	1585	10.7	2.4	9.215	A
B - A12 West	1309	327	174	1735	0.755	1720	1267	107.9	5.4	123.319	F
C - B1438 East	422	105	994	710	0.594	447	405	7.8	1.5	14.878	B

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.13	0.18	1.08	1.68	1.92			N/A	N/A
B - A12 West	2.61	0.11	1.11	5.94	8.16			N/A	N/A
C - B1438 East	0.91	0.16	0.96	1.47	1.47			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.79	0.03	0.34	3.99	9.34			N/A	N/A
B - A12 West	6.46	0.07	1.23	18.28	28.24			N/A	N/A
C - B1438 East	1.73	0.04	0.43	4.63	7.81			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	21.03	0.86	13.54	49.07	64.68			N/A	N/A
B - A12 West	68.85	30.08	64.72	105.25	119.16			N/A	N/A
C - B1438 East	14.84	1.26	10.67	31.81	40.58			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	30.24	0.64	17.58	74.69	100.93			N/A	N/A
B - A12 West	132.43	>199	>199	>199	>199			N/A	N/A
C - B1438 East	25.43	2.28	19.35	53.05	66.72			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.74	1.07	8.27	21.12	26.19			N/A	N/A
B - A12 West	107.95	72.08	105.77	138.33	148.65			N/A	N/A
C - B1438 East	7.75	0.41	4.90	17.35	22.71			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.40	0.04	0.40	6.52	11.97			N/A	N/A
B - A12 West	5.38	0.04	0.38	13.41	29.16			N/A	N/A
C - B1438 East	1.51	0.03	0.31	2.39	7.62			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	110.06	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1361	100.000
B - A12 West		ONE HOUR	✓	1741	100.000
C - B1438 East		ONE HOUR	✓	650	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1219	135
	B - A12 West	1410	2	330
	C - B1438 East	213	437	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	2	3
	B - A12 West	3	0	1
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	43.67	17.6	81.3	E	1249	1873
B - A12 West	1.10	151.39	91.7	167.3	F	1598	2397
C - B1438 East	1.06	138.50	29.3	74.0	F	597	895

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1024	256	248	2047	0.500	1020	1218	0.0	1.0	3.495	A
B - A12 West	1311	328	164	1850	0.709	1302	1242	0.0	2.4	6.454	A
C - B1438 East	490	122	921	918	0.533	485	348	0.0	1.1	8.227	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1223	306	296	2018	0.606	1221	1454	1.0	1.5	4.505	A
B - A12 West	1565	391	196	1831	0.855	1553	1486	2.4	5.4	12.464	B
C - B1438 East	585	146	1102	831	0.704	580	415	1.1	2.3	14.113	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1498	375	333	1567	0.956	1455	1637	1.5	12.4	25.974	D
B - A12 West	1917	479	223	1770	1.083	1746	1748	5.4	48.2	64.786	F
C - B1438 East	716	179	1313	692	1.035	659	475	2.3	16.5	67.532	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1498	375	332	1539	0.974	1477	1637	12.4	17.6	43.669	E
B - A12 West	1917	479	225	1747	1.098	1744	1772	48.2	91.7	151.386	F
C - B1438 East	716	179	1333	674	1.063	665	477	16.5	29.3	138.499	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1223	306	332	1436	0.852	1268	1637	17.6	6.5	25.031	D
B - A12 West	1565	391	227	1760	0.890	1741	1591	91.7	47.8	145.894	F
C - B1438 East	585	146	1144	704	0.830	674	455	29.3	6.9	101.094	F

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1024	256	284	2025	0.506	1046	1381	6.5	1.0	3.756	A
B - A12 West	1311	328	173	1845	0.711	1492	1283	47.8	2.5	16.941	C
C - B1438 East	490	122	944	907	0.540	512	386	6.9	1.2	9.630	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.50	1.02	1.38	1.38			N/A	N/A
B - A12 West	2.37	0.15	1.26	4.83	6.35			N/A	N/A
C - B1438 East	1.12	0.21	1.08	1.63	1.88			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.52	0.03	0.34	3.56	7.83			N/A	N/A
B - A12 West	5.40	0.06	1.26	15.37	24.29			N/A	N/A
C - B1438 East	2.26	0.05	0.49	6.13	9.88			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	12.36	0.10	3.13	35.17	53.38			N/A	N/A
B - A12 West	48.24	13.53	42.89	83.72	98.63			N/A	N/A
C - B1438 East	16.52	1.47	12.00	35.27	44.89			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	17.59	0.09	3.20	51.47	81.27			N/A	N/A
B - A12 West	91.69	35.78	85.22	146.03	167.34			N/A	N/A
C - B1438 East	29.33	3.39	23.09	59.49	74.00			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.45	1.16	4.98	11.90	14.58			N/A	N/A
B - A12 West	47.83	22.81	45.26	70.46	78.97			N/A	N/A
C - B1438 East	6.89	0.19	3.53	16.79	22.93			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.03	0.30	1.57	5.07			N/A	N/A
B - A12 West	2.55	0.03	0.29	2.55	9.95			N/A	N/A
C - B1438 East	1.20	0.03	0.28	1.20	3.74			N/A	N/A

Junctions 9									
ARCADY 9 - Roundabout Module									
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Filename: 2019.08.13_J26_Model_CV_Adjusted v12_SensTest.j9

Path: \\ser01cam1uk.uk.wspgroup.com\projects\50400326 - Sizewell C transport planning\Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\v12 sensitivity\J26

Report generation date: 13/03/2020 14:49:47

- »2019 Base Year, 6-7 AM
- »2019 Base Year, 7-8 AM
- »2019 Base Year, 8-9 AM
- »2019 Base Year, 3-4 PM
- »2019 Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
- »2023 Reference Case, 8-9 AM
- »2023 Reference Case, 3-4 PM
- »2023 Reference Case, 5-6 PM
- »2023 Early Years, 6-7 AM
- »2023 Early Years, 7-8 AM
- »2023 Early Years, 8-9 AM
- »2023 Early Years, 3-4 PM
- »2023 Early Years, 5-6 PM
- »2028 Reference Case, 6-7 AM
- »2028 Reference Case, 7-8 AM
- »2028 Reference Case, 8-9 AM
- »2028 Reference Case, 3-4 PM
- »2028 Reference Case, 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case, 6-7 AM
- »2034 Reference Case, 7-8 AM
- »2034 Reference Case, 8-9 AM
- »2034 Reference Case, 3-4 PM
- »2034 Reference Case, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North		0.7	3.04	0.41	A		2.6	6.40	0.72	A		11.8	25.40	0.93	D		4.4	10.95	0.82	B		2.0	5.37	0.67	A
B - A12 West	D1	0.6	3.14	0.37	A	D2	7.4	17.69	0.89	C	D3	13.3	30.83	0.95	D	D4	14.3	32.68	0.95	D	D5	8.2	18.93	0.90	C
C - B1438 East		0.1	4.40	0.12	A		0.7	8.68	0.41	A		1.9	18.95	0.67	C		2.6	20.66	0.74	C		2.1	14.74	0.68	B
2023 Reference Case																									
A - A12 North		0.8	3.19	0.45	A		6.3	15.53	0.88	C		17.4	37.32	0.97	E		6.9	16.77	0.89	C		2.3	5.87	0.70	A
B - A12 West	D6	0.6	3.25	0.39	A	D7	17.6	38.61	0.97	E	D8	32.0	64.56	1.01	F	D9	20.4	43.67	0.98	E	D10	8.9	20.61	0.91	C
C - B1438 East		0.2	4.75	0.14	A		2.0	20.94	0.68	C		10.4	72.41	0.95	F		4.9	35.16	0.86	E		4.1	25.80	0.81	D
2023 Early Years																									
A - A12 North		0.9	3.32	0.47	A		23.7	59.80	0.99	F		15.7	34.08	0.96	D		17.6	44.29	0.98	E		2.4	6.44	0.71	A
B - A12 West	D11	0.9	3.82	0.47	A	D12	138.2	271.06	1.16	F	D13	67.0	121.49	1.06	F	D14	53.6	101.39	1.06	F	D15	10.5	24.27	0.93	C
C - B1438 East		0.2	4.95	0.15	A		7.6	70.91	0.92	F		46.7	235.31	1.15	F		49.8	217.14	1.14	F		25.9	118.14	1.03	F
2028 Reference Case																									
A - A12 North		0.8	3.10	0.43	A		24.7	57.69	1.00	F		19.2	38.32	0.98	E		9.6	22.45	0.93	C		12.7	32.09	0.95	D
B - A12 West	D16	0.7	3.34	0.41	A	D17	73.3	130.76	1.08	F	D18	57.8	102.72	1.05	F	D19	35.5	67.54	1.02	F	D20	37.2	69.90	1.03	F
C - B1438 East		0.2	4.69	0.15	A		4.0	59.46	0.84	F		2.8	32.04	0.76	D		4.5	37.69	0.85	E		5.9	46.49	0.89	E
2028 Peak Construction																									
A - A12 North		0.8	3.12	0.43	A		11.0	25.63	0.94	D		14.0	30.68	0.95	D		11.7	29.42	0.95	D		4.7	12.63	0.84	B
B - A12 West	D21	1.2	4.31	0.54	A	D22	108.5	185.64	1.11	F	D23	72.7	128.86	1.07	F	D24	35.4	69.29	1.02	F	D25	16.0	35.22	0.97	E
C - B1438 East		0.2	4.76	0.16	A		2.1	29.15	0.70	D		1.8	18.32	0.65	C		8.1	54.67	0.93	F		5.6	34.94	0.87	D
2034 Reference Case																									
A - A12 North		0.8	3.19	0.45	A		29.4	67.05	1.01	F		16.9	33.92	0.97	D		14.8	36.06	0.96	E		3.1	7.98	0.76	A
B - A12 West	D26	0.8	3.47	0.43	A	D27	105.5	184.13	1.12	F	D28	34.2	65.87	1.02	F	D29	45.5	84.23	1.04	F	D30	15.1	33.29	0.96	D
C - B1438 East		0.2	4.81	0.15	A		4.4	65.49	0.85	F		5.8	46.96	0.89	E		16.6	94.22	1.01	F		4.7	29.29	0.84	D
2034 Operational Led																									
A - A12 North		0.8	3.19	0.45	A		25.4	62.25	1.00	F		13.7	29.72	0.95	D		15.1	36.89	0.97	E		2.4	6.18	0.71	A
B - A12 West	D31	0.8	3.47	0.43	A	D32	105.4	183.99	1.12	F	D33	70.8	122.09	1.06	F	D34	46.4	85.82	1.04	F	D35	14.7	32.57	0.95	D

C - B1438 East	0.2	4.81	0.15	A	4.1	61.90	0.84	F	3.8	32.22	0.81	D	14.3	82.84	0.99	F	4.5	28.04	0.83	D
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There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / B1438
Location	52° 5'2.99"N, 1°17'16.92"E
Site number	26
Date	01/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	A12 West	
C	B1438 East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	8.10	8.30	4.8	26.8	78.0	29.0	
B - A12 West	6.70	9.60	28.6	21.5	78.0	35.8	
C - B1438 East	2.90	8.30	25.8	20.6	78.0	42.0	

Exit Restrictions

Arm	Exit restriction present	Linked exit restriction present	Maximum capacity (PCU/hr)
A - A12 North	✓		1680
B - A12 West			
C - B1438 East			

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-300
B - A12 West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-650
C - B1438 East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-400

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.607	2248
B - A12 West	0.614	1999
C - B1438 East	0.481	1383

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	760	100.000
B - A12 West		ONE HOUR	✓	600	100.000
C - B1438 East		ONE HOUR	✓	106	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	729	29
	B - A12 West	530	0	70
	C - B1438 East	23	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	9	0
	B - A12 West	10	0	7
	C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.41	3.04	0.7	2.5	A	697	1046
B - A12 West	0.37	3.14	0.6	2.6	A	551	826
C - B1438 East	0.12	4.40	0.1	0.5	A	97	146

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	572	143	53	2037	0.281	571	417	0.0	0.4	2.454	A
B - A12 West	452	113	19	1812	0.249	450	610	0.0	0.3	2.642	A
C - B1438 East	80	20	549	1065	0.075	79	74	0.0	0.1	3.651	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	683	171	63	2030	0.337	683	499	0.4	0.5	2.671	A
B - A12 West	539	135	22	1809	0.298	539	729	0.3	0.4	2.833	A
C - B1438 East	95	24	657	1010	0.094	95	89	0.1	0.1	3.933	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	837	209	77	2022	0.414	836	610	0.5	0.7	3.034	A
B - A12 West	661	165	27	1807	0.366	660	893	0.4	0.6	3.138	A
C - B1438 East	117	29	804	935	0.125	117	109	0.1	0.1	4.397	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	837	209	77	2022	0.414	837	611	0.7	0.7	3.036	A
B - A12 West	661	165	28	1807	0.366	661	894	0.6	0.6	3.140	A
C - B1438 East	117	29	805	935	0.125	117	109	0.1	0.1	4.399	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	683	171	63	2030	0.337	684	499	0.7	0.5	2.677	A
B - A12 West	539	135	23	1809	0.298	540	731	0.6	0.4	2.836	A
C - B1438 East	95	24	658	1010	0.094	95	89	0.1	0.1	3.937	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	572	143	53	2036	0.281	573	418	0.5	0.4	2.459	A
B - A12 West	452	113	19	1812	0.249	452	612	0.4	0.3	2.650	A
C - B1438 East	80	20	551	1064	0.075	80	75	0.1	0.1	3.658	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - A12 West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - B1438 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.50	0.50	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.42	0.00	0.00	0.42	0.42			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.70	0.03	0.25	0.70	0.70			N/A	N/A
B - A12 West	0.57	0.03	0.25	0.57	0.57			N/A	N/A
C - B1438 East	0.14	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.70	0.03	0.28	0.70	2.47			N/A	N/A
B - A12 West	0.57	0.03	0.29	1.24	2.64			N/A	N/A
C - B1438 East	0.14	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.51	0.51	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.43	0.00	0.00	0.43	0.43			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.39	0.00	0.00	0.39	0.39			N/A	N/A
B - A12 West	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C - B1438 East	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	12.06	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1327	100.000
B - A12 West		ONE HOUR	✓	1436	100.000
C - B1438 East		ONE HOUR	✓	257	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	11	1207	109
B - A12 West	1236	1	199
C - B1438 East	109	147	1

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	0	4	4
B - A12 West	8	0	5
C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.72	6.40	2.6	5.3	A	1218	1827
B - A12 West	0.89	17.69	7.4	37.8	C	1318	1977
C - B1438 East	0.41	8.68	0.7	3.2	A	236	354

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	999	250	150	2066	0.484	995	1015	0.0	0.9	3.351	A
B - A12 West	1081	270	91	1803	0.600	1075	1016	0.0	1.5	4.909	A
C - B1438 East	193	48	914	908	0.213	192	232	0.0	0.3	5.026	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1193	298	180	2048	0.583	1191	1215	0.9	1.4	4.193	A
B - A12 West	1291	323	109	1792	0.720	1287	1216	1.5	2.5	7.063	A
C - B1438 East	231	58	1094	819	0.282	231	277	0.3	0.4	6.108	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1461	365	219	2024	0.722	1456	1477	1.4	2.5	6.288	A
B - A12 West	1581	395	133	1778	0.889	1563	1487	2.5	6.9	15.592	C
C - B1438 East	283	71	1338	700	0.404	282	337	0.4	0.7	8.593	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1461	365	221	2023	0.722	1461	1491	2.5	2.6	6.400	A
B - A12 West	1581	395	133	1778	0.889	1579	1492	6.9	7.4	17.692	C
C - B1438 East	283	71	1342	698	0.406	283	340	0.7	0.7	8.678	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1193	298	183	2046	0.583	1198	1236	2.6	1.4	4.265	A
B - A12 West	1291	323	109	1792	0.720	1310	1223	7.4	2.6	7.746	A
C - B1438 East	231	58	1100	816	0.283	232	281	0.7	0.4	6.174	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	999	250	152	2065	0.484	1001	1025	1.4	0.9	3.387	A
B - A12 West	1081	270	91	1802	0.600	1086	1022	2.6	1.5	5.053	A
C - B1438 East	193	48	919	905	0.214	194	233	0.4	0.3	5.064	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.93	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.48	0.59	1.39	1.82	1.94			N/A	N/A
C - B1438 East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.38	0.05	0.49	3.44	5.26			N/A	N/A
B - A12 West	2.51	0.05	0.47	6.92	11.54			N/A	N/A
C - B1438 East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.53	0.03	0.27	2.53	3.40			N/A	N/A
B - A12 West	6.93	0.04	0.39	17.37	37.78			N/A	N/A
C - B1438 East	0.67	0.03	0.26	0.67	0.67			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.57	0.03	0.26	2.57	2.57			N/A	N/A
B - A12 West	7.40	0.03	0.32	8.92	35.32			N/A	N/A
C - B1438 East	0.68	0.03	0.30	1.43	3.20			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.41	0.10	1.13	2.70	3.57			N/A	N/A
B - A12 West	2.65	0.05	0.46	7.36	12.54			N/A	N/A
C - B1438 East	0.40	0.00	0.00	0.40	0.40			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.94	0.05	0.55	1.93	2.84			N/A	N/A
B - A12 West	1.52	0.03	0.33	3.34	7.86			N/A	N/A
C - B1438 East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	27.16	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1616	100.000
B - A12 West		ONE HOUR	✓	1503	100.000
C - B1438 East		ONE HOUR	✓	342	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	13	1401	202
B - A12 West	1170	2	331
C - B1438 East	152	190	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	8	6	4
B - A12 West	8	0	5
C - B1438 East	4	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.93	25.40	11.8	64.9	D	1483	2224
B - A12 West	0.95	30.83	13.3	71.8	D	1379	2069
C - B1438 East	0.67	18.95	1.9	8.1	C	314	471

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1217	304	249	1974	0.616	1210	999	0.0	1.6	4.677	A
B - A12 West	1132	283	123	1786	0.634	1125	1193	0.0	1.7	5.394	A
C - B1438 East	257	64	1060	805	0.320	256	399	0.0	0.5	6.527	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1453	363	298	1944	0.747	1448	1195	1.6	2.9	7.172	A
B - A12 West	1351	338	148	1771	0.763	1346	1427	1.7	3.1	8.352	A
C - B1438 East	307	77	1268	704	0.437	306	477	0.5	0.8	9.023	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1779	445	359	1908	0.933	1749	1442	2.9	10.3	19.839	C
B - A12 West	1655	414	180	1752	0.945	1622	1726	3.1	11.4	23.246	C
C - B1438 East	377	94	1533	575	0.654	372	576	0.8	1.8	17.394	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1779	445	365	1904	0.934	1773	1464	10.3	11.8	25.405	D
B - A12 West	1655	414	181	1751	0.945	1647	1749	11.4	13.3	30.831	D
C - B1438 East	377	94	1554	565	0.666	376	584	1.8	1.9	18.948	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1453	363	308	1938	0.749	1488	1233	11.8	3.1	8.566	A
B - A12 West	1351	338	151	1769	0.764	1391	1465	13.3	3.4	10.441	B
C - B1438 East	307	77	1303	687	0.448	312	492	1.9	0.8	9.704	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1217	304	252	1972	0.617	1222	1011	3.1	1.6	4.840	A
B - A12 West	1132	283	125	1785	0.634	1138	1205	3.4	1.8	5.620	A
C - B1438 East	257	64	1071	800	0.322	259	403	0.8	0.5	6.670	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.58	0.55	1.47	2.10	2.64			N/A	N/A
B - A12 West	1.70	0.56	1.11	2.43	2.83			N/A	N/A
C - B1438 East	0.47	0.00	0.00	0.47	0.47			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.87	0.05	0.45	7.97	13.73			N/A	N/A
B - A12 West	3.10	0.05	0.49	8.70	14.46			N/A	N/A
C - B1438 East	0.76	0.08	0.79	1.32	1.32			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.33	0.06	1.02	30.14	52.10			N/A	N/A
B - A12 West	11.41	0.07	1.48	33.33	53.88			N/A	N/A
C - B1438 East	1.80	0.03	0.29	1.80	7.24			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.78	0.04	0.41	29.44	64.85			N/A	N/A
B - A12 West	13.29	0.05	0.47	37.18	71.77			N/A	N/A
C - B1438 East	1.92	0.03	0.29	1.92	8.10			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.09	0.04	0.43	8.61	15.38			N/A	N/A
B - A12 West	3.37	0.04	0.43	9.33	17.03			N/A	N/A
C - B1438 East	0.83	0.06	0.66	1.49	1.93			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.63	0.03	0.31	2.80	8.37			N/A	N/A
B - A12 West	1.76	0.03	0.31	2.89	8.98			N/A	N/A
C - B1438 East	0.48	0.04	0.36	1.40	1.50			N/A	N/A

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	22.23	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1337	100.000
B - A12 West		ONE HOUR	✓	1511	100.000
C - B1438 East		ONE HOUR	✓	432	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	6	1187	144
B - A12 West	1255	1	255
C - B1438 East	189	243	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	0	6	5
B - A12 West	6	0	1
C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	10.95	4.4	12.8	B	1227	1840
B - A12 West	0.95	32.68	14.3	75.3	D	1387	2080
C - B1438 East	0.74	20.66	2.6	12.3	C	396	595

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1007	252	192	2011	0.500	1003	1085	0.0	1.0	3.557	A
B - A12 West	1138	284	146	1807	0.630	1131	1073	0.0	1.7	5.276	A
C - B1438 East	325	81	895	902	0.361	323	299	0.0	0.6	6.196	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1202	300	229	1989	0.604	1200	1298	1.0	1.5	4.548	A
B - A12 West	1358	340	175	1789	0.759	1353	1284	1.7	3.0	8.146	A
C - B1438 East	388	97	1072	815	0.477	387	358	0.6	0.9	8.394	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1472	368	276	1962	0.750	1466	1568	1.5	2.9	7.183	A
B - A12 West	1664	416	213	1766	0.942	1631	1568	3.0	11.1	22.617	C
C - B1438 East	476	119	1310	697	0.683	471	433	0.9	2.0	15.657	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1472	368	280	1789	0.823	1466	1585	2.9	4.4	10.946	B
B - A12 West	1664	416	214	1744	0.954	1651	1569	11.1	14.3	32.684	D
C - B1438 East	476	119	1309	645	0.738	473	437	2.0	2.6	20.659	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1202	300	238	1984	0.606	1213	1343	4.4	1.6	4.735	A
B - A12 West	1358	340	178	1787	0.760	1402	1300	14.3	3.3	10.357	B
C - B1438 East	388	97	1083	809	0.480	395	367	2.6	0.9	8.843	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1007	252	194	2010	0.501	1009	1097	1.6	1.0	3.602	A
B - A12 West	1138	284	147	1806	0.630	1144	1080	3.3	1.7	5.491	A
C - B1438 East	325	81	901	899	0.362	327	302	0.9	0.6	6.306	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.67	0.56	1.08	2.35	2.79			N/A	N/A
C - B1438 East	0.56	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.51	0.05	0.48	3.86	6.05			N/A	N/A
B - A12 West	3.04	0.05	0.48	8.53	14.25			N/A	N/A
C - B1438 East	0.90	0.07	0.82	1.50	1.88			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.91	0.03	0.28	2.91	6.75			N/A	N/A
B - A12 West	11.13	0.07	1.21	32.61	53.42			N/A	N/A
C - B1438 East	2.04	0.03	0.29	2.04	8.47			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.37	0.03	0.29	4.37	12.80			N/A	N/A
B - A12 West	14.29	0.05	0.70	40.99	75.26			N/A	N/A
C - B1438 East	2.63	0.03	0.30	2.97	12.31			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.08	1.08	3.32	4.57			N/A	N/A
B - A12 West	3.30	0.04	0.43	9.14	16.64			N/A	N/A
C - B1438 East	0.94	0.06	0.68	1.83	2.58			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.01	0.05	0.46	2.36	3.61			N/A	N/A
B - A12 West	1.73	0.03	0.31	2.86	8.83			N/A	N/A
C - B1438 East	0.57	0.04	0.37	1.14	1.89			N/A	N/A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	13.03	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1252	100.000
B - A12 West		ONE HOUR	✓	1487	100.000
C - B1438 East		ONE HOUR	✓	479	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1102	143
	B - A12 West	1260	2	225
	C - B1438 East	191	288	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	2	3
	B - A12 West	3	0	0
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.67	5.37	2.0	3.8	A	1149	1723
B - A12 West	0.90	18.93	8.2	41.3	C	1364	2047
C - B1438 East	0.68	14.74	2.1	7.9	B	440	659

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	943	236	170	2096	0.450	939	1092	0.0	0.8	3.103	A
B - A12 West	1119	280	148	1862	0.601	1114	1044	0.0	1.5	4.773	A
C - B1438 East	361	90	834	960	0.376	358	276	0.0	0.6	5.959	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1126	281	203	2076	0.542	1124	1306	0.8	1.2	3.777	A
B - A12 West	1337	334	177	1844	0.725	1332	1249	1.5	2.6	6.975	A
C - B1438 East	431	108	997	880	0.489	429	330	0.6	0.9	7.959	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1378	345	247	2050	0.672	1375	1587	1.2	2.0	5.305	A
B - A12 West	1637	409	216	1820	0.899	1617	1527	2.6	7.6	16.316	C
C - B1438 East	527	132	1220	772	0.683	523	402	0.9	2.1	14.192	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1378	345	250	2049	0.673	1378	1603	2.0	2.0	5.368	A
B - A12 West	1637	409	218	1819	0.900	1635	1532	7.6	8.2	18.934	C
C - B1438 East	527	132	1223	771	0.684	527	405	2.1	2.1	14.737	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1126	281	207	2074	0.543	1129	1331	2.0	1.2	3.822	A
B - A12 West	1337	334	180	1843	0.725	1359	1257	8.2	2.7	7.753	A
C - B1438 East	431	108	1002	878	0.490	435	335	2.1	1.0	8.209	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	943	236	172	2095	0.450	944	1102	1.2	0.8	3.133	A
B - A12 West	1119	280	150	1861	0.602	1124	1050	2.7	1.5	4.917	A
C - B1438 East	361	90	838	957	0.377	362	278	1.0	0.6	6.062	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.81	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.49	0.58	1.40	1.85	1.98			N/A	N/A
C - B1438 East	0.60	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.17	0.05	0.63	2.66	3.85			N/A	N/A
B - A12 West	2.56	0.05	0.46	7.10	11.99			N/A	N/A
C - B1438 East	0.94	0.07	0.84	1.64	1.99			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.02	0.03	0.27	2.02	2.02			N/A	N/A
B - A12 West	7.57	0.04	0.41	20.04	41.19			N/A	N/A
C - B1438 East	2.05	0.03	0.29	2.05	7.92			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.04	0.03	0.26	2.04	2.04			N/A	N/A
B - A12 West	8.17	0.03	0.33	12.23	41.31			N/A	N/A
C - B1438 East	2.11	0.03	0.28	2.11	6.37			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.20	0.15	1.11	1.83	2.26			N/A	N/A
B - A12 West	2.72	0.04	0.45	7.55	12.97			N/A	N/A
C - B1438 East	0.98	0.06	0.72	1.88	2.66			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.82	0.06	0.72	1.38	1.82			N/A	N/A
B - A12 West	1.53	0.03	0.33	3.19	7.95			N/A	N/A
C - B1438 East	0.61	0.04	0.38	1.26	1.95			N/A	N/A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	824	100.000
B - A12 West		ONE HOUR	✓	648	100.000
C - B1438 East		ONE HOUR	✓	114	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	799	23
	B - A12 West	576	0	72
	C - B1438 East	28	86	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	1
	B - A12 West	9	0	7
	C - B1438 East	3	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.45	3.19	0.8	1.9	A	756	1134
B - A12 West	0.39	3.25	0.6	2.6	A	595	892
C - B1438 East	0.14	4.75	0.2	0.5	A	105	157

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	620	155	54	2050	0.303	619	455	0.0	0.4	2.511	A
B - A12 West	488	122	23	1828	0.267	487	664	0.0	0.4	2.681	A
C - B1438 East	86	21	601	1022	0.084	86	71	0.0	0.1	3.843	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	741	185	64	2044	0.362	740	545	0.4	0.6	2.759	A
B - A12 West	583	146	27	1825	0.319	582	795	0.4	0.5	2.896	A
C - B1438 East	103	26	719	964	0.107	103	85	0.1	0.1	4.180	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	907	227	79	2035	0.446	906	667	0.6	0.8	3.186	A
B - A12 West	714	178	33	1822	0.392	713	973	0.5	0.6	3.245	A
C - B1438 East	126	31	881	884	0.142	126	105	0.1	0.2	4.747	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	907	227	79	2035	0.446	907	668	0.8	0.8	3.191	A
B - A12 West	714	178	33	1822	0.392	714	974	0.6	0.6	3.247	A
C - B1438 East	126	31	882	883	0.142	126	105	0.2	0.2	4.751	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	741	185	65	2044	0.362	742	546	0.8	0.6	2.766	A
B - A12 West	583	146	27	1825	0.319	583	796	0.6	0.5	2.901	A
C - B1438 East	103	26	721	963	0.107	103	86	0.2	0.1	4.185	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	620	155	54	2050	0.303	621	457	0.6	0.4	2.521	A
B - A12 West	488	122	23	1828	0.267	488	667	0.5	0.4	2.689	A
C - B1438 East	86	21	603	1021	0.084	86	72	0.1	0.1	3.849	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - A12 West	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C - B1438 East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.08	0.76	1.35	1.43			N/A	N/A
B - A12 West	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C - B1438 East	0.12	0.00	0.00	0.12	0.12			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.03	0.25	0.80	0.80			N/A	N/A
B - A12 West	0.64	0.03	0.25	0.64	0.64			N/A	N/A
C - B1438 East	0.16	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.03	0.27	0.80	1.86			N/A	N/A
B - A12 West	0.64	0.03	0.28	0.95	2.63			N/A	N/A
C - B1438 East	0.17	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C - B1438 East	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - A12 West	0.37	0.00	0.00	0.37	0.37			N/A	N/A
C - B1438 East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	27.33	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1320	100.000
B - A12 West		ONE HOUR	✓	1510	100.000
C - B1438 East		ONE HOUR	✓	312	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1238	72
	B - A12 West	1306	1	203
	C - B1438 East	117	194	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	6
	B - A12 West	9	0	6
	C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	15.53	6.3	32.6	C	1212	1817
B - A12 West	0.97	38.61	17.6	85.0	E	1386	2079
C - B1438 East	0.68	20.94	2.0	10.0	C	286	429

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	994	249	154	2040	0.487	990	1073	0.0	0.9	3.417	A
B - A12 West	1137	284	96	1790	0.635	1130	1074	0.0	1.7	5.404	A
C - B1438 East	235	59	937	890	0.264	233	207	0.0	0.4	5.470	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1187	297	184	2021	0.587	1185	1284	0.9	1.4	4.295	A
B - A12 West	1358	339	115	1779	0.763	1352	1286	1.7	3.1	8.328	A
C - B1438 East	280	70	1122	799	0.351	280	247	0.4	0.5	6.924	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1454	363	222	1998	0.727	1449	1550	1.4	2.6	6.496	A
B - A12 West	1663	416	141	1764	0.943	1631	1572	3.1	11.2	22.814	C
C - B1438 East	343	86	1371	675	0.509	341	299	0.5	1.0	10.732	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1454	363	223	1657	0.877	1439	1555	2.6	6.3	15.530	C
B - A12 West	1663	416	140	1707	0.974	1638	1561	11.2	17.6	38.608	E
C - B1438 East	343	86	1362	508	0.676	340	300	1.0	2.0	20.938	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1187	297	192	2016	0.589	1206	1340	6.3	1.4	4.550	A
B - A12 West	1358	339	118	1777	0.764	1415	1310	17.6	3.4	11.385	B
C - B1438 East	280	70	1142	789	0.355	286	257	2.0	0.6	7.238	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	994	249	155	2039	0.488	996	1085	1.4	1.0	3.457	A
B - A12 West	1137	284	97	1789	0.635	1144	1081	3.4	1.8	5.627	A
C - B1438 East	235	59	943	887	0.265	236	209	0.6	0.4	5.528	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.94	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.71	0.57	1.12	2.44	2.84			N/A	N/A
C - B1438 East	0.36	0.00	0.00	0.36	0.36			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.41	0.05	0.49	3.53	5.43			N/A	N/A
B - A12 West	3.11	0.05	0.49	8.71	14.48			N/A	N/A
C - B1438 East	0.53	0.06	0.67	1.33	1.42			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.80	0.03	0.27	2.60	4.01			N/A	N/A
B - A12 West	11.21	0.07	1.28	32.84	53.62			N/A	N/A
C - B1438 East	1.01	0.03	0.26	1.01	1.01			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.28	0.03	0.33	10.35	32.58			N/A	N/A
B - A12 West	17.55	0.07	2.09	51.83	85.03			N/A	N/A
C - B1438 East	1.95	0.04	0.37	5.01	9.97			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.45	0.09	1.12	2.82	3.77			N/A	N/A
B - A12 West	3.38	0.04	0.43	9.38	17.05			N/A	N/A
C - B1438 East	0.56	0.06	0.65	1.33	1.42			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.05	0.50	1.99	2.95			N/A	N/A
B - A12 West	1.77	0.03	0.31	2.97	9.08			N/A	N/A
C - B1438 East	0.36	0.03	0.31	0.96	1.23			N/A	N/A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	53.68	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1610	100.000
B - A12 West		ONE HOUR	✓	1592	100.000
C - B1438 East		ONE HOUR	✓	489	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	13	1418	180
B - A12 West	1158	2	432
C - B1438 East	162	327	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	8	7	5
B - A12 West	10	0	2
C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	37.32	17.4	86.4	E	1478	2217
B - A12 West	1.01	64.56	32.0	108.3	F	1461	2191
C - B1438 East	0.95	72.41	10.4	46.1	F	449	673

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1212	303	324	1920	0.632	1206	996	0.0	1.7	4.996	A
B - A12 West	1198	300	131	1776	0.675	1190	1307	0.0	2.0	6.061	A
C - B1438 East	368	92	1073	811	0.454	365	458	0.0	0.8	8.013	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1448	362	388	1883	0.769	1442	1191	1.7	3.2	8.048	A
B - A12 West	1431	358	156	1761	0.812	1423	1563	2.0	4.1	10.382	B
C - B1438 East	440	110	1282	706	0.623	437	547	0.8	1.6	13.216	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1773	443	458	1842	0.963	1730	1407	3.2	14.0	25.659	D
B - A12 West	1753	438	184	1745	1.005	1681	1870	4.1	22.0	37.397	E
C - B1438 East	539	135	1539	578	0.933	515	649	1.6	7.5	46.335	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1773	443	467	1837	0.965	1759	1434	14.0	17.4	37.322	E
B - A12 West	1753	438	189	1742	1.006	1713	1903	22.0	32.0	64.562	F
C - B1438 East	539	135	1565	565	0.954	527	661	7.5	10.4	72.413	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1448	362	420	1864	0.777	1503	1289	17.4	3.6	11.380	B
B - A12 West	1431	358	169	1754	0.816	1540	1642	32.0	4.8	23.738	C
C - B1438 East	440	110	1337	679	0.648	473	585	10.4	1.9	20.175	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1212	303	330	1917	0.633	1220	1013	3.6	1.7	5.221	A
B - A12 West	1198	300	133	1775	0.675	1209	1325	4.8	2.1	6.479	A
C - B1438 East	368	92	1085	805	0.458	373	464	1.9	0.9	8.411	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.69	0.50	1.03	2.58	2.97			N/A	N/A
B - A12 West	2.03	0.36	1.28	3.43	4.19			N/A	N/A
C - B1438 East	0.82	0.52	0.99	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.21	0.05	0.47	8.99	15.32			N/A	N/A
B - A12 West	4.09	0.06	0.85	11.57	18.68			N/A	N/A
C - B1438 East	1.59	0.05	0.60	3.97	6.07			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	13.98	0.10	3.60	39.87	60.55			N/A	N/A
B - A12 West	21.97	0.63	13.32	52.86	70.65			N/A	N/A
C - B1438 East	7.50	0.10	2.26	20.56	30.36			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	17.43	0.07	1.59	51.48	86.37			N/A	N/A
B - A12 West	31.96	0.56	18.09	79.75	108.34			N/A	N/A
C - B1438 East	10.36	0.08	2.07	29.73	46.09			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.63	0.04	0.44	10.14	18.37			N/A	N/A
B - A12 West	4.82	0.04	0.45	13.52	24.78			N/A	N/A
C - B1438 East	1.94	0.04	0.39	5.15	9.55			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.75	0.03	0.30	2.33	8.49			N/A	N/A
B - A12 West	2.12	0.03	0.30	2.32	9.84			N/A	N/A
C - B1438 East	0.86	0.03	0.29	1.09	3.52			N/A	N/A

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	31.64	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1343	100.000
B - A12 West		ONE HOUR	✓	1539	100.000
C - B1438 East		ONE HOUR	✓	477	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1228	108
	B - A12 West	1278	1	260
	C - B1438 East	173	303	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	7	7
	B - A12 West	7	0	2
	C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	16.77	6.9	35.8	C	1232	1848
B - A12 West	0.98	43.67	20.4	91.5	E	1412	2119
C - B1438 East	0.86	35.16	4.9	26.5	E	437	656

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1011	253	195	1991	0.508	1007	1090	0.0	1.0	3.642	A
B - A12 West	1159	290	134	1805	0.642	1152	1149	0.0	1.8	5.456	A
C - B1438 East	359	90	926	885	0.406	356	276	0.0	0.7	6.776	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1207	302	234	1969	0.613	1205	1304	1.0	1.6	4.699	A
B - A12 West	1384	346	160	1789	0.773	1378	1375	1.8	3.3	8.625	A
C - B1438 East	428	107	1109	794	0.540	427	330	0.7	1.1	9.757	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1478	370	281	1942	0.761	1472	1569	1.6	3.1	7.572	A
B - A12 West	1695	424	194	1769	0.958	1655	1677	3.3	13.2	25.636	D
C - B1438 East	525	131	1355	670	0.783	516	398	1.1	3.2	22.265	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1478	370	282	1664	0.889	1463	1578	3.1	6.9	16.766	C
B - A12 West	1695	424	195	1723	0.983	1666	1670	13.2	20.4	43.667	E
C - B1438 East	525	131	1346	613	0.856	518	399	3.2	4.9	35.156	E

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1207	302	246	1962	0.615	1228	1371	6.9	1.6	5.043	A
B - A12 West	1384	346	166	1785	0.775	1451	1407	20.4	3.6	12.805	B
C - B1438 East	428	107	1130	783	0.547	443	344	4.9	1.2	11.025	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1011	253	198	1990	0.508	1013	1104	1.6	1.0	3.694	A
B - A12 West	1159	290	136	1804	0.642	1166	1158	3.6	1.8	5.707	A
C - B1438 East	359	90	932	882	0.407	361	279	1.2	0.7	6.941	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.02	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.76	0.54	1.14	2.63	2.99			N/A	N/A
C - B1438 East	0.67	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.56	0.05	0.47	4.02	6.43			N/A	N/A
B - A12 West	3.28	0.05	0.50	9.23	15.34			N/A	N/A
C - B1438 East	1.15	0.06	0.77	2.43	3.41			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.08	0.03	0.28	3.08	8.38			N/A	N/A
B - A12 West	13.18	0.09	2.99	37.89	58.26			N/A	N/A
C - B1438 East	3.24	0.03	0.34	7.13	17.46			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.87	0.03	0.33	11.52	35.80			N/A	N/A
B - A12 West	20.40	0.10	4.56	59.15	91.52			N/A	N/A
C - B1438 East	4.88	0.04	0.37	11.76	26.51			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.07	1.05	3.61	4.98			N/A	N/A
B - A12 West	3.61	0.04	0.43	10.01	18.42			N/A	N/A
C - B1438 East	1.24	0.05	0.46	3.03	4.81			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.04	0.44	2.52	3.90			N/A	N/A
B - A12 West	1.83	0.03	0.31	2.75	9.14			N/A	N/A
C - B1438 East	0.69	0.03	0.33	1.54	3.21			N/A	N/A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	15.71	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1285	100.000
B - A12 West		ONE HOUR	✓	1494	100.000
C - B1438 East		ONE HOUR	✓	539	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1169	109
	B - A12 West	1270	2	222
	C - B1438 East	178	361	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	3	4
	B - A12 West	4	0	2
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.70	5.87	2.3	4.5	A	1179	1769
B - A12 West	0.91	20.61	8.9	47.3	C	1371	2057
C - B1438 East	0.81	25.80	4.1	20.4	D	495	742

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	968	242	168	2075	0.466	964	1089	0.0	0.9	3.233	A
B - A12 West	1125	281	138	1849	0.608	1119	1148	0.0	1.5	4.889	A
C - B1438 East	406	101	884	932	0.436	403	248	0.0	0.8	6.769	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1155	289	201	2055	0.562	1154	1303	0.9	1.3	3.987	A
B - A12 West	1343	336	166	1833	0.733	1339	1374	1.5	2.7	7.218	A
C - B1438 East	485	121	1057	847	0.572	482	297	0.8	1.3	9.823	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1415	354	243	2030	0.697	1411	1580	1.3	2.3	5.785	A
B - A12 West	1645	411	200	1812	0.908	1623	1676	2.7	8.1	17.367	C
C - B1438 East	593	148	1293	731	0.812	584	361	1.3	3.8	22.979	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1415	354	246	2028	0.698	1415	1599	2.3	2.3	5.872	A
B - A12 West	1645	411	203	1810	0.909	1642	1686	8.1	8.9	20.609	C
C - B1438 East	593	148	1297	730	0.814	592	365	3.8	4.1	25.802	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1155	289	205	2052	0.563	1159	1332	2.3	1.3	4.048	A
B - A12 West	1343	336	170	1830	0.734	1367	1388	8.9	2.8	8.161	A
C - B1438 East	485	121	1063	844	0.574	495	302	4.1	1.4	10.617	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	968	242	169	2074	0.467	969	1101	1.3	0.9	3.263	A
B - A12 West	1125	281	140	1848	0.609	1130	1156	2.8	1.6	5.047	A
C - B1438 East	406	101	888	929	0.437	408	251	1.4	0.8	6.937	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.87	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.53	0.58	1.45	1.90	2.16			N/A	N/A
C - B1438 East	0.76	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.05	0.55	2.98	4.54			N/A	N/A
B - A12 West	2.67	0.05	0.47	7.41	12.48			N/A	N/A
C - B1438 East	1.31	0.06	0.74	2.94	4.31			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.26	0.03	0.27	2.26	2.26			N/A	N/A
B - A12 West	8.14	0.04	0.44	22.45	43.74			N/A	N/A
C - B1438 East	3.79	0.04	0.37	9.19	20.39			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.28	0.03	0.26	2.28	2.28			N/A	N/A
B - A12 West	8.90	0.03	0.34	16.06	47.30			N/A	N/A
C - B1438 East	4.05	0.03	0.32	5.65	20.03			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.30	0.12	1.13	2.19	2.84			N/A	N/A
B - A12 West	2.84	0.04	0.44	7.89	13.75			N/A	N/A
C - B1438 East	1.38	0.04	0.43	3.59	5.86			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.06	0.66	1.68	2.28			N/A	N/A
B - A12 West	1.58	0.03	0.32	3.17	8.22			N/A	N/A
C - B1438 East	0.79	0.03	0.32	1.67	3.80			N/A	N/A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	865	100.000
B - A12 West		ONE HOUR	✓	770	100.000
C - B1438 East		ONE HOUR	✓	121	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	839	24
	B - A12 West	697	0	73
	C - B1438 East	34	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	1
	B - A12 West	11	0	7
	C - B1438 East	3	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.47	3.32	0.9	1.5	A	794	1191
B - A12 West	0.47	3.82	0.9	1.5	A	707	1060
C - B1438 East	0.15	4.95	0.2	0.5	A	111	167

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	651	163	55	2052	0.317	649	550	0.0	0.5	2.563	A
B - A12 West	580	145	27	1798	0.323	578	696	0.0	0.5	2.947	A
C - B1438 East	91	23	632	1007	0.091	91	73	0.0	0.1	3.927	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	778	194	66	2045	0.380	777	658	0.5	0.6	2.836	A
B - A12 West	692	173	32	1795	0.386	692	832	0.5	0.6	3.262	A
C - B1438 East	109	27	756	946	0.115	109	87	0.1	0.1	4.302	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	953	238	81	2037	0.468	951	806	0.6	0.9	3.314	A
B - A12 West	848	212	40	1791	0.474	847	1019	0.6	0.9	3.811	A
C - B1438 East	133	33	925	862	0.155	133	107	0.1	0.2	4.941	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	953	238	81	2036	0.468	953	807	0.9	0.9	3.320	A
B - A12 West	848	212	40	1791	0.474	848	1020	0.9	0.9	3.817	A
C - B1438 East	133	33	926	861	0.155	133	107	0.2	0.2	4.946	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	778	194	66	2045	0.380	779	660	0.9	0.6	2.846	A
B - A12 West	692	173	32	1795	0.386	693	834	0.9	0.6	3.273	A
C - B1438 East	109	27	757	945	0.115	109	87	0.2	0.1	4.310	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	651	163	55	2052	0.317	652	552	0.6	0.5	2.572	A
B - A12 West	580	145	27	1798	0.323	580	698	0.6	0.5	2.958	A
C - B1438 East	91	23	634	1006	0.091	91	73	0.1	0.1	3.936	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
B - A12 West	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.61	0.09	0.80	1.36	1.43			N/A	N/A
B - A12 West	0.62	0.10	0.82	1.37	1.43			N/A	N/A
C - B1438 East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.87	0.03	0.25	0.87	0.87			N/A	N/A
B - A12 West	0.89	0.03	0.25	0.89	0.89			N/A	N/A
C - B1438 East	0.18	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.88	0.03	0.27	0.88	1.40			N/A	N/A
B - A12 West	0.90	0.03	0.27	0.90	1.38			N/A	N/A
C - B1438 East	0.18	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.62	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.63	0.55	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.47	0.00	0.00	0.47	0.47			N/A	N/A
B - A12 West	0.48	0.00	0.00	0.48	0.48			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	170.78	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1317	100.000
B - A12 West		ONE HOUR	✓	1732	100.000
C - B1438 East		ONE HOUR	✓	374	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1236	71
	B - A12 West	1446	1	285
	C - B1438 East	121	252	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	6
	B - A12 West	12	0	5
	C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.99	59.80	23.7	92.3	F	1209	1813
B - A12 West	1.16	271.06	138.2	200.0	F	1590	2384
C - B1438 East	0.92	70.91	7.6	35.5	F	343	515

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	992	248	214	2002	0.495	988	1178	0.0	1.0	3.535	A
B - A12 West	1304	326	100	1750	0.745	1293	1115	0.0	2.8	7.701	A
C - B1438 East	281	70	936	891	0.316	280	267	0.0	0.5	5.867	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1184	296	255	1978	0.599	1182	1404	1.0	1.5	4.514	A
B - A12 West	1557	389	119	1739	0.896	1539	1335	2.8	7.3	16.727	C
C - B1438 East	336	84	1120	800	0.420	335	318	0.5	0.7	7.728	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1450	363	273	1464	0.991	1388	1514	1.5	17.1	34.302	D
B - A12 West	1907	477	140	1659	1.150	1648	1566	7.3	72.2	95.741	F
C - B1438 East	412	103	1314	458	0.899	392	347	0.7	5.7	45.588	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1450	363	272	1462	0.992	1424	1515	17.1	23.7	59.796	F
B - A12 West	1907	477	144	1644	1.160	1643	1608	7.3	138.2	235.621	F
C - B1438 East	412	103	1348	446	0.924	404	348	5.7	7.6	70.912	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1184	296	275	1373	0.862	1250	1513	23.7	7.3	35.781	E
B - A12 West	1557	389	127	1674	0.930	1662	1413	138.2	112.1	271.065	F
C - B1438 East	336	84	1184	471	0.713	356	342	7.6	2.7	34.885	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	992	248	280	1259	0.788	1005	1511	7.3	4.0	14.875	B
B - A12 West	1304	326	102	1703	0.766	1688	1137	112.1	16.1	140.325	F
C - B1438 East	281	70	952	491	0.574	287	333	2.7	1.4	18.086	C

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.97	0.15	0.98	1.33	1.71			N/A	N/A
B - A12 West	2.83	0.10	1.11	6.72	9.35			N/A	N/A
C - B1438 East	0.46	0.00	0.00	0.46	0.46			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.47	0.03	0.32	2.94	7.66			N/A	N/A
B - A12 West	7.31	0.08	1.84	20.40	30.72			N/A	N/A
C - B1438 East	0.71	0.04	0.38	1.64	2.68			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	17.10	0.32	9.24	42.83	58.57			N/A	N/A
B - A12 West	72.19	32.75	68.16	108.92	122.83			N/A	N/A
C - B1438 East	5.67	0.07	1.01	15.96	24.65			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	23.71	0.20	9.79	64.34	92.29			N/A	N/A
B - A12 West	138.23	>199	>199	>199	>199			N/A	N/A
C - B1438 East	7.59	0.06	1.35	21.94	35.51			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.30	0.11	2.66	19.48	28.11			N/A	N/A
B - A12 West	112.10	68.29	109.08	150.27	163.57			N/A	N/A
C - B1438 East	2.73	0.11	1.23	6.18	8.44			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.95	0.10	1.58	9.85	13.86			N/A	N/A
B - A12 West	16.05	0.47	9.66	38.40	51.31			N/A	N/A
C - B1438 East	1.40	0.05	0.63	3.39	5.00			N/A	N/A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	101.91	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1594	100.000
B - A12 West		ONE HOUR	✓	1630	100.000
C - B1438 East		ONE HOUR	✓	591	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1402	179
	B - A12 West	1197	2	431
	C - B1438 East	178	413	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	8	5
	B - A12 West	15	0	2
	C - B1438 East	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.96	34.08	15.7	81.1	D	1463	2195
B - A12 West	1.06	121.49	67.0	141.5	F	1495	2243
C - B1438 East	1.15	235.31	46.7	87.8	F	543	814

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1200	300	323	1905	0.630	1194	1037	0.0	1.7	5.015	A
B - A12 West	1227	307	143	1713	0.716	1217	1359	0.0	2.5	7.127	A
C - B1438 East	445	111	1061	814	0.547	440	456	0.0	1.2	9.523	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1433	358	385	1869	0.767	1427	1237	1.7	3.2	8.043	A
B - A12 West	1465	366	170	1697	0.863	1452	1624	2.5	5.7	13.988	B
C - B1438 East	531	133	1269	709	0.750	525	544	1.2	2.8	18.974	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1755	439	441	1837	0.956	1716	1404	3.2	12.9	24.361	C
B - A12 West	1794	449	184	1689	1.062	1661	1905	5.7	39.1	58.551	F
C - B1438 East	651	163	1526	579	1.125	563	631	2.8	24.8	106.296	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1755	439	447	1834	0.957	1745	1420	12.9	15.7	34.082	D
B - A12 West	1794	449	184	1689	1.062	1683	1930	39.1	67.0	121.485	F
C - B1438 East	651	163	1551	566	1.150	564	640	24.8	46.7	235.309	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1433	358	437	1839	0.779	1481	1424	15.7	3.7	11.295	B
B - A12 West	1465	366	214	1672	0.876	1648	1773	67.0	21.4	100.307	F
C - B1438 East	531	133	1317	684	0.777	670	602	46.7	12.0	163.986	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1200	300	346	1892	0.634	1208	1113	3.7	1.8	5.323	A
B - A12 West	1227	307	157	1705	0.720	1302	1405	21.4	2.7	10.622	B
C - B1438 East	445	111	1074	807	0.551	488	480	12.0	1.3	12.808	B

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.68	0.52	1.04	2.51	2.92			N/A	N/A
B - A12 West	2.45	0.21	1.45	4.75	6.05			N/A	N/A
C - B1438 East	1.18	0.09	1.02	1.98	2.72			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.17	0.05	0.48	8.90	15.08			N/A	N/A
B - A12 West	5.68	0.08	1.25	15.79	23.95			N/A	N/A
C - B1438 East	2.77	0.05	0.73	7.58	11.94			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	12.95	0.08	2.58	37.44	58.32			N/A	N/A
B - A12 West	39.09	7.75	33.15	73.04	88.20			N/A	N/A
C - B1438 East	24.82	6.18	21.60	43.67	51.80			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	15.66	0.06	1.14	45.76	81.15			N/A	N/A
B - A12 West	67.00	17.25	59.00	119.23	141.48			N/A	N/A
C - B1438 East	46.68	16.49	42.69	75.99	87.76			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.70	0.05	0.45	10.41	18.37			N/A	N/A
B - A12 West	21.39	2.19	16.57	43.62	54.45			N/A	N/A
C - B1438 East	12.03	0.96	8.47	25.88	33.14			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.76	0.03	0.31	2.61	8.78			N/A	N/A
B - A12 West	2.65	0.03	0.30	2.65	11.62			N/A	N/A
C - B1438 East	1.26	0.03	0.27	1.26	1.85			N/A	N/A

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	100.97	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1317	100.000
B - A12 West		ONE HOUR	✓	1547	100.000
C - B1438 East		ONE HOUR	✓	681	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1203	107
	B - A12 West	1278	1	268
	C - B1438 East	221	460	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	10	7
	B - A12 West	10	0	2
	C - B1438 East	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.98	44.29	17.6	80.3	E	1208	1812
B - A12 West	1.06	101.39	53.6	126.7	F	1420	2130
C - B1438 East	1.14	217.14	49.8	94.4	F	625	937

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	991	248	201	1942	0.510	987	1125	0.0	1.0	3.755	A
B - A12 West	1165	291	169	1745	0.667	1157	1245	0.0	2.0	6.039	A
C - B1438 East	512	128	907	885	0.579	507	281	0.0	1.3	9.396	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1184	296	241	1920	0.617	1181	1344	1.0	1.6	4.861	A
B - A12 West	1391	348	202	1726	0.806	1383	1489	2.0	3.9	10.255	B
C - B1438 East	612	153	1086	793	0.771	605	336	1.3	3.1	18.456	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1450	362	279	1531	0.947	1411	1544	1.6	11.2	24.823	C
B - A12 West	1704	426	220	1647	1.034	1604	1735	3.9	28.9	47.064	E
C - B1438 East	749	187	1297	675	1.110	658	393	3.1	26.0	96.467	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1450	362	279	1482	0.978	1424	1544	11.2	17.6	44.294	E
B - A12 West	1704	426	219	1614	1.055	1605	1744	28.9	53.6	101.388	F
C - B1438 East	749	187	1309	657	1.140	654	394	26.0	49.8	217.136	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1184	296	274	1575	0.752	1242	1546	17.6	3.2	12.587	B
B - A12 West	1391	348	247	1621	0.858	1573	1637	53.6	8.1	71.421	F
C - B1438 East	612	153	1141	757	0.808	742	374	49.8	17.2	167.260	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	991	248	207	1939	0.511	1000	1173	3.2	1.1	3.867	A
B - A12 West	1165	291	191	1732	0.672	1189	1303	8.1	2.1	6.904	A
C - B1438 East	512	128	919	879	0.583	576	288	17.2	1.4	14.454	B

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.03	0.52	1.04	1.46	1.46			N/A	N/A
B - A12 West	1.97	0.24	1.15	3.49	4.37			N/A	N/A
C - B1438 East	1.34	0.11	1.14	2.37	2.97			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.59	0.04	0.35	3.89	8.11			N/A	N/A
B - A12 West	3.92	0.05	0.59	11.14	18.54			N/A	N/A
C - B1438 East	3.10	0.06	0.91	8.52	13.28			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.20	0.08	2.08	32.37	50.62			N/A	N/A
B - A12 West	28.92	2.57	21.98	60.68	76.43			N/A	N/A
C - B1438 East	26.04	6.14	22.52	46.45	55.33			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	17.64	0.09	3.54	51.37	80.32			N/A	N/A
B - A12 West	53.63	9.12	44.59	103.77	126.71			N/A	N/A
C - B1438 East	49.80	17.33	45.50	81.57	94.36			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.16	0.08	1.44	8.05	11.65			N/A	N/A
B - A12 West	8.08	0.10	2.46	22.21	32.82			N/A	N/A
C - B1438 East	17.23	2.93	14.21	32.29	39.18			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.03	0.30	1.65	5.22			N/A	N/A
B - A12 West	2.10	0.03	0.29	2.10	9.06			N/A	N/A
C - B1438 East	1.44	0.03	0.27	1.44	3.03			N/A	N/A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	36.10	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1238	100.000
B - A12 West		ONE HOUR	✓	1506	100.000
C - B1438 East		ONE HOUR	✓	690	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1129	103
	B - A12 West	1282	2	223
	C - B1438 East	192	498	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	4
	B - A12 West	4	0	2
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	6.44	2.4	4.2	A	1136	1704
B - A12 West	0.93	24.27	10.5	58.0	C	1382	2073
C - B1438 East	1.03	118.14	25.9	72.8	F	633	950

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	932	233	168	2027	0.460	929	1108	0.0	0.8	3.271	A
B - A12 West	1134	283	148	1833	0.619	1128	1220	0.0	1.6	5.061	A
C - B1438 East	519	130	853	936	0.555	515	244	0.0	1.2	8.448	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1113	278	201	2007	0.555	1112	1325	0.8	1.2	4.014	A
B - A12 West	1354	339	177	1815	0.746	1349	1459	1.6	2.8	7.642	A
C - B1438 East	620	155	1021	852	0.728	615	291	1.2	2.5	14.889	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1363	341	243	1982	0.688	1360	1593	1.2	2.2	5.748	A
B - A12 West	1658	415	203	1800	0.922	1633	1749	2.8	9.2	19.217	C
C - B1438 East	760	190	1249	737	1.030	703	354	2.5	16.7	64.827	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1363	341	246	1920	0.710	1362	1615	2.2	2.4	6.442	A
B - A12 West	1658	415	209	1792	0.926	1653	1766	9.2	10.5	24.267	C
C - B1438 East	760	190	1252	736	1.032	723	357	16.7	25.9	118.140	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1113	278	206	2004	0.555	1118	1381	2.4	1.3	4.081	A
B - A12 West	1354	339	204	1799	0.753	1383	1535	10.5	3.2	9.237	A
C - B1438 East	620	155	1027	849	0.731	712	297	25.9	3.0	40.210	E

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	932	233	170	2025	0.460	934	1122	1.3	0.9	3.302	A
B - A12 West	1134	283	152	1831	0.619	1140	1233	3.2	1.7	5.255	A
C - B1438 East	519	130	858	934	0.556	526	246	3.0	1.3	8.975	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.60	0.58	1.02	1.99	2.53			N/A	N/A
C - B1438 East	1.22	0.23	1.15	1.78	1.99			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.23	0.05	0.61	2.85	4.21			N/A	N/A
B - A12 West	2.84	0.05	0.48	7.93	13.30			N/A	N/A
C - B1438 East	2.53	0.05	0.69	6.86	10.80			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.16	0.03	0.27	2.16	2.16			N/A	N/A
B - A12 West	9.18	0.05	0.51	26.40	47.68			N/A	N/A
C - B1438 East	16.71	1.34	11.95	36.16	46.26			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.40	0.03	0.27	2.40	2.40			N/A	N/A
B - A12 West	10.50	0.04	0.38	24.33	58.05			N/A	N/A
C - B1438 East	25.86	1.44	18.55	56.75	72.78			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.26	0.13	1.12	1.99	2.69			N/A	N/A
B - A12 West	3.15	0.05	0.45	8.82	15.32			N/A	N/A
C - B1438 East	2.97	0.04	0.37	7.51	15.79			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.06	0.68	1.60	2.04			N/A	N/A
B - A12 West	1.65	0.03	0.32	3.09	8.60			N/A	N/A
C - B1438 East	1.28	0.03	0.28	1.28	4.09			N/A	N/A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	794	100.000
B - A12 West		ONE HOUR	✓	678	100.000
C - B1438 East		ONE HOUR	✓	119	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	768	24
	B - A12 West	604	0	74
	C - B1438 East	31	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	1
	B - A12 West	9	0	7
	C - B1438 East	3	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	3.10	0.8	2.2	A	729	1093
B - A12 West	0.41	3.34	0.7	2.5	A	622	934
C - B1438 East	0.15	4.69	0.2	0.5	A	109	164

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	598	149	55	2051	0.292	596	479	0.0	0.4	2.473	A
B - A12 West	511	128	25	1830	0.279	509	642	0.0	0.4	2.723	A
C - B1438 East	90	22	578	1033	0.087	89	74	0.0	0.1	3.812	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	714	178	66	2044	0.349	713	573	0.4	0.5	2.705	A
B - A12 West	610	152	30	1827	0.334	609	769	0.4	0.5	2.956	A
C - B1438 East	107	27	692	977	0.110	107	88	0.1	0.1	4.139	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	874	219	81	2035	0.430	873	701	0.5	0.7	3.097	A
B - A12 West	747	187	37	1823	0.410	746	941	0.5	0.7	3.340	A
C - B1438 East	131	33	847	900	0.146	131	108	0.1	0.2	4.681	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	874	219	81	2035	0.430	874	702	0.7	0.8	3.100	A
B - A12 West	747	187	37	1823	0.410	747	942	0.7	0.7	3.343	A
C - B1438 East	131	33	848	899	0.146	131	108	0.2	0.2	4.686	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	714	178	67	2044	0.349	715	574	0.8	0.5	2.711	A
B - A12 West	610	152	30	1827	0.334	610	770	0.7	0.5	2.962	A
C - B1438 East	107	27	693	976	0.110	107	88	0.2	0.1	4.144	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	598	149	56	2051	0.292	598	481	0.5	0.4	2.479	A
B - A12 West	511	128	25	1830	0.279	511	645	0.5	0.4	2.729	A
C - B1438 East	90	22	580	1032	0.087	90	74	0.1	0.1	3.823	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - A12 West	0.39	0.00	0.00	0.39	0.39			N/A	N/A
C - B1438 East	0.09	0.00	0.00	0.09	0.09			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.53	0.07	0.69	1.34	1.42			N/A	N/A
B - A12 West	0.50	0.00	0.00	0.50	0.50			N/A	N/A
C - B1438 East	0.12	0.00	0.00	0.12	0.12			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.03	0.25	0.75	0.75			N/A	N/A
B - A12 West	0.69	0.03	0.25	0.69	0.69			N/A	N/A
C - B1438 East	0.17	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.75	0.03	0.28	0.75	2.19			N/A	N/A
B - A12 West	0.69	0.03	0.28	0.69	2.51			N/A	N/A
C - B1438 East	0.17	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.54	0.54	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.50	0.50	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.12	0.00	0.00	0.12	0.12			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.41	0.00	0.00	0.41	0.41			N/A	N/A
B - A12 West	0.39	0.00	0.00	0.39	0.39			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	94.70	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1387	100.000
B - A12 West		ONE HOUR	✓	1609	100.000
C - B1438 East		ONE HOUR	✓	237	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	11	1376	0
B - A12 West	1399	1	209
C - B1438 East	121	115	1

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	0	5	0
B - A12 West	8	0	6
C - B1438 East	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	57.69	24.7	93.3	F	1273	1909
B - A12 West	1.08	130.76	73.3	146.2	F	1477	2215
C - B1438 East	0.84	59.46	4.0	19.0	F	217	326

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1044	261	158	2039	0.512	1040	1145	0.0	1.0	3.589	A
B - A12 West	1212	303	100	1795	0.675	1203	1118	0.0	2.0	6.008	A
C - B1438 East	178	45	1041	833	0.214	177	157	0.0	0.3	5.483	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1247	312	189	2020	0.617	1245	1369	1.0	1.6	4.629	A
B - A12 West	1447	362	120	1783	0.811	1439	1339	2.0	4.1	10.206	B
C - B1438 East	213	53	1246	732	0.291	212	188	0.3	0.4	6.920	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1527	382	215	1557	0.981	1470	1561	1.6	15.9	31.042	D
B - A12 West	1772	443	141	1667	1.063	1635	1581	4.1	38.3	56.622	F
C - B1438 East	261	65	1471	337	0.774	251	214	0.4	2.9	38.438	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1527	382	214	1530	0.999	1492	1562	15.9	24.7	57.693	F
B - A12 West	1772	443	144	1637	1.082	1632	1605	38.3	73.3	130.756	F
C - B1438 East	261	65	1493	311	0.838	256	213	2.9	4.0	59.457	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1247	312	217	1419	0.879	1311	1561	24.7	8.7	39.446	E
B - A12 West	1447	362	125	1675	0.864	1652	1409	73.3	21.9	107.314	F
C - B1438 East	213	53	1312	346	0.615	222	216	4.0	1.7	30.868	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1044	261	169	2032	0.514	1075	1225	8.7	1.1	3.878	A
B - A12 West	1212	303	104	1793	0.676	1291	1156	21.9	2.1	8.355	A
C - B1438 East	178	45	1076	816	0.219	184	169	1.7	0.3	5.751	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.34	1.04	1.29	1.66			N/A	N/A
B - A12 West	2.04	0.18	1.12	3.82	4.89			N/A	N/A
C - B1438 East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.59	0.03	0.34	3.60	8.23			N/A	N/A
B - A12 West	4.06	0.05	0.49	11.55	19.58			N/A	N/A
C - B1438 East	0.41	0.04	0.35	1.20	1.38			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	15.89	0.20	7.20	41.81	58.93			N/A	N/A
B - A12 West	38.30	7.60	32.48	71.54	86.38			N/A	N/A
C - B1438 East	2.85	0.04	0.37	7.20	15.15			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	24.67	0.23	11.02	65.82	93.26			N/A	N/A
B - A12 West	73.30	22.52	66.09	124.92	146.20			N/A	N/A
C - B1438 East	4.02	0.05	0.62	11.43	18.97			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.66	1.74	7.19	14.99	17.88			N/A	N/A
B - A12 West	21.92	4.39	18.52	40.19	48.35			N/A	N/A
C - B1438 East	1.72	0.60	1.17	2.28	2.72			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.03	0.29	1.18	4.92			N/A	N/A
B - A12 West	2.13	0.03	0.29	2.13	8.30			N/A	N/A
C - B1438 East	0.28	0.03	0.30	1.00	1.45			N/A	N/A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	68.00	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1612	100.000
B - A12 West		ONE HOUR	✓	1659	100.000
C - B1438 East		ONE HOUR	✓	289	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1427	173
	B - A12 West	1323	2	333
	C - B1438 East	147	142	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	7	5
	B - A12 West	9	0	3
	C - B1438 East	4	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.98	38.32	19.2	90.3	E	1480	2219
B - A12 West	1.05	102.72	57.8	133.8	F	1522	2283
C - B1438 East	0.76	32.04	2.8	13.8	D	265	398

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1214	303	251	1956	0.620	1207	1109	0.0	1.6	4.766	A
B - A12 West	1249	312	119	1785	0.700	1240	1176	0.0	2.3	6.495	A
C - B1438 East	218	54	1080	792	0.275	216	378	0.0	0.4	6.234	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1449	362	299	1928	0.752	1444	1324	1.6	2.9	7.361	A
B - A12 West	1491	373	143	1771	0.842	1481	1407	2.3	4.9	11.962	B
C - B1438 East	260	65	1291	688	0.378	259	452	0.4	0.6	8.378	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1775	444	347	1900	0.934	1745	1542	2.9	10.5	20.147	C
B - A12 West	1826	457	174	1753	1.042	1714	1702	4.9	33.0	49.726	E
C - B1438 East	318	80	1560	555	0.573	316	531	0.6	1.3	14.847	B

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1775	444	349	1807	0.983	1740	1551	10.5	19.2	38.322	E
B - A12 West	1826	457	173	1736	1.052	1727	1696	33.0	57.8	102.723	F
C - B1438 East	318	80	1556	419	0.759	313	533	1.3	2.8	32.035	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1449	362	343	1902	0.762	1513	1501	19.2	3.3	10.702	B
B - A12 West	1491	373	148	1768	0.843	1696	1473	57.8	6.7	63.730	F
C - B1438 East	260	65	1353	657	0.395	268	503	2.8	0.7	9.447	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1214	303	256	1953	0.621	1221	1131	3.3	1.7	4.958	A
B - A12 West	1249	312	121	1784	0.700	1266	1189	6.7	2.4	7.162	A
C - B1438 East	218	54	1091	786	0.277	219	385	0.7	0.4	6.354	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.61	0.55	1.50	2.20	2.70			N/A	N/A
B - A12 West	2.27	0.24	1.37	4.20	5.35			N/A	N/A
C - B1438 East	0.38	0.00	0.00	0.38	0.38			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.94	0.05	0.46	8.19	14.00			N/A	N/A
B - A12 West	4.92	0.06	1.22	13.91	21.89			N/A	N/A
C - B1438 East	0.60	0.07	0.75	1.35	1.43			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.47	0.06	1.10	30.57	52.44			N/A	N/A
B - A12 West	32.99	4.04	26.17	66.61	82.67			N/A	N/A
C - B1438 East	1.29	0.03	0.27	1.29	2.50			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	19.24	0.08	3.13	56.53	90.27			N/A	N/A
B - A12 West	57.83	10.69	48.65	110.19	133.77			N/A	N/A
C - B1438 East	2.77	0.04	0.42	7.61	13.84			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.33	0.05	0.46	9.34	16.20			N/A	N/A
B - A12 West	6.67	0.05	0.75	19.24	32.89			N/A	N/A
C - B1438 East	0.67	0.07	0.70	1.38	1.47			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.66	0.03	0.31	2.84	8.54			N/A	N/A
B - A12 West	2.39	0.03	0.30	2.39	10.40			N/A	N/A
C - B1438 East	0.39	0.03	0.35	1.17	1.36			N/A	N/A

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	45.78	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1348	100.000
B - A12 West		ONE HOUR	✓	1601	100.000
C - B1438 East		ONE HOUR	✓	400	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1327	14
	B - A12 West	1303	1	298
	C - B1438 East	176	224	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	49
	B - A12 West	7	0	2
	C - B1438 East	4	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.93	22.45	9.6	52.5	C	1237	1855
B - A12 West	1.02	67.54	35.5	111.8	F	1469	2204
C - B1438 East	0.85	37.69	4.5	23.8	E	367	550

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1015	254	223	1980	0.512	1010	1110	0.0	1.0	3.699	A
B - A12 West	1205	301	136	1808	0.667	1198	1163	0.0	2.0	5.831	A
C - B1438 East	301	75	1000	845	0.356	299	233	0.0	0.5	6.558	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1212	303	267	1955	0.620	1209	1328	1.0	1.6	4.816	A
B - A12 West	1439	360	163	1791	0.804	1432	1392	2.0	3.9	9.805	A
C - B1438 East	359	90	1197	748	0.480	358	279	0.5	0.9	9.187	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1484	371	317	1926	0.771	1477	1580	1.6	3.2	7.914	A
B - A12 West	1763	441	198	1770	0.996	1698	1699	3.9	20.0	34.588	D
C - B1438 East	440	110	1463	617	0.713	434	331	0.9	2.3	19.118	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1484	371	317	1598	0.928	1458	1580	3.2	9.6	22.454	C
B - A12 West	1763	441	197	1725	1.022	1701	1679	20.0	35.5	67.535	F
C - B1438 East	440	110	1444	519	0.848	431	332	2.3	4.5	37.689	E

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1212	303	292	1940	0.624	1243	1442	9.6	1.7	5.396	A
B - A12 West	1439	360	170	1787	0.805	1564	1434	35.5	4.5	23.907	C
C - B1438 East	359	90	1231	732	0.491	373	304	4.5	1.0	10.420	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1015	254	227	1978	0.513	1017	1126	1.7	1.1	3.758	A
B - A12 West	1205	301	138	1807	0.667	1215	1172	4.5	2.0	6.186	A
C - B1438 East	301	75	1007	842	0.357	303	237	1.0	0.6	6.694	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.96	0.39	1.24	3.20	3.92			N/A	N/A
C - B1438 East	0.55	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.61	0.05	0.47	4.18	6.69			N/A	N/A
B - A12 West	3.88	0.05	0.71	10.96	17.92			N/A	N/A
C - B1438 East	0.91	0.07	0.79	1.58	1.96			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.24	0.03	0.28	3.24	9.87			N/A	N/A
B - A12 West	20.05	0.36	10.90	50.34	68.82			N/A	N/A
C - B1438 East	2.31	0.03	0.31	3.08	11.28			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	9.58	0.04	0.42	25.03	52.50			N/A	N/A
B - A12 West	35.50	1.23	22.58	84.36	111.80			N/A	N/A
C - B1438 East	4.48	0.04	0.41	12.12	23.76			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.69	0.07	1.04	3.83	5.42			N/A	N/A
B - A12 West	4.47	0.04	0.44	12.44	23.03			N/A	N/A
C - B1438 East	0.99	0.05	0.58	2.01	2.95			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.04	0.43	2.62	4.16			N/A	N/A
B - A12 West	2.04	0.03	0.30	2.33	9.57			N/A	N/A
C - B1438 East	0.56	0.03	0.35	1.20	2.12			N/A	N/A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	52.03	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1314	100.000
B - A12 West		ONE HOUR	✓	1598	100.000
C - B1438 East		ONE HOUR	✓	432	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1192	115
	B - A12 West	1349	2	248
	C - B1438 East	174	258	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	3	4
	B - A12 West	4	0	2
	C - B1438 East	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	32.09	12.7	66.0	D	1206	1809
B - A12 West	1.03	69.90	37.2	113.0	F	1467	2200
C - B1438 East	0.89	46.49	5.9	30.1	E	396	595

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	990	247	187	2063	0.480	986	1144	0.0	0.9	3.333	A
B - A12 West	1203	301	135	1851	0.650	1196	1089	0.0	1.8	5.433	A
C - B1438 East	325	81	901	919	0.354	323	272	0.0	0.5	6.015	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1182	295	223	2041	0.579	1180	1369	0.9	1.4	4.173	A
B - A12 West	1437	359	162	1835	0.783	1430	1303	1.8	3.5	8.748	A
C - B1438 East	388	97	1078	833	0.466	387	325	0.5	0.9	8.051	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1447	362	264	1608	0.900	1423	1623	1.4	7.4	17.560	C
B - A12 West	1760	440	195	1765	0.997	1693	1570	3.5	20.2	34.471	D
C - B1438 East	476	119	1300	588	0.809	465	387	0.9	3.6	27.040	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1447	362	264	1519	0.953	1426	1623	7.4	12.7	32.089	D
B - A12 West	1760	440	196	1713	1.027	1692	1574	20.2	37.2	69.901	F
C - B1438 East	476	119	1303	535	0.889	467	387	3.6	5.9	46.487	E

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1182	295	245	2028	0.583	1227	1496	12.7	1.4	4.746	A
B - A12 West	1437	359	171	1830	0.785	1570	1358	37.2	3.9	20.892	C
C - B1438 East	388	97	1121	812	0.478	408	351	5.9	0.9	9.336	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	990	247	189	2061	0.480	991	1159	1.4	0.9	3.370	A
B - A12 West	1203	301	137	1851	0.650	1211	1096	3.9	1.9	5.701	A
C - B1438 East	325	81	906	917	0.355	327	275	0.9	0.6	6.115	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.92	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.82	0.35	1.11	2.91	3.65			N/A	N/A
C - B1438 East	0.54	0.54	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.36	0.04	0.35	3.37	6.79			N/A	N/A
B - A12 West	3.46	0.05	0.48	9.74	16.60			N/A	N/A
C - B1438 East	0.86	0.05	0.48	1.80	2.66			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	7.44	0.04	0.44	20.53	39.83			N/A	N/A
B - A12 West	20.21	0.38	11.19	50.39	68.62			N/A	N/A
C - B1438 East	3.63	0.04	0.38	9.35	19.45			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	12.66	0.05	0.80	36.66	65.99			N/A	N/A
B - A12 West	37.23	1.19	24.81	86.26	112.97			N/A	N/A
C - B1438 East	5.87	0.05	0.47	16.69	30.13			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.41	0.04	0.40	3.70	6.47			N/A	N/A
B - A12 West	3.89	0.04	0.41	10.54	20.40			N/A	N/A
C - B1438 East	0.93	0.04	0.40	2.24	3.68			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.93	0.03	0.32	1.95	4.61			N/A	N/A
B - A12 West	1.89	0.03	0.30	1.97	8.70			N/A	N/A
C - B1438 East	0.56	0.03	0.31	1.06	2.53			N/A	N/A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	801	100.000
B - A12 West		ONE HOUR	✓	885	100.000
C - B1438 East		ONE HOUR	✓	130	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	775	24
	B - A12 West	811	0	74
	C - B1438 East	43	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	1
	B - A12 West	9	0	7
	C - B1438 East	2	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	3.12	0.8	2.1	A	735	1103
B - A12 West	0.54	4.31	1.2	1.4	A	812	1218
C - B1438 East	0.16	4.76	0.2	0.5	A	119	179

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	603	151	55	2049	0.294	601	642	0.0	0.4	2.484	A
B - A12 West	666	167	33	1818	0.366	664	647	0.0	0.6	3.111	A
C - B1438 East	98	25	583	1034	0.095	98	74	0.0	0.1	3.842	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	720	180	66	2043	0.353	720	768	0.4	0.5	2.721	A
B - A12 West	795	199	40	1814	0.438	795	775	0.6	0.8	3.526	A
C - B1438 East	117	29	698	977	0.120	117	88	0.1	0.1	4.185	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	882	221	81	2034	0.434	881	940	0.5	0.8	3.122	A
B - A12 West	974	244	49	1809	0.538	973	949	0.8	1.2	4.294	A
C - B1438 East	143	36	854	899	0.159	143	108	0.1	0.2	4.760	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	882	221	81	2034	0.434	882	942	0.8	0.8	3.125	A
B - A12 West	974	244	49	1809	0.538	974	949	1.2	1.2	4.310	A
C - B1438 East	143	36	855	899	0.160	143	108	0.2	0.2	4.765	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	720	180	67	2043	0.353	721	770	0.8	0.5	2.727	A
B - A12 West	795	199	40	1814	0.438	797	776	1.2	0.8	3.545	A
C - B1438 East	117	29	699	976	0.120	117	89	0.2	0.1	4.190	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	603	151	56	2049	0.294	604	645	0.5	0.4	2.490	A
B - A12 West	666	167	34	1818	0.366	667	650	0.8	0.6	3.128	A
C - B1438 East	98	25	585	1033	0.095	98	74	0.1	0.1	3.850	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - A12 West	0.57	0.55	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.54	0.07	0.72	1.34	1.42			N/A	N/A
B - A12 West	0.78	0.09	0.83	1.21	1.21			N/A	N/A
C - B1438 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.03	0.25	0.76	0.76			N/A	N/A
B - A12 West	1.15	0.03	0.26	1.15	1.15			N/A	N/A
C - B1438 East	0.19	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.76	0.03	0.27	0.76	2.10			N/A	N/A
B - A12 West	1.16	0.03	0.26	1.16	1.16			N/A	N/A
C - B1438 East	0.19	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.55	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.79	0.52	0.99	1.40	1.45			N/A	N/A
C - B1438 East	0.14	0.00	0.00	0.14	0.14			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.42	0.00	0.00	0.42	0.42			N/A	N/A
B - A12 West	0.58	0.08	0.76	1.35	1.43			N/A	N/A
C - B1438 East	0.11	0.00	0.00	0.11	0.11			N/A	N/A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	112.82	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1307	100.000
B - A12 West		ONE HOUR	✓	1746	100.000
C - B1438 East		ONE HOUR	✓	234	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1274	23
	B - A12 West	1396	1	349
	C - B1438 East	112	121	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	5	18
	B - A12 West	12	0	4
	C - B1438 East	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.94	25.63	11.0	57.4	D	1200	1800
B - A12 West	1.11	185.64	108.5	183.6	F	1602	2404
C - B1438 East	0.70	29.15	2.1	6.2	D	215	322

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	984	246	262	1973	0.499	980	1134	0.0	1.0	3.610	A
B - A12 West	1315	329	93	1757	0.748	1303	1046	0.0	2.9	7.744	A
C - B1438 East	176	44	964	870	0.202	175	278	0.0	0.3	5.169	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1175	294	312	1943	0.605	1173	1351	1.0	1.5	4.660	A
B - A12 West	1570	392	111	1747	0.899	1551	1252	2.9	7.5	16.986	C
C - B1438 East	210	53	1154	777	0.271	210	331	0.3	0.4	6.340	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1439	360	346	1924	0.748	1434	1508	1.5	2.9	7.273	A
B - A12 West	1923	481	136	1733	1.109	1717	1531	7.5	58.8	78.794	F
C - B1438 East	258	64	1410	651	0.396	256	369	0.4	0.6	9.099	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1439	360	347	1524	0.944	1407	1511	2.9	11.0	25.634	D
B - A12 West	1923	481	134	1726	1.114	1724	1502	58.8	108.5	180.862	F
C - B1438 East	258	64	1384	370	0.696	252	370	0.6	2.1	29.151	D

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1175	294	348	1922	0.611	1213	1496	11.0	1.6	5.344	A
B - A12 West	1570	392	115	1745	0.900	1729	1295	108.5	68.7	185.640	F
C - B1438 East	210	53	1193	758	0.277	217	368	2.1	0.4	6.737	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	984	246	317	1941	0.507	987	1353	1.6	1.0	3.784	A
B - A12 West	1315	329	94	1757	0.748	1577	1053	68.7	3.2	48.561	E
C - B1438 East	176	44	970	867	0.203	177	333	0.4	0.3	5.216	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.99	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	2.87	0.16	1.55	6.09	8.06			N/A	N/A
C - B1438 East	0.25	0.00	0.00	0.25	0.25			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.51	0.05	0.48	3.84	5.98			N/A	N/A
B - A12 West	7.49	0.11	2.57	20.19	29.37			N/A	N/A
C - B1438 East	0.37	0.00	0.00	0.37	0.37			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.88	0.03	0.28	2.88	6.73			N/A	N/A
B - A12 West	58.82	21.51	54.12	95.10	109.53			N/A	N/A
C - B1438 East	0.64	0.03	0.26	0.64	0.64			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.99	0.05	0.62	31.66	57.36			N/A	N/A
B - A12 West	108.46	>199	>199	>199	>199			N/A	N/A
C - B1438 East	2.07	0.10	1.35	4.56	6.20			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.60	0.08	1.11	3.39	4.64			N/A	N/A
B - A12 West	68.71	36.85	65.95	97.06	107.36			N/A	N/A
C - B1438 East	0.39	0.00	0.00	0.39	0.39			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.05	0.47	2.42	3.65			N/A	N/A
B - A12 West	3.21	0.03	0.30	3.21	13.81			N/A	N/A
C - B1438 East	0.26	0.00	0.00	0.26	0.26			N/A	N/A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	75.95	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1584	100.000
B - A12 West		ONE HOUR	✓	1655	100.000
C - B1438 East		ONE HOUR	✓	330	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1399	172
	B - A12 West	1228	2	425
	C - B1438 East	149	181	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	8	5
	B - A12 West	14	0	2
	C - B1438 East	4	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	30.68	14.0	74.9	D	1454	2181
B - A12 West	1.07	128.86	72.7	147.5	F	1519	2278
C - B1438 East	0.65	18.32	1.8	7.6	C	303	455

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1193	298	319	1908	0.625	1186	1039	0.0	1.6	4.946	A
B - A12 West	1246	312	121	1737	0.717	1236	1184	0.0	2.5	7.058	A
C - B1438 East	249	62	1059	803	0.310	247	446	0.0	0.4	6.450	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1424	356	381	1872	0.761	1418	1240	1.6	3.1	7.836	A
B - A12 West	1488	372	145	1723	0.864	1475	1417	2.5	5.7	13.832	B
C - B1438 East	297	74	1266	700	0.424	296	533	0.4	0.7	8.885	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1744	436	433	1842	0.947	1709	1422	3.1	11.8	22.749	C
B - A12 West	1822	456	177	1705	1.069	1678	1709	5.7	41.8	60.796	F
C - B1438 East	364	91	1526	571	0.637	360	616	0.7	1.7	16.786	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1744	436	438	1839	0.949	1736	1439	11.8	14.0	30.682	D
B - A12 West	1822	456	179	1704	1.070	1698	1734	41.8	72.7	128.855	F
C - B1438 East	364	91	1550	559	0.651	363	624	1.7	1.8	18.318	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1424	356	438	1839	0.774	1466	1408	14.0	3.6	10.634	B
B - A12 West	1488	372	148	1721	0.864	1698	1462	72.7	20.2	102.341	F
C - B1438 East	297	74	1309	679	0.437	301	595	1.8	0.8	9.626	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1193	298	340	1896	0.629	1200	1100	3.6	1.7	5.231	A
B - A12 West	1246	312	123	1736	0.718	1316	1199	20.2	2.6	10.024	B
C - B1438 East	249	62	1072	797	0.312	250	468	0.8	0.5	6.597	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.64	0.53	1.01	2.39	2.82			N/A	N/A
B - A12 West	2.47	0.20	1.43	4.83	6.22			N/A	N/A
C - B1438 East	0.44	0.00	0.00	0.44	0.44			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.07	0.05	0.47	8.61	14.60			N/A	N/A
B - A12 West	5.70	0.07	1.19	15.93	24.32			N/A	N/A
C - B1438 East	0.72	0.08	0.78	1.41	1.49			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.84	0.07	1.60	34.56	55.70			N/A	N/A
B - A12 West	41.75	9.39	36.02	76.10	91.12			N/A	N/A
C - B1438 East	1.67	0.03	0.29	1.67	6.11			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	13.96	0.05	0.49	39.36	74.89			N/A	N/A
B - A12 West	72.73	21.31	65.17	125.50	147.45			N/A	N/A
C - B1438 East	1.79	0.03	0.29	1.79	7.58			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.58	0.05	0.46	10.08	17.59			N/A	N/A
B - A12 West	20.20	1.50	15.05	42.60	53.87			N/A	N/A
C - B1438 East	0.79	0.06	0.69	1.30	1.78			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.72	0.03	0.31	2.71	8.69			N/A	N/A
B - A12 West	2.62	0.03	0.29	2.62	11.06			N/A	N/A
C - B1438 East	0.46	0.04	0.36	1.27	1.27			N/A	N/A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	51.43	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1326	100.000
B - A12 West		ONE HOUR	✓	1544	100.000
C - B1438 East		ONE HOUR	✓	501	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1205	115
	B - A12 West	1263	1	280
	C - B1438 East	177	323	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	9	6
	B - A12 West	10	0	2
	C - B1438 East	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	29.42	11.7	63.0	D	1217	1826
B - A12 West	1.02	69.29	35.4	110.0	F	1417	2126
C - B1438 East	0.93	54.67	8.1	39.7	F	459	689

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	999	250	210	1955	0.511	994	1082	0.0	1.0	3.732	A
B - A12 West	1163	291	137	1759	0.661	1155	1146	0.0	1.9	5.893	A
C - B1438 East	377	94	909	886	0.425	374	296	0.0	0.7	6.989	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1192	298	251	1932	0.617	1190	1294	1.0	1.6	4.840	A
B - A12 West	1388	347	164	1743	0.797	1381	1371	1.9	3.7	9.758	A
C - B1438 East	450	113	1088	795	0.566	448	354	0.7	1.3	10.296	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1460	365	298	1648	0.886	1440	1536	1.6	6.7	15.962	C
B - A12 West	1700	425	197	1709	0.995	1637	1656	3.7	19.4	34.834	D
C - B1438 East	551	138	1316	640	0.862	537	422	1.3	4.9	31.367	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1460	365	298	1543	0.946	1440	1536	6.7	11.7	29.418	D
B - A12 West	1700	425	197	1659	1.025	1637	1657	19.4	35.4	69.288	F
C - B1438 East	551	138	1316	593	0.930	539	422	4.9	8.1	54.665	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1192	298	275	1918	0.622	1233	1412	11.7	1.7	5.561	A
B - A12 West	1388	347	174	1737	0.799	1513	1429	35.4	4.3	24.006	C
C - B1438 East	450	113	1127	776	0.580	477	381	8.1	1.4	13.059	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	999	250	213	1953	0.511	1001	1098	1.7	1.1	3.788	A
B - A12 West	1163	291	139	1757	0.662	1172	1155	4.3	2.0	6.243	A
C - B1438 East	377	94	915	883	0.427	380	299	1.4	0.8	7.187	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.55	1.01	1.43	1.48			N/A	N/A
B - A12 West	1.91	0.41	1.21	3.01	3.79			N/A	N/A
C - B1438 East	0.73	0.55	1.00	1.40	1.45			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.59	0.04	0.38	4.14	7.76			N/A	N/A
B - A12 West	3.72	0.05	0.65	10.53	17.27			N/A	N/A
C - B1438 East	1.27	0.05	0.55	2.98	4.54			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	6.69	0.04	0.40	17.17	36.47			N/A	N/A
B - A12 West	19.44	0.34	10.44	48.96	67.07			N/A	N/A
C - B1438 East	4.94	0.05	0.47	14.08	24.89			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.73	0.05	0.47	32.88	62.99			N/A	N/A
B - A12 West	35.38	1.35	22.88	83.32	109.95			N/A	N/A
C - B1438 East	8.05	0.06	0.99	23.41	39.66			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.67	0.04	0.42	4.46	7.60			N/A	N/A
B - A12 West	4.30	0.04	0.43	11.87	22.16			N/A	N/A
C - B1438 East	1.42	0.04	0.40	3.73	6.52			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.03	0.33	2.33	5.28			N/A	N/A
B - A12 West	1.99	0.03	0.30	2.27	9.32			N/A	N/A
C - B1438 East	0.75	0.03	0.30	1.17	3.67			N/A	N/A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	26.67	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1234	100.000
B - A12 West		ONE HOUR	✓	1533	100.000
C - B1438 East		ONE HOUR	✓	558	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1113	115
	B - A12 West	1293	2	239
	C - B1438 East	180	378	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	4
	B - A12 West	5	0	2
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	12.63	4.7	21.9	B	1133	1699
B - A12 West	0.97	35.22	16.0	81.0	E	1407	2111
C - B1438 East	0.87	34.94	5.6	30.8	D	512	768

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	929	232	180	2016	0.461	926	1107	0.0	0.8	3.293	A
B - A12 West	1154	289	139	1834	0.630	1148	1119	0.0	1.7	5.198	A
C - B1438 East	420	105	841	941	0.447	417	265	0.0	0.8	6.831	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1110	277	216	1996	0.556	1108	1324	0.8	1.2	4.048	A
B - A12 West	1379	345	167	1817	0.759	1373	1339	1.7	3.0	8.005	A
C - B1438 East	502	125	1007	858	0.585	499	317	0.8	1.4	9.984	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1359	340	260	1970	0.690	1355	1598	1.2	2.2	5.822	A
B - A12 West	1688	422	202	1796	0.940	1657	1633	3.0	11.0	22.011	C
C - B1438 East	614	154	1232	744	0.825	603	384	1.4	4.1	23.896	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1359	340	262	1624	0.837	1349	1610	2.2	4.7	12.634	B
B - A12 West	1688	422	203	1749	0.965	1668	1630	11.0	16.0	35.220	E
C - B1438 East	614	154	1226	704	0.873	608	385	4.1	5.6	34.935	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1110	277	224	1990	0.557	1123	1378	4.7	1.3	4.218	A
B - A12 West	1379	345	173	1814	0.760	1429	1366	16.0	3.3	10.533	B
C - B1438 East	502	125	1021	850	0.590	518	327	5.6	1.5	11.348	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	929	232	182	2015	0.461	931	1120	1.3	0.9	3.324	A
B - A12 West	1154	289	141	1833	0.630	1161	1127	3.3	1.7	5.407	A
C - B1438 East	420	105	846	939	0.448	423	267	1.5	0.8	7.013	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.85	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.67	0.56	1.08	2.35	2.78			N/A	N/A
C - B1438 East	0.80	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.24	0.05	0.60	2.87	4.26			N/A	N/A
B - A12 West	3.03	0.05	0.48	8.51	14.26			N/A	N/A
C - B1438 East	1.37	0.06	0.72	3.20	4.70			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.18	0.03	0.27	2.18	2.18			N/A	N/A
B - A12 West	10.96	0.06	1.49	32.14	53.24			N/A	N/A
C - B1438 East	4.10	0.04	0.38	10.47	22.05			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	4.74	0.03	0.31	5.08	21.91			N/A	N/A
B - A12 West	15.96	0.06	1.42	46.91	81.04			N/A	N/A
C - B1438 East	5.63	0.04	0.37	13.43	30.76			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.27	0.12	1.12	2.04	2.73			N/A	N/A
B - A12 West	3.30	0.04	0.43	9.17	16.59			N/A	N/A
C - B1438 East	1.48	0.04	0.43	3.86	6.42			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.86	0.06	0.66	1.62	2.11			N/A	N/A
B - A12 West	1.73	0.03	0.31	2.91	8.85			N/A	N/A
C - B1438 East	0.82	0.03	0.32	1.67	3.99			N/A	N/A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	824	100.000
B - A12 West		ONE HOUR	✓	718	100.000
C - B1438 East		ONE HOUR	✓	123	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	798	24
	B - A12 West	640	0	78
	C - B1438 East	34	89	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	1
	B - A12 West	8	0	7
	C - B1438 East	3	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.45	3.19	0.8	1.9	A	756	1134
B - A12 West	0.43	3.47	0.8	2.1	A	659	989
C - B1438 East	0.15	4.81	0.2	0.5	A	113	170

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	620	155	58	2052	0.302	619	507	0.0	0.4	2.507	A
B - A12 West	541	135	27	1836	0.294	539	666	0.0	0.4	2.771	A
C - B1438 East	93	23	600	1022	0.091	92	77	0.0	0.1	3.869	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	741	185	70	2045	0.362	740	607	0.4	0.6	2.757	A
B - A12 West	646	161	32	1833	0.352	645	797	0.4	0.5	3.028	A
C - B1438 East	111	28	718	964	0.115	111	92	0.1	0.1	4.218	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	907	227	86	2036	0.446	906	744	0.6	0.8	3.184	A
B - A12 West	791	198	39	1829	0.432	790	976	0.5	0.8	3.461	A
C - B1438 East	136	34	880	884	0.153	135	112	0.1	0.2	4.806	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	907	227	86	2036	0.446	907	745	0.8	0.8	3.189	A
B - A12 West	791	198	39	1829	0.432	791	977	0.8	0.8	3.466	A
C - B1438 East	136	34	881	884	0.153	136	112	0.2	0.2	4.811	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	741	185	70	2045	0.362	742	609	0.8	0.6	2.763	A
B - A12 West	646	161	32	1833	0.352	647	799	0.8	0.5	3.035	A
C - B1438 East	111	28	720	963	0.115	111	92	0.2	0.1	4.225	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	620	155	59	2052	0.302	621	510	0.6	0.4	2.516	A
B - A12 West	541	135	27	1836	0.294	541	669	0.5	0.4	2.780	A
C - B1438 East	93	23	603	1021	0.091	93	77	0.1	0.1	3.879	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - A12 West	0.42	0.00	0.00	0.42	0.42			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.08	0.76	1.35	1.43			N/A	N/A
B - A12 West	0.54	0.07	0.73	1.35	1.42			N/A	N/A
C - B1438 East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.03	0.25	0.80	0.80			N/A	N/A
B - A12 West	0.76	0.03	0.25	0.76	0.76			N/A	N/A
C - B1438 East	0.18	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.03	0.27	0.80	1.87			N/A	N/A
B - A12 West	0.76	0.03	0.28	0.76	2.14			N/A	N/A
C - B1438 East	0.18	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.55	0.55	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - A12 West	0.42	0.00	0.00	0.42	0.42			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	127.00	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1418	100.000
B - A12 West		ONE HOUR	✓	1693	100.000
C - B1438 East		ONE HOUR	✓	235	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	11	1407	0
	B - A12 West	1470	1	222
	C - B1438 East	113	121	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	4	0
	B - A12 West	7	0	6
	C - B1438 East	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	67.05	29.4	99.5	F	1301	1951
B - A12 West	1.12	184.13	105.5	178.9	F	1554	2331
C - B1438 East	0.85	65.49	4.4	20.4	F	216	323

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1067	267	168	2054	0.520	1063	1191	0.0	1.1	3.620	A
B - A12 West	1275	319	93	1815	0.702	1266	1146	0.0	2.3	6.450	A
C - B1438 East	177	44	1064	826	0.214	176	167	0.0	0.3	5.531	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1274	319	200	2034	0.627	1272	1423	1.1	1.7	4.713	A
B - A12 West	1522	381	112	1804	0.844	1512	1372	2.3	5.0	11.879	B
C - B1438 East	211	53	1273	724	0.292	211	199	0.3	0.4	7.007	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1561	390	221	1557	1.003	1488	1576	1.7	19.9	36.165	E
B - A12 West	1864	466	131	1685	1.107	1665	1605	5.0	54.7	73.913	F
C - B1438 East	259	65	1489	321	0.806	247	220	0.4	3.3	43.746	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1561	390	220	1552	1.006	1523	1576	19.9	29.4	67.045	F
B - A12 West	1864	466	135	1664	1.121	1661	1643	54.7	105.5	179.839	F
C - B1438 East	259	65	1524	304	0.852	254	219	3.3	4.4	65.494	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1274	319	223	1426	0.894	1349	1575	29.4	10.7	51.247	F
B - A12 West	1522	381	117	1697	0.897	1681	1454	105.5	65.9	184.127	F
C - B1438 East	211	53	1350	323	0.653	220	222	4.4	2.1	37.422	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1067	267	202	2032	0.525	1106	1424	10.7	1.1	4.045	A
B - A12 West	1275	319	98	1813	0.703	1529	1193	65.9	2.5	29.606	D
C - B1438 East	177	44	1106	805	0.220	184	201	2.1	0.3	5.862	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.23	1.06	1.50	1.79			N/A	N/A
B - A12 West	2.30	0.13	1.14	4.81	6.40			N/A	N/A
C - B1438 East	0.27	0.00	0.00	0.27	0.27			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.66	0.03	0.33	3.63	8.64			N/A	N/A
B - A12 West	4.99	0.06	0.90	14.29	23.38			N/A	N/A
C - B1438 East	0.41	0.04	0.35	1.22	1.41			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	19.90	0.58	12.06	47.78	63.84			N/A	N/A
B - A12 West	54.75	19.03	50.04	89.83	103.97			N/A	N/A
C - B1438 East	3.26	0.04	0.41	8.88	16.70			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	29.40	0.51	16.62	73.28	99.53			N/A	N/A
B - A12 West	105.50	48.50	99.91	158.86	178.91			N/A	N/A
C - B1438 East	4.37	0.05	0.77	12.43	20.40			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	10.69	2.75	9.20	17.90	21.06			N/A	N/A
B - A12 West	65.91	39.46	63.87	88.64	96.66			N/A	N/A
C - B1438 East	2.05	0.68	1.49	2.79	3.13			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.12	0.03	0.29	1.45	4.89			N/A	N/A
B - A12 West	2.48	0.03	0.29	2.48	8.85			N/A	N/A
C - B1438 East	0.28	0.03	0.29	0.96	1.50			N/A	N/A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	49.51	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1610	100.000
B - A12 West		ONE HOUR	✓	1595	100.000
C - B1438 East		ONE HOUR	✓	420	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	13	1396	202
B - A12 West	1299	2	294
C - B1438 East	162	258	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	8	6	5
B - A12 West	7	0	3
C - B1438 East	4	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	33.92	16.9	84.2	D	1478	2217
B - A12 West	1.02	65.87	34.2	110.3	F	1463	2195
C - B1438 East	0.89	46.96	5.8	30.1	E	386	578

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1212	303	221	1987	0.610	1206	1102	0.0	1.5	4.573	A
B - A12 West	1201	300	131	1800	0.667	1193	1240	0.0	2.0	5.853	A
C - B1438 East	316	79	1057	816	0.388	314	371	0.0	0.6	7.135	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1448	362	264	1962	0.738	1443	1318	1.5	2.7	6.871	A
B - A12 West	1434	358	157	1785	0.803	1426	1483	2.0	3.9	9.829	A
C - B1438 East	378	94	1264	713	0.530	376	443	0.6	1.1	10.609	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1773	443	314	1933	0.917	1748	1567	2.7	8.9	17.520	C
B - A12 West	1756	439	189	1765	0.995	1692	1796	3.9	19.8	34.340	D
C - B1438 East	463	116	1531	581	0.796	453	531	1.1	3.4	26.517	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1773	443	315	1821	0.974	1741	1572	8.9	16.9	33.925	D
B - A12 West	1756	439	189	1724	1.019	1698	1789	19.8	34.2	65.868	F
C - B1438 East	463	116	1525	520	0.889	453	531	3.4	5.8	46.961	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1448	362	288	1948	0.743	1503	1429	16.9	3.0	9.073	A
B - A12 West	1434	358	165	1780	0.806	1552	1548	34.2	4.5	23.092	C
C - B1438 East	378	94	1317	687	0.550	396	474	5.8	1.3	13.093	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1212	303	224	1986	0.611	1218	1119	3.0	1.6	4.723	A
B - A12 West	1201	300	133	1799	0.667	1210	1253	4.5	2.0	6.212	A
C - B1438 East	316	79	1067	811	0.390	319	376	1.3	0.6	7.351	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.54	0.57	1.45	1.95	2.41			N/A	N/A
B - A12 West	1.96	0.40	1.25	3.19	3.91			N/A	N/A
C - B1438 East	0.63	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.74	0.05	0.45	7.60	13.06			N/A	N/A
B - A12 West	3.88	0.05	0.72	10.94	17.86			N/A	N/A
C - B1438 East	1.10	0.06	0.75	2.27	3.18			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.93	0.05	0.47	25.10	47.24			N/A	N/A
B - A12 West	19.76	0.33	10.57	49.85	68.34			N/A	N/A
C - B1438 East	3.41	0.04	0.37	8.52	18.29			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	16.90	0.06	1.37	49.80	84.20			N/A	N/A
B - A12 West	34.18	0.97	20.96	82.58	110.30			N/A	N/A
C - B1438 East	5.80	0.04	0.45	16.24	30.10			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.99	0.05	0.45	8.33	14.38			N/A	N/A
B - A12 West	4.47	0.04	0.44	12.45	23.01			N/A	N/A
C - B1438 East	1.26	0.05	0.45	3.12	4.93			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.59	0.03	0.32	3.01	8.26			N/A	N/A
B - A12 West	2.05	0.03	0.30	2.37	9.61			N/A	N/A
C - B1438 East	0.65	0.03	0.31	1.29	3.03			N/A	N/A

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	66.96	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1359	100.000
B - A12 West		ONE HOUR	✓	1589	100.000
C - B1438 East		ONE HOUR	✓	561	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1281	72
	B - A12 West	1299	1	289
	C - B1438 East	208	353	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	10
	B - A12 West	6	0	2
	C - B1438 East	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.96	36.06	14.8	73.6	E	1247	1870
B - A12 West	1.04	84.23	45.5	120.4	F	1458	2187
C - B1438 East	1.01	94.22	16.6	57.6	F	514	772

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1023	256	217	1989	0.514	1019	1131	0.0	1.0	3.695	A
B - A12 West	1196	299	160	1798	0.665	1189	1224	0.0	2.0	5.837	A
C - B1438 East	422	106	965	871	0.484	418	270	0.0	0.9	7.886	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1221	305	260	1964	0.622	1219	1352	1.0	1.6	4.816	A
B - A12 West	1429	357	191	1779	0.803	1421	1465	2.0	3.9	9.843	A
C - B1438 East	504	126	1155	777	0.649	501	323	0.9	1.8	12.880	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1496	374	305	1626	0.920	1467	1586	1.6	8.9	19.901	C
B - A12 West	1750	437	224	1724	1.015	1668	1752	3.9	24.4	40.348	E
C - B1438 East	617	154	1390	640	0.965	586	381	1.8	9.7	50.321	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1496	374	304	1550	0.965	1472	1586	8.9	14.8	36.063	E
B - A12 West	1750	437	225	1680	1.041	1666	1760	24.4	45.5	84.227	F
C - B1438 East	617	154	1395	611	1.010	590	381	9.7	16.6	94.224	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1221	305	291	1946	0.628	1274	1515	14.8	1.7	5.773	A
B - A12 West	1429	357	214	1765	0.809	1592	1555	45.5	4.7	35.084	E
C - B1438 East	504	126	1207	751	0.671	562	357	16.6	2.2	24.454	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1023	256	221	1987	0.515	1025	1149	1.7	1.1	3.755	A
B - A12 West	1196	299	163	1796	0.666	1207	1236	4.7	2.0	6.219	A
C - B1438 East	422	106	972	868	0.486	427	274	2.2	1.0	8.244	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.05	0.54	1.03	1.34	1.34			N/A	N/A
B - A12 West	1.95	0.29	1.18	3.33	4.08			N/A	N/A
C - B1438 East	0.92	0.51	0.99	1.43	1.48			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.62	0.04	0.36	4.10	8.15			N/A	N/A
B - A12 West	3.87	0.05	0.60	10.97	18.20			N/A	N/A
C - B1438 East	1.78	0.05	0.50	4.66	7.29			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	8.86	0.05	0.72	25.69	45.22			N/A	N/A
B - A12 West	24.43	1.24	16.41	55.85	72.86			N/A	N/A
C - B1438 East	9.70	0.16	4.38	25.09	35.22			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	14.76	0.06	1.02	43.35	73.62			N/A	N/A
B - A12 West	45.47	4.33	34.83	95.68	120.44			N/A	N/A
C - B1438 East	16.56	0.29	8.65	41.90	57.64			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.04	0.39	4.54	8.31			N/A	N/A
B - A12 West	4.67	0.04	0.44	13.00	24.14			N/A	N/A
C - B1438 East	2.16	0.04	0.38	5.68	10.97			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.07	0.03	0.31	1.98	5.43			N/A	N/A
B - A12 West	2.03	0.03	0.30	2.03	9.05			N/A	N/A
C - B1438 East	0.96	0.03	0.28	0.99	3.70			N/A	N/A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	23.03	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1299	100.000
B - A12 West		ONE HOUR	✓	1571	100.000
C - B1438 East		ONE HOUR	✓	552	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1170	122
	B - A12 West	1295	2	274
	C - B1438 East	193	359	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	2	4
	B - A12 West	3	0	1
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	7.98	3.1	4.8	A	1192	1788
B - A12 West	0.96	33.29	15.1	78.8	D	1442	2163
C - B1438 East	0.84	29.29	4.7	24.7	D	507	760

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	978	245	207	2071	0.472	975	1119	0.0	0.9	3.271	A
B - A12 West	1183	296	149	1859	0.636	1176	1148	0.0	1.7	5.221	A
C - B1438 East	416	104	885	936	0.444	412	296	0.0	0.8	6.839	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1168	292	247	2047	0.571	1166	1339	0.9	1.3	4.078	A
B - A12 West	1412	353	179	1841	0.767	1407	1374	1.7	3.2	8.182	A
C - B1438 East	496	124	1059	851	0.583	494	355	0.8	1.4	10.009	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1431	358	297	2017	0.709	1426	1612	1.3	2.4	6.051	A
B - A12 West	1730	432	216	1818	0.952	1693	1675	3.2	12.4	23.852	C
C - B1438 East	608	152	1295	737	0.825	597	429	1.4	4.1	24.053	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1431	358	302	1876	0.763	1428	1637	2.4	3.1	7.980	A
B - A12 West	1730	432	219	1811	0.955	1719	1682	12.4	15.1	33.290	D
C - B1438 East	608	152	1296	724	0.839	605	434	4.1	4.7	29.291	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1168	292	256	2042	0.572	1175	1387	3.1	1.4	4.187	A
B - A12 West	1412	353	184	1837	0.769	1459	1392	15.1	3.5	10.598	B
C - B1438 East	496	124	1067	847	0.586	509	365	4.7	1.5	11.019	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	978	245	209	2070	0.473	980	1132	1.4	0.9	3.310	A
B - A12 West	1183	296	151	1858	0.637	1190	1156	3.5	1.8	5.442	A
C - B1438 East	416	104	890	933	0.445	418	299	1.5	0.8	7.023	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.72	0.54	1.11	2.54	2.92			N/A	N/A
C - B1438 East	0.79	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.05	0.51	3.18	4.84			N/A	N/A
B - A12 West	3.18	0.05	0.48	8.92	14.99			N/A	N/A
C - B1438 East	1.36	0.06	0.72	3.15	4.65			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.39	0.03	0.27	2.39	2.48			N/A	N/A
B - A12 West	12.39	0.08	2.09	36.07	57.04			N/A	N/A
C - B1438 East	4.08	0.04	0.38	10.45	21.95			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.11	0.03	0.27	3.11	3.88			N/A	N/A
B - A12 West	15.07	0.05	0.93	43.69	78.84			N/A	N/A
C - B1438 East	4.66	0.03	0.33	8.49	24.70			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.11	1.13	2.45	3.09			N/A	N/A
B - A12 West	3.46	0.04	0.43	9.61	17.59			N/A	N/A
C - B1438 East	1.45	0.04	0.43	3.79	6.32			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.05	0.60	1.80	2.56			N/A	N/A
B - A12 West	1.78	0.03	0.31	2.78	8.98			N/A	N/A
C - B1438 East	0.81	0.03	0.32	1.65	3.95			N/A	N/A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	3.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	825	100.000
B - A12 West		ONE HOUR	✓	719	100.000
C - B1438 East		ONE HOUR	✓	123	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	2	799	24
	B - A12 West	641	0	78
	C - B1438 East	34	89	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	8	1
	B - A12 West	8	0	7
	C - B1438 East	3	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.45	3.19	0.8	1.9	A	757	1136
B - A12 West	0.43	3.47	0.8	2.1	A	660	990
C - B1438 East	0.15	4.81	0.2	0.5	A	113	170

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	621	155	58	2052	0.303	619	508	0.0	0.4	2.509	A
B - A12 West	541	135	27	1836	0.295	540	667	0.0	0.4	2.773	A
C - B1438 East	93	23	601	1022	0.091	92	77	0.0	0.1	3.870	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	742	185	70	2045	0.363	741	608	0.4	0.6	2.758	A
B - A12 West	647	162	32	1833	0.353	646	798	0.4	0.5	3.030	A
C - B1438 East	111	28	719	964	0.115	111	92	0.1	0.1	4.220	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	908	227	86	2036	0.446	908	745	0.6	0.8	3.187	A
B - A12 West	792	198	39	1829	0.433	791	977	0.5	0.8	3.464	A
C - B1438 East	136	34	881	884	0.153	135	112	0.1	0.2	4.809	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	908	227	86	2036	0.446	908	746	0.8	0.8	3.192	A
B - A12 West	792	198	39	1829	0.433	792	978	0.8	0.8	3.470	A
C - B1438 East	136	34	882	883	0.154	136	112	0.2	0.2	4.814	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	742	185	70	2045	0.363	743	610	0.8	0.6	2.765	A
B - A12 West	647	162	32	1833	0.353	647	800	0.8	0.5	3.039	A
C - B1438 East	111	28	721	963	0.115	111	92	0.2	0.1	4.226	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	621	155	59	2052	0.303	622	510	0.6	0.4	2.519	A
B - A12 West	541	135	27	1836	0.295	542	669	0.5	0.4	2.781	A
C - B1438 East	93	23	603	1021	0.091	93	77	0.1	0.1	3.879	A

Queue Variation Results for each time segment

05:45 - 06:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.43	0.00	0.00	0.43	0.43			N/A	N/A
B - A12 West	0.42	0.00	0.00	0.42	0.42			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

06:00 - 06:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.08	0.76	1.35	1.43			N/A	N/A
B - A12 West	0.54	0.07	0.73	1.35	1.42			N/A	N/A
C - B1438 East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

06:15 - 06:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.03	0.25	0.80	0.80			N/A	N/A
B - A12 West	0.76	0.03	0.25	0.76	0.76			N/A	N/A
C - B1438 East	0.18	0.03	0.26	0.46	0.49			N/A	N/A

06:30 - 06:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.80	0.03	0.27	0.80	1.86			N/A	N/A
B - A12 West	0.76	0.03	0.27	0.76	2.13			N/A	N/A
C - B1438 East	0.18	0.03	0.25	0.45	0.48			N/A	N/A

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.57	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	0.55	0.55	1.00	1.40	1.45			N/A	N/A
C - B1438 East	0.13	0.00	0.00	0.13	0.13			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
B - A12 West	0.42	0.00	0.00	0.42	0.42			N/A	N/A
C - B1438 East	0.10	0.00	0.00	0.10	0.10			N/A	N/A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	126.12	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1337	100.000
B - A12 West		ONE HOUR	✓	1691	100.000
C - B1438 East		ONE HOUR	✓	235	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	11	1319	7
B - A12 West	1468	1	223
C - B1438 East	113	121	1

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 West	C - B1438 East
A - A12 North	0	4	61
B - A12 West	7	0	6
C - B1438 East	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	62.25	25.4	92.8	F	1227	1841
B - A12 West	1.12	183.99	105.4	178.8	F	1552	2328
C - B1438 East	0.84	61.90	4.1	19.5	F	216	323

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1007	252	168	2048	0.492	1003	1190	0.0	1.0	3.433	A
B - A12 West	1273	318	93	1813	0.702	1264	1081	0.0	2.3	6.459	A
C - B1438 East	177	44	999	857	0.206	176	172	0.0	0.3	5.275	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1202	301	201	2028	0.593	1200	1421	1.0	1.4	4.341	A
B - A12 West	1521	380	112	1802	0.844	1510	1294	2.3	5.0	11.894	B
C - B1438 East	211	53	1195	762	0.277	211	206	0.3	0.4	6.526	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1472	368	221	1484	0.992	1408	1574	1.4	17.4	34.289	D
B - A12 West	1862	466	131	1683	1.107	1663	1518	5.0	54.7	73.959	F
C - B1438 East	259	65	1402	325	0.795	248	227	0.4	3.1	41.946	E

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1472	368	221	1475	0.998	1441	1574	17.4	25.4	62.251	F
B - A12 West	1862	466	135	1662	1.121	1659	1553	54.7	105.4	179.901	F
C - B1438 East	259	65	1434	307	0.841	255	227	3.1	4.1	61.905	F

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1202	301	223	1357	0.886	1266	1573	25.4	9.6	45.239	E
B - A12 West	1521	380	117	1695	0.897	1679	1363	105.4	65.7	183.992	F
C - B1438 East	211	53	1260	328	0.643	220	229	4.1	2.0	35.372	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1007	252	203	2026	0.497	1041	1421	9.6	1.0	3.779	A
B - A12 West	1273	318	97	1810	0.703	1526	1123	65.7	2.5	29.510	D
C - B1438 East	177	44	1037	839	0.211	184	207	2.0	0.3	5.551	A

Queue Variation Results for each time segment

06:45 - 07:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.96	0.27	1.00	1.47	1.47			N/A	N/A
B - A12 West	2.30	0.13	1.14	4.81	6.40			N/A	N/A
C - B1438 East	0.26	0.00	0.00	0.26	0.26			N/A	N/A

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.44	0.03	0.33	3.00	7.46			N/A	N/A
B - A12 West	4.99	0.06	0.90	14.29	23.38			N/A	N/A
C - B1438 East	0.38	0.03	0.34	1.17	1.38			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	17.43	0.32	9.41	43.71	59.79			N/A	N/A
B - A12 West	54.71	19.02	50.01	89.77	103.90			N/A	N/A
C - B1438 East	3.12	0.04	0.39	8.30	16.34			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	25.41	0.29	12.38	66.40	92.76			N/A	N/A
B - A12 West	105.41	48.45	99.82	158.75	178.80			N/A	N/A
C - B1438 East	4.13	0.05	0.66	11.75	19.47			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	9.55	2.67	8.26	15.54	18.12			N/A	N/A
B - A12 West	65.72	39.28	63.68	88.50	96.56			N/A	N/A
C - B1438 East	1.96	0.67	1.43	2.61	2.89			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.00	0.03	0.29	1.47	4.51			N/A	N/A
B - A12 West	2.48	0.03	0.29	2.48	8.85			N/A	N/A
C - B1438 East	0.27	0.03	0.29	0.94	1.44			N/A	N/A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	72.42	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1609	100.000
B - A12 West		ONE HOUR	✓	1701	100.000
C - B1438 East		ONE HOUR	✓	411	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	13	1421	176
	B - A12 West	1298	2	400
	C - B1438 East	160	251	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	8	6	5
	B - A12 West	8	0	2
	C - B1438 East	4	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	29.72	13.7	74.3	D	1477	2215
B - A12 West	1.06	122.09	70.8	146.8	F	1561	2341
C - B1438 East	0.81	32.22	3.8	20.4	D	377	566

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1212	303	301	1938	0.625	1205	1099	0.0	1.6	4.871	A
B - A12 West	1280	320	129	1795	0.713	1271	1253	0.0	2.4	6.750	A
C - B1438 East	310	77	1075	806	0.384	307	431	0.0	0.6	7.184	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1447	362	359	1904	0.760	1441	1312	1.6	3.1	7.686	A
B - A12 West	1529	382	155	1780	0.859	1516	1499	2.4	5.5	13.089	B
C - B1438 East	370	92	1285	702	0.527	368	514	0.6	1.1	10.721	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1772	443	410	1874	0.946	1737	1508	3.1	11.7	22.205	C
B - A12 West	1873	468	186	1760	1.064	1732	1807	5.5	40.8	57.913	F
C - B1438 East	453	113	1550	571	0.793	444	597	1.1	3.4	26.604	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1772	443	415	1871	0.947	1764	1527	11.7	13.7	29.722	D
B - A12 West	1873	468	189	1759	1.065	1753	1835	40.8	70.8	122.086	F
C - B1438 East	453	113	1573	559	0.810	451	605	3.4	3.8	32.215	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1447	362	414	1871	0.773	1487	1497	13.7	3.6	10.302	B
B - A12 West	1529	382	160	1777	0.861	1752	1547	70.8	15.1	92.578	F
C - B1438 East	370	92	1327	681	0.543	380	575	3.8	1.2	12.348	B

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1212	303	315	1930	0.628	1219	1147	3.6	1.7	5.119	A
B - A12 West	1280	320	131	1794	0.714	1330	1268	15.1	2.6	8.592	A
C - B1438 East	310	77	1087	800	0.387	312	446	1.2	0.6	7.415	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.64	0.53	1.02	2.38	2.82			N/A	N/A
B - A12 West	2.42	0.20	1.40	4.73	6.05			N/A	N/A
C - B1438 East	0.62	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.06	0.05	0.47	8.58	14.59			N/A	N/A
B - A12 West	5.54	0.07	1.49	15.59	24.05			N/A	N/A
C - B1438 East	1.09	0.06	0.75	2.21	3.06			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	11.71	0.07	1.43	34.29	55.78			N/A	N/A
B - A12 West	40.79	8.47	34.81	75.53	90.91			N/A	N/A
C - B1438 East	3.35	0.04	0.37	8.30	17.93			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	13.73	0.05	0.47	38.33	74.29			N/A	N/A
B - A12 West	70.78	19.32	62.83	124.28	146.83			N/A	N/A
C - B1438 East	3.82	0.03	0.33	7.30	20.37			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	3.55	0.05	0.46	9.99	17.41			N/A	N/A
B - A12 West	15.07	0.44	8.97	36.09	48.29			N/A	N/A
C - B1438 East	1.22	0.04	0.45	3.00	4.82			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.71	0.03	0.31	2.71	8.66			N/A	N/A
B - A12 West	2.57	0.03	0.29	2.57	10.77			N/A	N/A
C - B1438 East	0.64	0.03	0.31	1.27	2.98			N/A	N/A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	66.27	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1358	100.000
B - A12 West		ONE HOUR	✓	1588	100.000
C - B1438 East		ONE HOUR	✓	562	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	6	1231	121
	B - A12 West	1299	1	288
	C - B1438 East	208	354	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	6	6
	B - A12 West	6	0	2
	C - B1438 East	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	36.89	15.1	74.8	E	1246	1869
B - A12 West	1.04	85.82	46.4	121.3	F	1457	2186
C - B1438 East	0.99	82.84	14.3	54.9	F	515	773

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1022	256	216	1993	0.513	1018	1131	0.0	1.0	3.678	A
B - A12 West	1196	299	160	1798	0.665	1188	1188	0.0	1.9	5.831	A
C - B1438 East	423	106	928	890	0.475	419	306	0.0	0.9	7.593	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1220	305	259	1968	0.620	1218	1353	1.0	1.6	4.785	A
B - A12 West	1428	357	191	1779	0.803	1420	1421	1.9	3.9	9.824	A
C - B1438 East	505	126	1111	799	0.632	502	366	0.9	1.7	11.989	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1495	374	303	1619	0.923	1465	1586	1.6	9.1	20.366	C
B - A12 West	1749	437	225	1719	1.017	1665	1701	3.9	24.9	40.904	E
C - B1438 East	618	155	1336	653	0.947	591	433	1.7	8.6	45.363	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1495	374	303	1546	0.967	1471	1587	9.1	15.1	36.893	E
B - A12 West	1749	437	227	1676	1.043	1663	1709	24.9	46.4	85.818	F
C - B1438 East	618	155	1341	622	0.994	595	433	8.6	14.3	82.838	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1220	305	291	1950	0.626	1274	1515	15.1	1.7	5.756	A
B - A12 West	1428	357	211	1767	0.808	1595	1505	46.4	4.6	35.782	E
C - B1438 East	505	126	1162	774	0.653	554	403	14.3	2.0	19.972	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1022	256	220	1991	0.513	1025	1149	1.7	1.1	3.734	A
B - A12 West	1196	299	163	1796	0.666	1206	1199	4.6	2.0	6.208	A
C - B1438 East	423	106	934	887	0.477	427	310	2.0	0.9	7.896	A

Queue Variation Results for each time segment

14:45 - 15:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.04	0.54	1.03	1.34	1.34			N/A	N/A
B - A12 West	1.95	0.28	1.18	3.34	4.11			N/A	N/A
C - B1438 East	0.89	0.52	0.99	1.41	1.46			N/A	N/A

15:00 - 15:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.61	0.04	0.36	4.04	8.12			N/A	N/A
B - A12 West	3.86	0.05	0.58	10.94	18.20			N/A	N/A
C - B1438 East	1.66	0.05	0.49	4.30	6.75			N/A	N/A

15:15 - 15:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	9.10	0.05	0.88	26.48	45.89			N/A	N/A
B - A12 West	24.87	1.38	16.96	56.47	73.47			N/A	N/A
C - B1438 East	8.59	0.11	3.01	23.19	33.66			N/A	N/A

15:30 - 15:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	15.10	0.06	1.28	44.48	74.76			N/A	N/A
B - A12 West	46.41	4.79	35.96	96.70	121.27			N/A	N/A
C - B1438 East	14.34	0.16	5.92	38.41	54.87			N/A	N/A

15:45 - 16:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.70	0.04	0.39	4.49	8.29			N/A	N/A
B - A12 West	4.64	0.04	0.43	12.83	23.99			N/A	N/A
C - B1438 East	1.97	0.04	0.38	5.14	9.90			N/A	N/A

16:00 - 16:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.06	0.03	0.31	1.94	5.39			N/A	N/A
B - A12 West	2.03	0.03	0.30	2.03	8.97			N/A	N/A
C - B1438 East	0.93	0.03	0.29	1.16	3.82			N/A	N/A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J26	A12 / B1438	Standard Roundabout		A, C, B	21.82	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1299	100.000
B - A12 West		ONE HOUR	✓	1571	100.000
C - B1438 East		ONE HOUR	✓	555	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	7	1171	122
	B - A12 West	1293	2	276
	C - B1438 East	193	362	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 West	C - B1438 East
From	A - A12 North	0	2	4
	B - A12 West	3	0	1
	C - B1438 East	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.71	6.18	2.4	4.8	A	1192	1788
B - A12 West	0.95	32.57	14.7	77.4	D	1442	2163
C - B1438 East	0.83	28.04	4.5	23.4	D	509	764

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	978	245	208	2070	0.472	975	1117	0.0	0.9	3.274	A
B - A12 West	1183	296	149	1859	0.636	1176	1150	0.0	1.7	5.220	A
C - B1438 East	418	104	885	936	0.447	415	298	0.0	0.8	6.869	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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A - A12 North	1168	292	249	2046	0.571	1166	1336	0.9	1.3	4.085	A
B - A12 West	1412	353	179	1841	0.767	1407	1377	1.7	3.2	8.181	A
C - B1438 East	499	125	1059	851	0.586	497	357	0.8	1.4	10.081	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1431	358	300	2015	0.710	1426	1609	1.3	2.4	6.065	A
B - A12 West	1730	432	216	1818	0.951	1693	1678	3.2	12.4	23.831	C
C - B1438 East	611	153	1295	737	0.829	600	431	1.4	4.2	24.497	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1431	358	305	2013	0.711	1430	1635	2.4	2.4	6.180	A
B - A12 West	1730	432	220	1816	0.953	1721	1689	12.4	14.7	32.571	D
C - B1438 East	611	153	1299	735	0.831	610	437	4.2	4.5	28.044	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1168	292	258	2040	0.572	1172	1383	2.4	1.4	4.167	A
B - A12 West	1412	353	184	1838	0.769	1457	1392	14.7	3.5	10.511	B
C - B1438 East	499	125	1064	849	0.588	511	366	4.5	1.5	11.028	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	978	245	211	2069	0.473	980	1130	1.4	0.9	3.310	A
B - A12 West	1183	296	151	1858	0.637	1190	1159	3.5	1.8	5.443	A
C - B1438 East	418	104	890	933	0.448	420	301	1.5	0.8	7.054	A

Queue Variation Results for each time segment

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.89	0.55	1.00	1.40	1.45			N/A	N/A
B - A12 West	1.72	0.54	1.11	2.54	2.92			N/A	N/A
C - B1438 East	0.80	0.55	1.00	1.40	1.45			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.32	0.05	0.50	3.19	4.85			N/A	N/A
B - A12 West	3.18	0.05	0.48	8.92	14.99			N/A	N/A
C - B1438 East	1.38	0.06	0.72	3.23	4.75			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.39	0.03	0.27	2.39	2.53			N/A	N/A
B - A12 West	12.37	0.08	2.08	36.03	57.01			N/A	N/A
C - B1438 East	4.19	0.04	0.39	10.88	22.47			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	2.43	0.03	0.26	2.43	2.43			N/A	N/A
B - A12 West	14.71	0.05	0.75	42.29	77.44			N/A	N/A
C - B1438 East	4.51	0.03	0.33	7.52	23.42			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	1.35	0.11	1.13	2.46	3.12			N/A	N/A
B - A12 West	3.46	0.04	0.43	9.60	17.57			N/A	N/A
C - B1438 East	1.47	0.04	0.42	3.84	6.46			N/A	N/A

18:00 - 18:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
A - A12 North	0.90	0.05	0.60	1.80	2.57			N/A	N/A
B - A12 West	1.78	0.03	0.31	2.78	8.98			N/A	N/A
C - B1438 East	0.82	0.03	0.31	1.64	3.99			N/A	N/A

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: 2019.08.13_J27_Model_CV_Adjusted v11_Fixed.j9
 Path: \\user01cam1uk.uk.wspgroup.com\projects\50400326 - Sizewell C transport planning\Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\For Issue\Scoped In\11 fixed\J27\Model
 Report generation date: 13/03/2020 14:54:51

- »2019 Base Year, 6-7 AM
- »2019 Base Year, 7-8 AM
- »2019 Base Year, 8-9 AM
- »2019 Base Year, 3-4 PM
- »2019 Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
- »2023 Reference Case, 8-9 AM
- »2023 Reference Case, 3-4 PM
- »2023 Reference Case, 5-6 PM
- »2023 Early Years, 6-7 AM
- »2023 Early Years, 7-8 AM
- »2023 Early Years, 8-9 AM
- »2023 Early Years, 3-4 PM
- »2023 Early Years, 5-6 PM
- »2028 Reference Case, 6-7 AM
- »2028 Reference Case, 7-8 AM
- »2028 Reference Case, 8-9 AM
- »2028 Reference Case, 3-4 PM
- »2028 Reference Case, 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case, 6-7 AM
- »2034 Reference Case, 7-8 AM
- »2034 Reference Case, 8-9 AM
- »2034 Reference Case, 3-4 PM
- »2034 Reference Case, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North	D1	0.6	2.65	0.38	A	D2	5.0	10.64	0.84	B	D3	35.0	74.16	0.99	F	D4	5.1	11.68	0.84	B	D5	2.6	6.27	0.73	A
B - Grundisburgh Rd West		0.1	4.02	0.07	A		0.7	11.94	0.41	B		14.4	122.08	0.96	F		7.8	79.33	0.93	F		1.7	20.91	0.64	C
C - A12 South		0.4	2.78	0.31	A		5.0	13.47	0.84	B		9.5	25.26	0.91	D		20.1	46.96	0.98	E		8.7	20.65	0.91	C
D - B1079 East		0.1	4.34	0.08	A		0.8	15.26	0.44	C		11.4	123.17	0.95	F		3.0	30.02	0.76	D		1.0	11.64	0.50	B
2023 Reference Case																									
A - A12 North	D6	0.7	2.81	0.41	A	D7	6.1	13.31	0.87	B	D8	19.9	43.75	0.96	E	D9	6.1	14.01	0.87	B	D10	3.2	7.59	0.76	A
B - Grundisburgh Rd West		0.1	4.35	0.11	A		1.9	23.86	0.67	C		9.6	950.35	1.19	F		70.0	550.32	1.32	F		10.5	94.39	0.97	F
C - A12 South		0.5	2.88	0.34	A		9.2	23.59	0.91	C		9.6	25.36	0.91	D		62.8	120.00	1.06	F		16.0	36.52	0.96	E
D - B1079 East		0.1	4.58	0.09	A		1.1	19.84	0.53	C		13.1	145.24	0.96	F		7.1	65.97	0.91	F		1.6	16.74	0.62	C
2023 Early Years																									
A - A12 North	D11	0.7	2.84	0.42	A	D12	5.6	11.98	0.86	B	D13	14.1	30.78	0.94	D	D14	6.9	15.98	0.88	C	D15	4.0	9.32	0.80	A
B - Grundisburgh Rd West		0.1	4.79	0.13	A		3.6	45.68	0.81	E		234.9	1928.28	1.41	F		74.9	603.38	1.33	F		11.3	100.38	0.98	F
C - A12 South		0.7	3.28	0.41	A		35.9	77.69	1.02	F		43.3	106.37	1.00	F		82.6	155.54	1.09	F		22.6	49.54	0.98	E
D - B1079 East		0.1	4.63	0.10	A		1.7	26.44	0.64	D		9.3	102.63	0.92	F		9.4	84.18	0.95	F		1.8	19.77	0.66	C
2028 Reference Case																									
A - A12 North	D16	0.7	2.79	0.41	A	D17	7.6	15.57	0.89	C	D18	101.6	191.14	1.03	F	D19	9.3	20.14	0.91	C	D20	4.0	8.79	0.80	A
B - Grundisburgh Rd West		0.1	4.20	0.07	A		0.7	15.45	0.42	C		5.8	61.87	0.86	F		5.5	64.27	0.88	F		2.2	28.23	0.70	D
C - A12 South		0.6	2.98	0.36	A		25.4	56.81	0.99	F		189.7	419.59	1.08	F		80.9	149.23	1.09	F		35.6	71.15	1.01	F
D - B1079 East		0.1	4.49	0.10	A		1.3	21.07	0.57	C		92.6	779.72	1.16	F		11.3	94.98	0.98	F		2.0	20.01	0.67	C
2028 Peak Construction																									
A - A12 North	D21	0.7	2.81	0.42	A	D22	5.4	11.01	0.85	B	D23	62.2	120.30	1.01	F	D24	11.3	24.66	0.93	C	D25	4.1	9.21	0.81	A
B - Grundisburgh Rd West		0.1	5.10	0.10	A		0.8	17.51	0.46	C		14.7	145.45	0.96	F		6.2	68.61	0.90	F		2.5	30.98	0.73	D
C - A12 South		1.0	3.80	0.50	A		52.0	104.72	1.05	F		179.0	410.49	1.08	F		81.2	154.70	1.09	F		35.6	72.38	1.02	F
D - B1079 East		0.1	4.54	0.11	A		1.6	23.31	0.62	C		102.7	888.95	1.19	F		13.9	112.97	1.01	F		2.0	20.25	0.68	C
2034 Reference Case																									
A - A12 North	D26	0.8	2.91	0.43	A	D27	6.3	12.89	0.87	B	D28	124.2	238.95	1.04	F	D29	14.0	29.84	0.95	D	D30	4.9	10.54	0.83	B
B - Grundisburgh Rd West		0.1	4.40	0.08	A		0.8	16.92	0.45	C		96.5	772.75	1.15	F		12.1	107.37	0.98	F		3.0	33.94	0.77	D
C - A12 South		0.7	3.14	0.40	A		29.9	64.45	1.00	F		349.1	762.14	1.15	F		126.8	279.05	1.15	F		73.9	132.38	1.08	F
D - B1079 East		0.1	4.71	0.12	A		1.8	25.25	0.66	D		143.1	1132.71	1.23	F		38.7	246.68	1.17	F		3.8	33.53	0.81	D
2034 Operational Led																									
A - A12 North	D31	0.8	2.91	0.44	A	D32	6.1	12.55	0.87	B	D33	124.1	239.61	1.04	F	D34	14.1	30.07	0.95	D	D35	4.9	10.56	0.83	B
B - Grundisburgh Rd West		0.1	4.40	0.08	A		0.8	16.72	0.44	C		120.0	983.01	1.19	F		12.5	110.66	0.98	F		3.2	35.15	0.78	E

C - A12 South	D31	0.7	3.14	0.40	A	D32	31.4	67.08	1.01	F	D33	346.5	756.73	1.15	F	D34	128.2	283.40	1.15	F	D35	76.1	135.83	1.08	F
D - B1079 East		0.1	4.71	0.12	A		1.8	25.26	0.66	D		140.5	1107.66	1.23	F		39.2	249.35	1.17	F		3.8	33.71	0.81	D

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / B1079 Grundsburg Road
Location	52° 5'45.80"N, 1° 17'54.03"E
Site number	27
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D3	2019 Base Year	8-9 AM	FLAT	07:45	09:15	90	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D8	2023 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D13	2023 Early Years	8-9 AM	FLAT	07:45	09:15	90	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D18	2028 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D23	2028 Peak Construction	8-9 AM	FLAT	07:45	09:15	90	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D28	2034 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D33	2034 Operational Led	8-9 AM	FLAT	07:45	09:15	90	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15		15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	2.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Grundisburgh Rd West	
C	A12 South	
D	B1079 East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.40	7.40	0.0	32.9	55.1	9.0	
B - Grundisburgh Rd West	2.70	6.10	12.0	22.1	55.1	13.5	
C - A12 South	6.70	7.80	5.2	25.1	55.1	3.5	
D - B1079 East	2.60	7.10	11.6	26.6	55.1	6.5	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct		-80
B - Grundisburgh Rd West	Direct		-65
C - A12 South	Direct		-300
D - B1079 East	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.745	2369
B - Grundisburgh Rd West	0.554	1377
C - A12 South	0.749	2156
D - B1079 East	0.578	1525

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	752	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	528	100.000
D - B1079 East		ONE HOUR	✓	63	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	63	676	8
	B - Grundisburgh Rd West	17	0	34	11
	C - A12 South	484	32	2	10
	D - B1079 East	20	15	28	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
A - A12 North		0	2	7	0

	B - Grundisburgh Rd West	0	0	12	0
From	C - A12 South	11	3	0	0
	D - B1079 East	10	0	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.38	2.65	0.6	A	690	1035
B - Grundisburgh Rd West	0.07	4.02	0.1	A	57	85
C - A12 South	0.31	2.78	0.4	A	485	727
D - B1079 East	0.08	4.34	0.1	A	58	87

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	566	142	43	2203	0.257	565	395	0.0	0.3	2.195	A
B - Grundisburgh Rd West	47	12	391	1069	0.044	46	83	0.0	0.0	3.521	A
C - A12 South	398	99	77	1902	0.209	396	556	0.0	0.3	2.390	A
D - B1079 East	47	12	586	1049	0.045	47	22	0.0	0.0	3.593	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	676	169	51	2196	0.308	676	473	0.3	0.4	2.367	A
B - Grundisburgh Rd West	56	14	468	1024	0.054	56	99	0.0	0.1	3.715	A
C - A12 South	475	119	93	1892	0.251	474	665	0.3	0.3	2.540	A
D - B1079 East	57	14	701	985	0.057	57	26	0.0	0.1	3.875	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	828	207	63	2188	0.378	827	579	0.4	0.6	2.645	A
B - Grundisburgh Rd West	68	17	573	964	0.071	68	121	0.1	0.1	4.018	A
C - A12 South	581	145	113	1877	0.310	581	814	0.3	0.4	2.777	A
D - B1079 East	69	17	858	898	0.077	69	32	0.1	0.1	4.341	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	828	207	63	2188	0.378	828	579	0.6	0.6	2.647	A
B - Grundisburgh Rd West	68	17	574	964	0.071	68	121	0.1	0.1	4.019	A
C - A12 South	581	145	113	1877	0.310	581	815	0.4	0.4	2.778	A
D - B1079 East	69	17	859	898	0.077	69	32	0.1	0.1	4.343	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	676	169	51	2196	0.308	677	473	0.6	0.4	2.369	A
B - Grundisburgh Rd West	56	14	469	1024	0.054	56	99	0.1	0.1	3.717	A
C - A12 South	475	119	93	1891	0.251	475	666	0.4	0.3	2.542	A
D - B1079 East	57	14	702	985	0.058	57	26	0.1	0.1	3.880	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	566	142	43	2203	0.257	567	396	0.4	0.3	2.202	A
B - Grundisburgh Rd West	47	12	393	1068	0.044	47	83	0.1	0.0	3.524	A
C - A12 South	398	99	78	1902	0.209	398	558	0.3	0.3	2.393	A
D - B1079 East	47	12	588	1048	0.045	47	22	0.1	0.0	3.597	A

2019 Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	12.09	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1594	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	191	100.000
C - A12 South		ONE HOUR	✓	1258	100.000
D - B1079 East		ONE HOUR	✓	167	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	285	1261	41
	B - Grundisburgh Rd West	35	0	96	60
	C - A12 South	1113	76	2	67
	D - B1079 East	74	53	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	4	0
	B - Grundisburgh Rd West	6	0	6	3
	C - A12 South	10	4	0	0
	D - B1079 East	1	0	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	10.64	5.0	B	1463	2194
B - Grundisburgh Rd West	0.41	11.94	0.7	B	175	263
C - A12 South	0.84	13.47	5.0	B	1154	1732
D - B1079 East	0.44	15.26	0.8	C	153	230

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1200	300	168	2150	0.558	1195	921	0.0	1.3	3.751	A
B - Grundisburgh Rd West	144	36	946	766	0.188	143	310	0.0	0.2	5.788	A
C - A12 South	947	237	314	1754	0.540	942	1049	0.0	1.2	4.414	A
D - B1079 East	126	31	1238	761	0.165	125	126	0.0	0.2	5.655	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1433	358	202	2125	0.674	1430	1102	1.3	2.0	5.155	A
B - Grundisburgh Rd West	172	43	1132	659	0.260	171	371	0.2	0.3	7.368	A

C - A12 South	1131	283	376	1710	0.661	1128	1255	1.2	1.9	6.155	A
D - B1079 East	150	38	1481	617	0.243	150	151	0.2	0.3	7.688	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1755	439	246	2092	0.839	1744	1342	2.0	4.9	10.018	B
B - Grundisburgh Rd West	210	53	1379	518	0.406	209	453	0.3	0.7	11.611	B
C - A12 South	1385	346	458	1652	0.839	1374	1530	1.9	4.8	12.461	B
D - B1079 East	184	46	1806	426	0.432	182	184	0.3	0.7	14.670	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1755	439	248	2091	0.839	1754	1352	4.9	5.0	10.640	B
B - Grundisburgh Rd West	210	53	1390	512	0.411	210	456	0.7	0.7	11.939	B
C - A12 South	1385	346	461	1649	0.840	1384	1540	4.8	5.0	13.468	B
D - B1079 East	184	46	1817	419	0.438	184	185	0.7	0.8	15.263	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1433	358	204	2123	0.675	1445	1117	5.0	2.1	5.395	A
B - Grundisburgh Rd West	172	43	1148	651	0.264	173	376	0.7	0.4	7.557	A
C - A12 South	1131	283	380	1707	0.663	1143	1268	5.0	2.0	6.516	A
D - B1079 East	150	38	1496	608	0.247	152	152	0.8	0.3	7.916	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1200	300	170	2148	0.559	1203	928	2.1	1.3	3.824	A
B - Grundisburgh Rd West	144	36	954	761	0.189	144	313	0.4	0.2	5.839	A
C - A12 South	947	237	316	1752	0.541	950	1056	2.0	1.2	4.511	A
D - B1079 East	126	31	1246	756	0.166	126	127	0.3	0.2	5.725	A

2019 Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	65.85	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1756	100.000
B - Grundisburgh Rd West		FLAT	✓	446	100.000
C - A12 South		FLAT	✓	1406	100.000
D - B1079 East		FLAT	✓	355	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	373	1298	69
	B - Grundisburgh Rd West	61	0	185	200
	C - A12 South	1077	89	1	239
	D - B1079 East	154	71	130	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	7	1
	B - Grundisburgh Rd West	15	0	4	1
	C - A12 South	11	6	0	4
	D - B1079 East	2	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.99	74.16	35.0	F	1756	2634
B - Grundisburgh Rd West	0.96	122.08	14.4	F	446	669
C - A12 South	0.91	25.26	9.5	D	1406	2109
D - B1079 East	0.95	123.17	11.4	F	355	532

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1756	439	598	1798	0.977	1692	1273	0.0	16.0	26.117	D
B - Grundisburgh Rd West	446	111	1451	485	0.919	420	514	0.0	6.5	45.095	E
C - A12 South	1406	351	588	1560	0.901	1376	1549	0.0	7.5	17.430	C
D - B1079 East	355	89	1801	412	0.863	337	489	0.0	4.5	41.567	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1756	439	614	1785	0.984	1732	1299	16.0	22.1	46.444	E
B - Grundisburgh Rd West	446	111	1479	469	0.951	435	526	6.5	9.3	79.091	F

C - A12 South	1406	351	603	1550	0.907	1402	1588	7.5	8.5	23.103	C
D - B1079 East	355	89	1845	385	0.922	346	501	4.5	6.9	73.619	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1756	439	618	1783	0.985	1739	1303	22.1	26.4	56.147	F
B - Grundisburgh Rd West	446	111	1482	467	0.955	439	528	9.3	11.1	95.741	F
C - A12 South	1406	351	606	1548	0.909	1404	1596	8.5	9.0	24.199	C
D - B1079 East	355	89	1853	380	0.935	349	504	6.9	8.4	91.674	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1756	439	620	1781	0.986	1742	1304	26.4	29.8	63.371	F
B - Grundisburgh Rd West	446	111	1484	466	0.957	441	529	11.1	12.5	106.935	F
C - A12 South	1406	351	608	1546	0.909	1405	1600	9.0	9.2	24.726	C
D - B1079 East	355	89	1858	377	0.941	350	505	8.4	9.6	104.435	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1756	439	621	1781	0.986	1745	1305	29.8	32.6	69.220	F
B - Grundisburgh Rd West	446	111	1485	466	0.958	442	530	12.5	13.5	115.367	F
C - A12 South	1406	351	609	1546	0.910	1405	1603	9.2	9.4	25.043	D
D - B1079 East	355	89	1861	376	0.945	351	506	9.6	10.6	114.622	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1756	439	622	1780	0.987	1746	1306	32.6	35.0	74.157	F
B - Grundisburgh Rd West	446	111	1485	465	0.958	443	530	13.5	14.4	122.080	F
C - A12 South	1406	351	610	1545	0.910	1405	1604	9.4	9.5	25.255	D
D - B1079 East	355	89	1862	374	0.948	352	506	10.6	11.4	123.171	F

2019 Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	33.90	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1466	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	340	100.000
C - A12 South		ONE HOUR	✓	1448	100.000
D - B1079 East		ONE HOUR	✓	344	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	225	1129	98
	B - Grundisburgh Rd West	70	1	141	128
	C - A12 South	1200	125	3	120
	D - B1079 East	164	95	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	4	7	3
	B - Grundisburgh Rd West	6	0	4	2
	C - A12 South	7	5	0	1
	D - B1079 East	2	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	11.68	5.1	B	1345	2018
B - Grundisburgh Rd West	0.93	79.33	7.8	F	312	468
C - A12 South	0.98	46.96	20.1	E	1329	1993
D - B1079 East	0.76	30.02	3.0	D	316	473

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1104	276	293	2013	0.548	1099	1083	0.0	1.2	3.920	A
B - Grundisburgh Rd West	256	64	1123	690	0.371	254	334	0.0	0.6	8.200	A
C - A12 South	1090	273	373	1760	0.619	1084	1017	0.0	1.6	5.273	A
D - B1079 East	259	65	1134	816	0.318	257	259	0.0	0.5	6.427	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1318	329	351	1971	0.669	1315	1296	1.2	2.0	5.457	A
B - Grundisburgh Rd West	306	76	1343	566	0.540	303	400	0.6	1.1	13.603	B

C - A12 South	1302	325	447	1706	0.763	1296	1217	1.6	3.1	8.652	A
D - B1079 East	309	77	1356	680	0.455	308	310	0.5	0.8	9.625	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1614	404	415	1926	0.838	1603	1547	2.0	4.8	10.785	B
B - Grundisburgh Rd West	374	94	1604	418	0.896	357	483	1.1	5.5	49.658	E
C - A12 South	1594	399	542	1636	0.975	1546	1477	3.1	15.3	30.318	D
D - B1079 East	379	95	1648	503	0.752	371	370	0.8	2.7	25.896	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1614	404	424	1919	0.841	1613	1576	4.8	5.1	11.679	B
B - Grundisburgh Rd West	374	94	1635	401	0.934	365	489	5.5	7.8	79.330	F
C - A12 South	1594	399	548	1631	0.978	1575	1490	15.3	20.1	46.962	E
D - B1079 East	379	95	1661	495	0.765	378	376	2.7	3.0	30.020	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1318	329	379	1951	0.675	1330	1366	5.1	2.1	5.897	A
B - Grundisburgh Rd West	306	76	1414	526	0.581	331	411	7.8	1.5	20.689	C
C - A12 South	1302	325	457	1699	0.766	1368	1243	20.1	3.4	12.982	B
D - B1079 East	309	77	1382	665	0.465	318	327	3.0	0.9	10.605	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1104	276	299	2008	0.550	1107	1098	2.1	1.2	4.009	A
B - Grundisburgh Rd West	256	64	1137	682	0.375	259	337	1.5	0.6	8.574	A
C - A12 South	1090	273	378	1757	0.620	1097	1027	3.4	1.7	5.512	A
D - B1079 East	259	65	1144	809	0.320	261	263	0.9	0.5	6.581	A

2019 Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	14.07	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1379	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	275	100.000
C - A12 South		ONE HOUR	✓	1454	100.000
D - B1079 East		ONE HOUR	✓	280	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	195	1103	76
	B - Grundisburgh Rd West	63	0	90	122
	C - A12 South	1260	131	0	63
	D - B1079 East	118	98	64	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	3	3
	B - Grundisburgh Rd West	0	0	1	0
	C - A12 South	3	2	0	5
	D - B1079 East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	6.27	2.6	A	1265	1898
B - Grundisburgh Rd West	0.64	20.91	1.7	C	252	379
C - A12 South	0.91	20.65	8.7	C	1334	2001
D - B1079 East	0.50	11.64	1.0	B	257	385

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1038	260	206	2163	0.480	1035	1083	0.0	0.9	3.179	A
B - Grundisburgh Rd West	207	52	1083	760	0.272	206	318	0.0	0.4	6.477	A
C - A12 South	1095	274	312	1873	0.584	1089	943	0.0	1.4	4.559	A
D - B1079 East	211	53	1045	905	0.233	210	195	0.0	0.3	5.169	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1240	310	246	2133	0.581	1238	1296	0.9	1.4	4.014	A
B - Grundisburgh Rd West	247	62	1296	640	0.387	246	380	0.4	0.6	9.125	A

C - A12 South	1307	327	373	1828	0.715	1303	1128	1.4	2.4	6.797	A
D - B1079 East	252	63	1250	784	0.321	251	234	0.3	0.5	6.746	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1518	380	299	2094	0.725	1513	1571	1.4	2.6	6.149	A
B - Grundisburgh Rd West	303	76	1571	484	0.626	299	463	0.6	1.6	19.078	C
C - A12 South	1601	400	456	1767	0.906	1579	1378	2.4	8.0	17.377	C
D - B1079 East	308	77	1528	621	0.497	306	284	0.5	1.0	11.385	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1518	380	302	2092	0.726	1518	1589	2.6	2.6	6.274	A
B - Grundisburgh Rd West	303	76	1589	474	0.639	302	467	1.6	1.7	20.907	C
C - A12 South	1601	400	458	1766	0.907	1598	1384	8.0	8.7	20.649	C
D - B1079 East	308	77	1533	617	0.499	308	287	1.0	1.0	11.640	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1240	310	251	2129	0.582	1245	1323	2.6	1.4	4.092	A
B - Grundisburgh Rd West	247	62	1323	624	0.396	251	385	1.7	0.7	9.758	A
C - A12 South	1307	327	376	1826	0.716	1331	1136	8.7	2.6	7.624	A
D - B1079 East	252	63	1258	779	0.323	254	238	1.0	0.5	6.876	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1038	260	208	2161	0.480	1040	1093	1.4	0.9	3.218	A
B - Grundisburgh Rd West	207	52	1093	754	0.275	208	320	0.7	0.4	6.608	A
C - A12 South	1095	274	314	1872	0.585	1099	948	2.6	1.4	4.689	A
D - B1079 East	211	53	1051	901	0.234	211	197	0.5	0.3	5.223	A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	3.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	805	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	95	100.000
C - A12 South		ONE HOUR	✓	591	100.000
D - B1079 East		ONE HOUR	✓	73	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	68	722	11
	B - Grundisburgh Rd West	22	0	61	13
	C - A12 South	533	37	2	19
	D - B1079 East	23	17	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	4
	B - Grundisburgh Rd West	0	0	10	0
	C - A12 South	9	2	0	1
	D - B1079 East	10	0	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.41	2.81	0.7	A	739	1109
B - Grundisburgh Rd West	0.11	4.35	0.1	A	87	131
C - A12 South	0.34	2.88	0.5	A	542	814
D - B1079 East	0.09	4.58	0.1	A	67	101

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	606	152	71	2192	0.277	605	437	0.0	0.4	2.265	A
B - Grundisburgh Rd West	71	18	437	1047	0.068	71	91	0.0	0.1	3.689	A
C - A12 South	445	111	85	1928	0.231	444	614	0.0	0.3	2.422	A
D - B1079 East	55	14	644	1034	0.053	55	32	0.0	0.1	3.676	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	724	181	85	2182	0.332	724	523	0.4	0.5	2.468	A
B - Grundisburgh Rd West	85	21	523	998	0.085	85	109	0.1	0.1	3.943	A

C - A12 South	531	133	101	1916	0.277	531	735	0.3	0.4	2.598	A
D - B1079 East	66	16	770	963	0.068	66	38	0.1	0.1	4.010	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	887	222	104	2168	0.409	886	641	0.5	0.7	2.807	A
B - Grundisburgh Rd West	104	26	640	932	0.112	104	134	0.1	0.1	4.351	A
C - A12 South	651	163	124	1900	0.342	650	900	0.4	0.5	2.878	A
D - B1079 East	81	20	943	867	0.093	81	47	0.1	0.1	4.578	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	887	222	104	2168	0.409	887	641	0.7	0.7	2.810	A
B - Grundisburgh Rd West	104	26	641	931	0.112	104	134	0.1	0.1	4.353	A
C - A12 South	651	163	124	1900	0.343	651	901	0.5	0.5	2.880	A
D - B1079 East	81	20	944	866	0.093	81	47	0.1	0.1	4.581	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	724	181	85	2182	0.332	725	524	0.7	0.5	2.471	A
B - Grundisburgh Rd West	85	21	524	998	0.085	85	110	0.1	0.1	3.946	A
C - A12 South	531	133	101	1916	0.277	532	736	0.5	0.4	2.603	A
D - B1079 East	66	16	772	963	0.068	66	38	0.1	0.1	4.016	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	606	152	71	2192	0.277	607	439	0.5	0.4	2.272	A
B - Grundisburgh Rd West	71	18	439	1046	0.068	71	92	0.1	0.1	3.693	A
C - A12 South	445	111	85	1928	0.231	445	616	0.4	0.3	2.430	A
D - B1079 East	55	14	646	1033	0.053	55	32	0.1	0.1	3.681	A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	18.72	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1567	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	276	100.000
C - A12 South		ONE HOUR	✓	1361	100.000
D - B1079 East		ONE HOUR	✓	183	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	291	1223	46
	B - Grundisburgh Rd West	41	0	171	64
	C - A12 South	1191	85	2	83
	D - B1079 East	77	56	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	6	0
	B - Grundisburgh Rd West	4	0	5	4
	C - A12 South	10	3	0	0
	D - B1079 East	1	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.31	6.1	B	1438	2157
B - Grundisburgh Rd West	0.67	23.86	1.9	C	253	380
C - A12 South	0.91	23.59	9.2	C	1249	1873
D - B1079 East	0.53	19.84	1.1	C	168	252

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1180	295	240	2074	0.569	1174	985	0.0	1.3	3.980	A
B - Grundisburgh Rd West	208	52	1019	728	0.286	206	324	0.0	0.4	6.884	A
C - A12 South	1025	256	323	1747	0.587	1019	1083	0.0	1.4	4.910	A
D - B1079 East	138	34	1270	737	0.187	137	144	0.0	0.2	5.985	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1409	352	287	2039	0.691	1405	1179	1.3	2.2	5.646	A
B - Grundisburgh Rd West	248	62	1219	612	0.406	247	387	0.4	0.7	9.832	A

C - A12 South	1224	306	387	1702	0.719	1219	1296	1.4	2.5	7.394	A
D - B1079 East	164	41	1519	588	0.280	164	173	0.2	0.4	8.468	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1725	431	348	1995	0.865	1711	1427	2.2	5.8	12.098	B
B - Grundisburgh Rd West	304	76	1475	464	0.655	300	471	0.7	1.8	21.311	C
C - A12 South	1499	375	470	1643	0.912	1475	1577	2.5	8.3	19.287	C
D - B1079 East	201	50	1849	391	0.515	199	209	0.4	1.0	18.475	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1725	431	352	1991	0.866	1724	1446	5.8	6.1	13.307	B
B - Grundisburgh Rd West	304	76	1494	453	0.671	303	475	1.8	1.9	23.857	C
C - A12 South	1499	375	474	1640	0.914	1495	1591	8.3	9.2	23.586	C
D - B1079 East	201	50	1864	382	0.527	201	212	1.0	1.1	19.843	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1409	352	294	2034	0.693	1424	1208	6.1	2.3	6.043	A
B - Grundisburgh Rd West	248	62	1249	595	0.417	253	394	1.9	0.7	10.680	B
C - A12 South	1224	306	393	1698	0.721	1250	1316	9.2	2.7	8.486	A
D - B1079 East	164	41	1541	575	0.286	167	176	1.1	0.4	8.882	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1180	295	243	2071	0.569	1183	996	2.3	1.3	4.072	A
B - Grundisburgh Rd West	208	52	1029	722	0.288	209	326	0.7	0.4	7.041	A
C - A12 South	1025	256	326	1745	0.587	1030	1093	2.7	1.4	5.068	A
D - B1079 East	138	34	1280	731	0.188	138	146	0.4	0.2	6.082	A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	167.76	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1707	100.000
B - Grundisburgh Rd West		FLAT	✓	564	100.000
C - A12 South		FLAT	✓	1410	100.000
D - B1079 East		FLAT	✓	343	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	366	1246	79
	B - Grundisburgh Rd West	56	0	289	219
	C - A12 South	1158	97	1	155
	D - B1079 East	126	75	143	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	9	2
	B - Grundisburgh Rd West	18	0	3	0
	C - A12 South	11	5	0	11
	D - B1079 East	2	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.96	43.75	19.9	E	1707	2561
B - Grundisburgh Rd West	1.19	950.35	134.9	F	564	846
C - A12 South	0.91	25.36	9.6	D	1410	2115
D - B1079 East	0.96	145.24	13.1	F	343	515

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1707	427	579	1782	0.958	1655	1314	0.0	13.0	22.852	C
B - Grundisburgh Rd West	564	141	1419	494	1.142	473	520	0.0	22.8	103.614	F
C - A12 South	1410	353	559	1563	0.902	1380	1586	0.0	7.5	17.495	C
D - B1079 East	343	86	1822	387	0.886	323	412	0.0	5.0	47.022	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1707	427	584	1779	0.960	1695	1339	13.0	16.0	35.783	E
B - Grundisburgh Rd West	564	141	1447	477	1.181	475	532	22.8	44.9	273.490	F

C - A12 South	1410	353	573	1553	0.908	1406	1620	7.5	8.6	23.220	C
D - B1079 East	343	86	1861	363	0.945	332	418	5.0	7.9	86.509	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1707	427	583	1779	0.960	1701	1342	16.0	17.6	39.440	E
B - Grundisburgh Rd West	564	141	1451	475	1.187	475	535	44.9	67.3	439.853	F
C - A12 South	1410	353	577	1551	0.909	1408	1625	8.6	9.0	24.322	C
D - B1079 East	343	86	1866	360	0.953	336	418	7.9	9.7	108.698	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1707	427	583	1779	0.960	1703	1343	17.6	18.6	41.476	E
B - Grundisburgh Rd West	564	141	1452	475	1.189	474	535	67.3	89.8	608.913	F
C - A12 South	1410	353	579	1550	0.910	1409	1627	9.0	9.3	24.845	C
D - B1079 East	343	86	1868	359	0.956	338	418	9.7	11.1	123.954	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1707	427	583	1779	0.960	1704	1344	18.6	19.3	42.807	E
B - Grundisburgh Rd West	564	141	1453	474	1.190	474	536	89.8	112.3	779.334	F
C - A12 South	1410	353	579	1549	0.910	1409	1628	9.3	9.5	25.155	D
D - B1079 East	343	86	1869	358	0.958	339	418	11.1	12.2	135.713	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1707	427	583	1779	0.959	1705	1344	19.3	19.9	43.751	E
B - Grundisburgh Rd West	564	141	1453	474	1.190	474	536	112.3	134.9	950.351	F
C - A12 South	1410	353	580	1549	0.911	1410	1629	9.5	9.6	25.359	D
D - B1079 East	343	86	1870	358	0.959	340	418	12.2	13.1	145.242	F

2023 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	123.36	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1481	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	454	100.000
C - A12 South		ONE HOUR	✓	1534	100.000
D - B1079 East		ONE HOUR	✓	379	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	240	1116	111
	B - Grundisburgh Rd West	81	1	233	139
	C - A12 South	1263	134	3	134
	D - B1079 East	197	102	80	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	8	2
	B - Grundisburgh Rd West	5	0	4	2
	C - A12 South	7	4	0	0
	D - B1079 East	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	14.01	6.1	B	1359	2038
B - Grundisburgh Rd West	1.32	550.32	70.0	F	417	625
C - A12 South	1.06	120.00	62.8	F	1407	2111
D - B1079 East	0.91	65.97	7.1	F	348	522

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1115	279	380	1934	0.576	1109	1162	0.0	1.3	4.337	A
B - Grundisburgh Rd West	342	86	1204	643	0.532	338	357	0.0	1.1	11.626	B
C - A12 South	1155	289	414	1727	0.669	1147	1072	0.0	2.0	6.123	A
D - B1079 East	286	71	1202	766	0.373	283	287	0.0	0.6	7.419	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1331	333	450	1884	0.707	1327	1387	1.3	2.4	6.418	A
B - Grundisburgh Rd West	408	102	1437	511	0.800	399	427	1.1	3.4	30.108	D

C - A12 South	1379	345	495	1668	0.827	1369	1279	2.0	4.4	11.679	B
D - B1079 East	341	85	1436	624	0.547	339	341	0.6	1.2	12.526	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1630	408	455	1881	0.867	1616	1579	2.4	5.9	12.950	B
B - Grundisburgh Rd West	500	125	1649	390	1.282	384	507	3.4	32.5	190.860	F
C - A12 South	1689	422	593	1596	1.058	1564	1503	4.4	35.7	56.464	F
D - B1079 East	418	104	1696	464	0.900	399	375	1.2	5.7	46.549	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1630	408	451	1884	0.865	1630	1598	5.9	6.1	14.007	B
B - Grundisburgh Rd West	500	125	1671	378	1.323	378	514	32.5	63.2	471.718	F
C - A12 South	1689	422	605	1587	1.064	1580	1512	35.7	62.8	120.002	F
D - B1079 East	418	104	1705	459	0.910	412	376	5.7	7.1	65.974	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1331	333	456	1880	0.708	1346	1590	6.1	2.5	6.911	A
B - Grundisburgh Rd West	408	102	1665	382	1.069	381	457	63.2	70.0	550.320	F
C - A12 South	1379	345	519	1651	0.835	1603	1290	62.8	6.7	77.613	F
D - B1079 East	341	85	1444	619	0.551	364	357	7.1	1.3	15.404	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1115	279	610	1769	0.630	1118	1236	2.5	1.7	5.554	A
B - Grundisburgh Rd West	342	86	1230	628	0.545	615	363	70.0	1.8	214.089	F
C - A12 South	1155	289	420	1723	0.670	1173	1221	6.7	2.1	6.755	A
D - B1079 East	286	71	1353	677	0.422	288	375	1.3	0.7	9.303	A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	29.44	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1391	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	374	100.000
C - A12 South		ONE HOUR	✓	1514	100.000
D - B1079 East		ONE HOUR	✓	313	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	169	1114	83
	B - Grundisburgh Rd West	79	0	167	128
	C - A12 South	1306	137	0	71
	D - B1079 East	141	100	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	4	2
	B - Grundisburgh Rd West	0	0	1	0
	C - A12 South	3	1	0	5
	D - B1079 East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	7.59	3.2	A	1277	1915
B - Grundisburgh Rd West	0.97	94.39	10.5	F	343	515
C - A12 South	0.96	36.52	16.0	E	1389	2083
D - B1079 East	0.62	16.74	1.6	C	287	431

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1047	262	273	2092	0.501	1043	1146	0.0	1.0	3.422	A
B - Grundisburgh Rd West	282	70	1140	723	0.389	279	319	0.0	0.6	8.058	A
C - A12 South	1139	285	326	1848	0.616	1133	1014	0.0	1.6	4.989	A
D - B1079 East	236	59	1106	863	0.273	234	211	0.0	0.4	5.714	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1251	313	327	2052	0.609	1249	1370	1.0	1.5	4.468	A
B - Grundisburgh Rd West	336	84	1364	596	0.564	334	382	0.6	1.3	13.598	B

C - A12 South	1361	340	390	1802	0.755	1355	1214	1.6	3.0	7.963	A
D - B1079 East	281	70	1324	734	0.383	280	252	0.4	0.6	7.919	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1532	383	383	2011	0.762	1526	1644	1.5	3.1	7.317	A
B - Grundisburgh Rd West	412	103	1638	439	0.937	389	463	1.3	7.0	56.068	F
C - A12 South	1666	417	476	1739	0.958	1626	1474	3.0	13.1	25.678	D
D - B1079 East	344	86	1609	564	0.610	341	300	0.6	1.5	15.864	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1532	383	392	2005	0.764	1532	1672	3.1	3.2	7.587	A
B - Grundisburgh Rd West	412	103	1666	423	0.973	398	468	7.0	10.5	94.387	F
C - A12 South	1666	417	479	1737	0.960	1655	1484	13.1	16.0	36.516	E
D - B1079 East	344	86	1619	559	0.616	344	305	1.5	1.6	16.736	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1251	313	360	2028	0.617	1257	1429	3.2	1.6	4.703	A
B - Grundisburgh Rd West	336	84	1417	565	0.595	372	390	10.5	1.5	21.905	C
C - A12 South	1361	340	395	1798	0.757	1411	1239	16.0	3.2	10.473	B
D - B1079 East	281	70	1349	719	0.391	285	268	1.6	0.7	8.355	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1047	262	279	2088	0.502	1050	1159	1.6	1.0	3.479	A
B - Grundisburgh Rd West	282	70	1153	716	0.393	285	322	1.5	0.7	8.419	A
C - A12 South	1139	285	329	1846	0.617	1146	1023	3.2	1.6	5.184	A
D - B1079 East	236	59	1115	858	0.275	237	214	0.7	0.4	5.805	A

2023 Early Years, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	3.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	818	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	99	100.000
C - A12 South		ONE HOUR	✓	694	100.000
D - B1079 East		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	68	734	12
	B - Grundisburgh Rd West	25	0	62	13
	C - A12 South	636	37	2	19
	D - B1079 East	26	17	35	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	4
	B - Grundisburgh Rd West	0	0	10	0
	C - A12 South	11	2	0	1
	D - B1079 East	9	0	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.84	0.7	A	751	1126
B - Grundisburgh Rd West	0.13	4.79	0.1	A	91	136
C - A12 South	0.41	3.28	0.7	A	637	955
D - B1079 East	0.10	4.63	0.1	A	71	106

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	616	154	72	2194	0.281	615	519	0.0	0.4	2.277	A
B - Grundisburgh Rd West	74	19	516	999	0.074	74	91	0.0	0.1	3.892	A
C - A12 South	523	131	87	1891	0.276	521	625	0.0	0.4	2.626	A
D - B1079 East	58	15	654	1034	0.056	58	33	0.0	0.1	3.689	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	736	184	86	2183	0.337	735	621	0.4	0.5	2.486	A
B - Grundisburgh Rd West	89	22	618	940	0.095	89	109	0.1	0.1	4.228	A

C - A12 South	624	156	104	1879	0.332	624	747	0.4	0.5	2.868	A
D - B1079 East	69	17	782	962	0.072	69	39	0.1	0.1	4.034	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	901	225	105	2169	0.415	900	760	0.5	0.7	2.836	A
B - Grundisburgh Rd West	109	27	757	860	0.127	109	134	0.1	0.1	4.790	A
C - A12 South	764	191	127	1863	0.410	763	915	0.5	0.7	3.274	A
D - B1079 East	85	21	957	863	0.099	85	48	0.1	0.1	4.625	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	901	225	105	2169	0.415	901	761	0.7	0.7	2.839	A
B - Grundisburgh Rd West	109	27	758	859	0.127	109	134	0.1	0.1	4.795	A
C - A12 South	764	191	127	1862	0.410	764	916	0.7	0.7	3.277	A
D - B1079 East	85	21	958	863	0.099	85	48	0.1	0.1	4.628	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	736	184	86	2183	0.337	736	622	0.7	0.5	2.489	A
B - Grundisburgh Rd West	89	22	619	939	0.095	89	110	0.1	0.1	4.235	A
C - A12 South	624	156	104	1879	0.332	625	749	0.7	0.5	2.874	A
D - B1079 East	69	17	783	961	0.072	70	39	0.1	0.1	4.041	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	616	154	72	2194	0.281	617	521	0.5	0.4	2.284	A
B - Grundisburgh Rd West	74	19	518	998	0.075	75	92	0.1	0.1	3.900	A
C - A12 South	523	131	87	1890	0.276	523	627	0.5	0.4	2.632	A
D - B1079 East	58	15	656	1032	0.056	58	33	0.1	0.1	3.697	A

2023 Early Years, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	43.47	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1593	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	279	100.000
C - A12 South		ONE HOUR	✓	1450	100.000
D - B1079 East		ONE HOUR	✓	213	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	292	1247	47
	B - Grundisburgh Rd West	38	0	166	75
	C - A12 South	1376	72	2	0
	D - B1079 East	89	72	52	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	6	0
	B - Grundisburgh Rd West	4	0	5	3
	C - A12 South	13	3	0	0
	D - B1079 East	1	0	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	11.98	5.6	B	1462	2192
B - Grundisburgh Rd West	0.81	45.68	3.6	E	256	384
C - A12 South	1.02	77.69	35.9	F	1331	1996
D - B1079 East	0.64	26.44	1.7	D	195	293

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1199	300	182	2113	0.568	1194	1129	0.0	1.3	3.897	A
B - Grundisburgh Rd West	210	53	1103	661	0.318	208	327	0.0	0.5	7.925	A
C - A12 South	1092	273	345	1678	0.651	1084	1099	0.0	1.8	5.993	A
D - B1079 East	160	40	1285	729	0.220	159	91	0.0	0.3	6.306	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1432	358	217	2086	0.686	1429	1350	1.3	2.1	5.445	A
B - Grundisburgh Rd West	251	63	1318	533	0.471	249	391	0.5	0.9	12.632	B

C - A12 South	1304	326	413	1632	0.799	1296	1315	1.8	3.8	10.487	B
D - B1079 East	191	48	1537	578	0.331	191	109	0.3	0.5	9.277	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1754	438	261	2054	0.854	1741	1585	2.1	5.4	11.050	B
B - Grundisburgh Rd West	307	77	1547	397	0.775	299	472	0.9	2.9	34.431	D
C - A12 South	1597	399	501	1571	1.016	1518	1599	3.8	23.5	42.555	E
D - B1079 East	234	59	1870	378	0.620	230	131	0.5	1.5	23.739	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1754	438	266	2051	0.855	1753	1615	5.4	5.6	11.981	B
B - Grundisburgh Rd West	307	77	1576	379	0.811	305	477	2.9	3.6	45.683	E
C - A12 South	1597	399	506	1567	1.019	1547	1613	23.5	35.9	77.690	F
D - B1079 East	234	59	1885	369	0.635	234	133	1.5	1.7	26.442	D

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1432	358	227	2079	0.689	1445	1481	5.6	2.3	5.800	A
B - Grundisburgh Rd West	251	63	1448	455	0.551	260	402	3.6	1.3	19.303	C
C - A12 South	1304	326	420	1627	0.801	1430	1336	35.9	4.4	27.987	D
D - B1079 East	191	48	1560	564	0.339	196	112	1.7	0.5	9.902	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1199	300	186	2109	0.568	1203	1147	2.3	1.3	3.988	A
B - Grundisburgh Rd West	210	53	1120	651	0.323	213	330	1.3	0.5	8.294	A
C - A12 South	1092	273	348	1676	0.651	1102	1110	4.4	1.9	6.377	A
D - B1079 East	160	40	1296	722	0.222	161	93	0.5	0.3	6.430	A

2023 Early Years, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	313.19	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1700	100.000
B - Grundisburgh Rd West		FLAT	✓	566	100.000
C - A12 South		FLAT	✓	1493	100.000
D - B1079 East		FLAT	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	366	1239	79
	B - Grundisburgh Rd West	59	0	289	218
	C - A12 South	1241	97	1	155
	D - B1079 East	128	75	143	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	11	2
	B - Grundisburgh Rd West	17	0	3	0
	C - A12 South	15	5	0	11
	D - B1079 East	2	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.94	30.78	14.1	D	1700	2550
B - Grundisburgh Rd West	1.41	1928.28	234.9	F	566	849
C - A12 South	1.00	106.37	43.3	F	1493	2240
D - B1079 East	0.92	102.63	9.3	F	345	518

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1700	425	529	1803	0.943	1655	1365	0.0	11.2	20.389	C
B - Grundisburgh Rd West	566	141	1470	436	1.297	424	519	0.0	35.4	166.522	F
C - A12 South	1493	373	563	1510	0.989	1426	1559	0.0	16.9	31.422	D
D - B1079 East	345	86	1796	394	0.875	326	389	0.0	4.8	44.773	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1700	425	522	1808	0.940	1694	1399	11.2	12.7	28.722	D
B - Grundisburgh Rd West	566	141	1509	413	1.371	412	533	35.4	73.8	494.519	F

C - A12 South	1493	373	578	1500	0.995	1463	1585	16.9	24.4	59.060	F
D - B1079 East	345	86	1827	375	0.920	337	389	4.8	6.9	76.105	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1700	425	519	1810	0.939	1698	1406	12.7	13.4	29.903	D
B - Grundisburgh Rd West	566	141	1517	408	1.388	408	535	73.8	113.4	842.062	F
C - A12 South	1493	373	582	1498	0.997	1470	1587	24.4	30.2	74.199	F
D - B1079 East	345	86	1828	375	0.922	341	389	6.9	7.9	88.909	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1700	425	517	1811	0.939	1699	1409	13.4	13.7	30.385	D
B - Grundisburgh Rd West	566	141	1521	405	1.396	405	535	113.4	153.5	1197.278	F
C - A12 South	1493	373	583	1497	0.997	1474	1587	30.2	35.1	86.424	F
D - B1079 East	345	86	1828	375	0.922	343	388	7.9	8.6	95.619	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1700	425	516	1812	0.938	1699	1411	13.7	13.9	30.635	D
B - Grundisburgh Rd West	566	141	1524	404	1.401	404	536	153.5	194.1	1562.681	F
C - A12 South	1493	373	583	1497	0.998	1476	1587	35.1	39.4	96.972	F
D - B1079 East	345	86	1827	375	0.921	343	388	8.6	9.0	99.792	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1700	425	515	1813	0.938	1700	1413	13.9	14.1	30.781	D
B - Grundisburgh Rd West	566	141	1525	403	1.405	403	536	194.1	234.9	1928.282	F
C - A12 South	1493	373	584	1496	0.998	1478	1587	39.4	43.3	106.373	F
D - B1079 East	345	86	1827	375	0.921	344	388	9.0	9.3	102.625	F

2023 Early Years, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	145.25	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1480	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	454	100.000
C - A12 South		ONE HOUR	✓	1542	100.000
D - B1079 East		ONE HOUR	✓	380	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	245	1110	111
	B - Grundisburgh Rd West	84	1	229	140
	C - A12 South	1271	134	3	134
	D - B1079 East	197	104	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	11	2
	B - Grundisburgh Rd West	5	0	5	2
	C - A12 South	10	4	0	0
	D - B1079 East	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	15.98	6.9	C	1358	2037
B - Grundisburgh Rd West	1.33	603.38	74.9	F	417	625
C - A12 South	1.09	155.54	82.6	F	1415	2122
D - B1079 East	0.95	84.18	9.4	F	349	524

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1114	279	377	1896	0.588	1109	1169	0.0	1.4	4.540	A
B - Grundisburgh Rd West	342	86	1209	626	0.546	337	362	0.0	1.2	12.274	B
C - A12 South	1161	290	419	1688	0.688	1152	1063	0.0	2.2	6.620	A
D - B1079 East	286	72	1198	754	0.380	284	287	0.0	0.6	7.617	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1330	333	445	1848	0.720	1326	1394	1.4	2.5	6.835	A
B - Grundisburgh Rd West	408	102	1442	491	0.831	397	433	1.2	4.0	34.748	D

C - A12 South	1386	346	501	1629	0.851	1374	1268	2.2	5.2	13.518	B
D - B1079 East	342	85	1430	610	0.561	339	341	0.6	1.2	13.183	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1629	407	447	1848	0.882	1613	1558	2.5	6.6	14.420	B
B - Grundisburgh Rd West	500	125	1624	386	1.295	381	510	4.0	33.9	201.401	F
C - A12 South	1697	424	596	1560	1.088	1538	1487	5.2	45.1	69.029	F
D - B1079 East	419	105	1688	448	0.934	396	372	1.2	6.9	54.524	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1629	407	444	1849	0.881	1628	1572	6.6	6.9	15.985	C
B - Grundisburgh Rd West	500	125	1640	377	1.326	377	517	33.9	64.8	492.121	F
C - A12 South	1697	424	609	1551	1.095	1547	1499	45.1	82.6	155.543	F
D - B1079 East	419	105	1700	441	0.950	409	373	6.9	9.4	84.185	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1330	333	441	1852	0.718	1348	1583	6.9	2.6	7.367	A
B - Grundisburgh Rd West	408	102	1655	368	1.109	368	464	64.8	74.9	603.376	F
C - A12 South	1386	346	533	1607	0.863	1587	1277	82.6	32.3	132.967	F
D - B1079 East	342	85	1436	606	0.564	374	352	9.4	1.3	17.569	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1114	279	561	1767	0.631	1118	1317	2.6	1.7	5.579	A
B - Grundisburgh Rd West	342	86	1329	557	0.614	549	377	74.9	23.1	326.111	F
C - A12 South	1161	290	425	1683	0.689	1281	1178	32.3	2.3	11.945	B
D - B1079 East	286	72	1314	685	0.418	289	365	1.3	0.7	9.139	A

2023 Early Years, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	35.99	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1433	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	372	100.000
C - A12 South		ONE HOUR	✓	1530	100.000
D - B1079 East		ONE HOUR	✓	314	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	204	1131	93
	B - Grundisburgh Rd West	80	0	150	142
	C - A12 South	1317	141	0	72
	D - B1079 East	141	105	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	7	2
	B - Grundisburgh Rd West	0	0	1	0
	C - A12 South	4	1	0	5
	D - B1079 East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	9.32	4.0	A	1315	1973
B - Grundisburgh Rd West	0.98	100.38	11.3	F	341	512
C - A12 South	0.98	49.54	22.6	E	1404	2105
D - B1079 East	0.66	19.77	1.8	C	288	432

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1079	270	272	2045	0.528	1075	1154	0.0	1.1	3.694	A
B - Grundisburgh Rd West	280	70	1149	715	0.392	278	337	0.0	0.6	8.185	A
C - A12 South	1151	288	341	1828	0.630	1145	1011	0.0	1.7	5.222	A
D - B1079 East	236	59	1117	841	0.281	235	229	0.0	0.4	5.924	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1289	322	325	2007	0.642	1286	1380	1.1	1.8	4.975	A
B - Grundisburgh Rd West	334	84	1374	586	0.571	332	403	0.6	1.3	14.022	B

C - A12 South	1375	344	408	1779	0.773	1369	1210	1.7	3.3	8.644	A
D - B1079 East	282	71	1337	708	0.399	281	274	0.4	0.7	8.419	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1578	395	380	1968	0.802	1570	1644	1.8	3.9	8.858	A
B - Grundisburgh Rd West	410	102	1638	434	0.943	386	488	1.3	7.2	57.896	F
C - A12 South	1684	421	497	1714	0.982	1629	1469	3.3	16.9	31.241	D
D - B1079 East	346	86	1624	533	0.649	341	325	0.7	1.7	18.389	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1578	395	387	1962	0.804	1578	1675	3.9	4.0	9.323	A
B - Grundisburgh Rd West	410	102	1669	416	0.983	394	493	7.2	11.3	100.385	F
C - A12 South	1684	421	501	1711	0.984	1661	1479	16.9	22.6	49.542	E
D - B1079 East	346	86	1635	526	0.656	345	330	1.7	1.8	19.771	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1289	322	361	1981	0.650	1297	1462	4.0	1.9	5.324	A
B - Grundisburgh Rd West	334	84	1451	542	0.617	373	414	11.3	1.7	25.705	D
C - A12 South	1375	344	414	1774	0.775	1451	1236	22.6	3.6	13.612	B
D - B1079 East	282	71	1364	692	0.408	287	294	1.8	0.7	8.985	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1079	270	278	2041	0.529	1082	1169	1.9	1.1	3.766	A
B - Grundisburgh Rd West	280	70	1163	707	0.396	284	340	1.7	0.7	8.602	A
C - A12 South	1151	288	344	1825	0.631	1159	1020	3.6	1.7	5.463	A
D - B1079 East	236	59	1127	835	0.283	237	233	0.7	0.4	6.034	A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	3.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	824	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	57	100.000
C - A12 South		ONE HOUR	✓	629	100.000
D - B1079 East		ONE HOUR	✓	82	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	72	734	14
	B - Grundisburgh Rd West	24	0	19	15
	C - A12 South	556	42	2	29
	D - B1079 East	24	19	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	3
	B - Grundisburgh Rd West	0	0	16	0
	C - A12 South	9	2	0	0
	D - B1079 East	10	0	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.41	2.79	0.7	A	756	1135
B - Grundisburgh Rd West	0.07	4.20	0.1	A	52	78
C - A12 South	0.36	2.98	0.6	A	577	866
D - B1079 East	0.10	4.49	0.1	A	75	113

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	621	155	48	2214	0.280	619	457	0.0	0.4	2.256	A
B - Grundisburgh Rd West	43	11	462	1043	0.041	43	100	0.0	0.0	3.597	A
C - A12 South	474	118	90	1931	0.245	472	596	0.0	0.3	2.465	A
D - B1079 East	62	15	624	1056	0.059	62	43	0.0	0.1	3.621	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	741	185	58	2206	0.336	741	547	0.4	0.5	2.456	A
B - Grundisburgh Rd West	51	13	553	991	0.052	51	119	0.0	0.1	3.828	A

C - A12 South	566	141	108	1918	0.295	565	713	0.3	0.4	2.660	A
D - B1079 East	74	18	747	987	0.075	74	52	0.1	0.1	3.943	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	908	227	71	2197	0.413	907	669	0.5	0.7	2.789	A
B - Grundisburgh Rd West	63	16	678	920	0.068	62	146	0.1	0.1	4.196	A
C - A12 South	693	173	132	1901	0.364	692	873	0.4	0.6	2.975	A
D - B1079 East	91	23	915	892	0.102	90	63	0.1	0.1	4.489	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	908	227	71	2197	0.413	908	670	0.7	0.7	2.791	A
B - Grundisburgh Rd West	63	16	678	920	0.068	63	146	0.1	0.1	4.198	A
C - A12 South	693	173	132	1901	0.364	693	874	0.6	0.6	2.978	A
D - B1079 East	91	23	915	892	0.102	91	63	0.1	0.1	4.492	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	741	185	58	2206	0.336	742	548	0.7	0.5	2.458	A
B - Grundisburgh Rd West	51	13	554	991	0.052	51	120	0.1	0.1	3.831	A
C - A12 South	566	141	108	1918	0.295	566	715	0.6	0.4	2.663	A
D - B1079 East	74	18	748	986	0.075	74	52	0.1	0.1	3.948	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	621	155	49	2213	0.280	621	458	0.5	0.4	2.262	A
B - Grundisburgh Rd West	43	11	464	1042	0.041	43	100	0.1	0.0	3.601	A
C - A12 South	474	118	90	1931	0.245	474	598	0.4	0.3	2.473	A
D - B1079 East	62	15	626	1055	0.059	62	43	0.1	0.1	3.629	A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	33.56	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1683	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	150	100.000
C - A12 South		ONE HOUR	✓	1477	100.000
D - B1079 East		ONE HOUR	✓	203	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	298	1328	50
	B - Grundisburgh Rd West	46	0	41	63
	C - A12 South	1264	97	2	114
	D - B1079 East	81	59	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	5	0
	B - Grundisburgh Rd West	4	0	12	4
	C - A12 South	10	4	0	1
	D - B1079 East	1	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	15.57	7.6	C	1544	2316
B - Grundisburgh Rd West	0.42	15.45	0.7	C	138	207
C - A12 South	0.99	56.81	25.4	F	1355	2033
D - B1079 East	0.57	21.07	1.3	C	186	279

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1267	317	165	2133	0.594	1261	1046	0.0	1.4	4.102	A
B - Grundisburgh Rd West	113	28	1099	677	0.167	112	340	0.0	0.2	6.370	A
C - A12 South	1112	278	333	1748	0.636	1105	1075	0.0	1.7	5.540	A
D - B1079 East	153	38	1256	743	0.206	152	170	0.0	0.3	6.075	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1513	378	197	2109	0.717	1509	1251	1.4	2.5	5.953	A
B - Grundisburgh Rd West	135	34	1314	555	0.243	135	407	0.2	0.3	8.559	A

C - A12 South	1328	332	399	1702	0.780	1321	1286	1.7	3.4	9.298	A
D - B1079 East	182	46	1503	596	0.306	182	203	0.3	0.4	8.666	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1853	463	237	2080	0.891	1834	1487	2.5	7.2	13.711	B
B - Grundisburgh Rd West	165	41	1560	415	0.398	164	492	0.3	0.6	14.267	B
C - A12 South	1626	407	485	1641	0.991	1567	1563	3.4	18.3	34.413	D
D - B1079 East	223	56	1827	403	0.554	220	244	0.4	1.2	19.383	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1853	463	240	2078	0.892	1851	1515	7.2	7.6	15.565	C
B - Grundisburgh Rd West	165	41	1590	398	0.416	165	498	0.6	0.7	15.454	C
C - A12 South	1626	407	490	1637	0.993	1598	1577	18.3	25.4	56.808	F
D - B1079 East	223	56	1844	393	0.568	223	247	1.2	1.3	21.068	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1513	378	206	2103	0.719	1533	1333	7.6	2.6	6.529	A
B - Grundisburgh Rd West	135	34	1402	504	0.268	136	418	0.7	0.4	9.821	A
C - A12 South	1328	332	406	1697	0.783	1414	1307	25.4	3.8	16.425	C
D - B1079 East	182	46	1527	582	0.313	186	212	1.3	0.5	9.152	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1267	317	167	2131	0.594	1271	1060	2.6	1.5	4.208	A
B - Grundisburgh Rd West	113	28	1113	668	0.169	114	343	0.4	0.2	6.499	A
C - A12 South	1112	278	337	1746	0.637	1120	1084	3.8	1.8	5.823	A
D - B1079 East	153	38	1267	737	0.207	154	172	0.5	0.3	6.176	A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	328.16	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1887	100.000
B - Grundisburgh Rd West		FLAT	✓	354	100.000
C - A12 South		FLAT	✓	1635	100.000
D - B1079 East		FLAT	✓	461	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	382	1403	86
	B - Grundisburgh Rd West	68	0	59	227
	C - A12 South	1241	141	1	253
	D - B1079 East	204	106	152	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	8	2
	B - Grundisburgh Rd West	15	0	8	0
	C - A12 South	10	4	0	7
	D - B1079 East	1	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.03	191.14	101.6	F	1887	2831
B - Grundisburgh Rd West	0.86	61.87	5.8	F	354	531
C - A12 South	1.08	419.59	189.7	F	1635	2453
D - B1079 East	1.16	779.72	92.6	F	461	692

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1887	472	504	1848	1.021	1781	1382	0.0	26.6	35.928	E
B - Grundisburgh Rd West	354	88	1548	426	0.830	339	580	0.0	3.9	36.435	E
C - A12 South	1635	409	645	1522	1.075	1483	1513	0.0	38.1	55.251	F
D - B1079 East	461	115	1757	429	1.076	402	528	0.0	14.9	86.716	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1887	472	517	1838	1.027	1820	1406	26.6	43.4	77.402	F
B - Grundisburgh Rd West	354	88	1574	411	0.861	350	591	3.9	4.9	53.540	F

C - A12 South	1635	409	653	1516	1.079	1511	1544	38.1	69.1	136.075	F
D - B1079 East	461	115	1796	405	1.139	401	541	14.9	29.9	221.948	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1887	472	520	1837	1.028	1826	1408	43.4	58.7	107.638	F
B - Grundisburgh Rd West	354	88	1575	410	0.863	352	592	4.9	5.3	58.134	F
C - A12 South	1635	409	653	1516	1.079	1514	1548	69.1	99.5	207.170	F
D - B1079 East	461	115	1802	401	1.149	400	543	29.9	45.3	356.441	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1887	472	520	1836	1.028	1829	1408	58.7	73.4	136.199	F
B - Grundisburgh Rd West	354	88	1576	410	0.864	353	592	5.3	5.6	60.099	F
C - A12 South	1635	409	653	1516	1.079	1515	1550	99.5	129.7	278.041	F
D - B1079 East	461	115	1805	400	1.154	399	544	45.3	60.9	495.225	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1887	472	521	1836	1.028	1830	1409	73.4	87.6	163.922	F
B - Grundisburgh Rd West	354	88	1576	410	0.864	353	592	5.6	5.7	61.186	F
C - A12 South	1635	409	653	1516	1.079	1515	1551	129.7	159.7	348.836	F
D - B1079 East	461	115	1807	399	1.157	398	545	60.9	76.7	636.778	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1887	472	521	1836	1.028	1831	1409	87.6	101.6	191.141	F
B - Grundisburgh Rd West	354	88	1576	410	0.864	354	592	5.7	5.8	61.871	F
C - A12 South	1635	409	653	1516	1.079	1515	1552	159.7	189.7	419.587	F
D - B1079 East	461	115	1808	398	1.159	398	545	76.7	92.6	779.719	F

2028 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	83.40	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1606	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	304	100.000
C - A12 South		ONE HOUR	✓	1574	100.000
D - B1079 East		ONE HOUR	✓	396	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	235	1241	116
	B - Grundisburgh Rd West	81	1	80	142
	C - A12 South	1283	144	3	144
	D - B1079 East	197	108	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	7	2
	B - Grundisburgh Rd West	5	0	6	2
	C - A12 South	7	4	0	1
	D - B1079 East	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	20.14	9.3	C	1474	2210
B - Grundisburgh Rd West	0.88	64.27	5.5	F	279	419
C - A12 South	1.09	149.23	80.9	F	1444	2166
D - B1079 East	0.98	94.98	11.3	F	364	546

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1209	302	276	2017	0.599	1203	1177	0.0	1.5	4.389	A
B - Grundisburgh Rd West	229	57	1226	630	0.363	227	365	0.0	0.6	8.874	A
C - A12 South	1185	296	415	1726	0.686	1176	1060	0.0	2.1	6.454	A
D - B1079 East	298	75	1179	782	0.382	296	300	0.0	0.6	7.374	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1444	361	330	1979	0.729	1439	1404	1.5	2.6	6.607	A
B - Grundisburgh Rd West	274	68	1462	496	0.551	271	437	0.6	1.2	15.824	C

C - A12 South	1415	354	496	1666	0.849	1403	1268	2.1	5.1	13.095	B
D - B1079 East	356	89	1410	641	0.556	354	359	0.6	1.2	12.439	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1768	442	383	1941	0.911	1745	1589	2.6	8.4	16.678	C
B - Grundisburgh Rd West	335	84	1650	389	0.861	322	513	1.2	4.5	46.661	E
C - A12 South	1733	433	587	1599	1.084	1576	1531	5.1	44.4	66.649	F
D - B1079 East	436	109	1708	460	0.950	411	420	1.2	7.7	56.782	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1768	442	391	1936	0.913	1765	1606	8.4	9.3	20.141	C
B - Grundisburgh Rd West	335	84	1666	380	0.881	331	520	4.5	5.5	64.266	F
C - A12 South	1733	433	599	1590	1.089	1587	1551	44.4	80.9	149.232	F
D - B1079 East	436	109	1728	447	0.976	422	427	7.7	11.3	94.975	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1444	361	359	1959	0.737	1469	1605	9.3	2.9	7.729	A
B - Grundisburgh Rd West	274	68	1680	373	0.734	283	472	5.5	3.1	43.415	E
C - A12 South	1415	354	533	1639	0.863	1619	1304	80.9	29.7	125.808	F
D - B1079 East	356	89	1442	622	0.573	396	387	11.3	1.4	18.677	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1209	302	296	2003	0.603	1214	1279	2.9	1.5	4.594	A
B - Grundisburgh Rd West	229	57	1336	568	0.404	239	379	3.1	0.7	11.244	B
C - A12 South	1185	296	421	1722	0.688	1294	1073	29.7	2.3	10.825	B
D - B1079 East	298	75	1193	773	0.386	301	318	1.4	0.6	7.678	A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	37.86	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1522	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	262	100.000
C - A12 South		ONE HOUR	✓	1579	100.000
D - B1079 East		ONE HOUR	✓	336	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	209	1220	88
	B - Grundisburgh Rd West	81	0	49	132
	C - A12 South	1340	156	0	83
	D - B1079 East	144	107	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	2	4	2
	B - Grundisburgh Rd West	0	0	0	0
	C - A12 South	3	1	0	4
	D - B1079 East	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	8.79	4.0	A	1397	2095
B - Grundisburgh Rd West	0.70	28.23	2.2	D	240	361
C - A12 South	1.01	71.15	35.6	F	1448	2173
D - B1079 East	0.67	20.01	2.0	C	308	462

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1146	287	198	2150	0.533	1142	1174	0.0	1.1	3.553	A
B - Grundisburgh Rd West	197	49	1176	705	0.280	196	354	0.0	0.4	7.046	A
C - A12 South	1188	297	349	1834	0.648	1181	1015	0.0	1.8	5.459	A
D - B1079 East	253	63	1113	857	0.295	251	226	0.0	0.4	5.924	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1369	342	236	2122	0.645	1366	1404	1.1	1.8	4.747	A
B - Grundisburgh Rd West	236	59	1406	574	0.410	234	423	0.4	0.7	10.561	B

C - A12 South	1419	355	417	1783	0.796	1411	1215	1.8	3.7	9.490	A
D - B1079 East	302	75	1331	728	0.415	301	271	0.4	0.7	8.412	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1676	419	283	2087	0.803	1668	1657	1.8	3.9	8.412	A
B - Grundisburgh Rd West	288	72	1657	430	0.670	284	509	0.7	1.9	23.800	C
C - A12 South	1738	434	508	1717	1.012	1658	1482	3.7	23.6	39.362	E
D - B1079 East	370	92	1625	553	0.668	365	326	0.7	1.9	18.663	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1676	419	288	2084	0.804	1676	1687	3.9	4.0	8.786	A
B - Grundisburgh Rd West	288	72	1687	413	0.698	287	515	1.9	2.2	28.232	D
C - A12 South	1738	434	512	1714	1.014	1690	1491	23.6	35.6	71.152	F
D - B1079 East	370	92	1633	548	0.674	369	330	1.9	2.0	20.012	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1369	342	248	2113	0.648	1377	1521	4.0	1.9	4.946	A
B - Grundisburgh Rd West	236	59	1528	504	0.468	241	440	2.2	0.9	13.933	B
C - A12 South	1419	355	423	1779	0.798	1545	1227	35.6	4.2	22.894	C
D - B1079 East	302	75	1343	721	0.419	307	282	2.0	0.7	8.803	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1146	287	201	2148	0.534	1149	1191	1.9	1.2	3.613	A
B - Grundisburgh Rd West	197	49	1192	696	0.283	199	357	0.9	0.4	7.280	A
C - A12 South	1188	297	352	1831	0.649	1198	1023	4.2	1.9	5.767	A
D - B1079 East	253	63	1120	853	0.296	254	229	0.7	0.4	6.023	A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	3.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	832	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	68	100.000
C - A12 South		ONE HOUR	✓	848	100.000
D - B1079 East		ONE HOUR	✓	92	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	73	741	14
	B - Grundisburgh Rd West	35	0	19	15
	C - A12 South	775	42	2	29
	D - B1079 East	34	19	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	3
	B - Grundisburgh Rd West	0	0	16	0
	C - A12 South	9	2	0	0
	D - B1079 East	7	0	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.81	0.7	A	764	1146
B - Grundisburgh Rd West	0.10	5.10	0.1	A	62	93
C - A12 South	0.50	3.80	1.0	A	778	1167
D - B1079 East	0.11	4.54	0.1	A	85	127

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	627	157	48	2214	0.283	625	637	0.0	0.4	2.263	A
B - Grundisburgh Rd West	51	13	634	952	0.054	51	100	0.0	0.1	3.995	A
C - A12 South	638	160	98	1914	0.334	637	601	0.0	0.5	2.814	A
D - B1079 East	69	17	630	1061	0.065	69	43	0.0	0.1	3.628	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	748	187	58	2207	0.339	748	762	0.4	0.5	2.466	A
B - Grundisburgh Rd West	61	15	759	880	0.069	61	120	0.1	0.1	4.397	A

C - A12 South	762	191	117	1901	0.401	762	720	0.5	0.7	3.159	A
D - B1079 East	83	21	754	991	0.084	83	51	0.1	0.1	3.963	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	916	229	71	2198	0.417	916	933	0.5	0.7	2.807	A
B - Grundisburgh Rd West	75	19	929	781	0.096	75	147	0.1	0.1	5.093	A
C - A12 South	934	233	144	1882	0.496	933	881	0.7	1.0	3.786	A
D - B1079 East	102	25	923	895	0.113	101	63	0.1	0.1	4.536	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	916	229	71	2198	0.417	916	934	0.7	0.7	2.809	A
B - Grundisburgh Rd West	75	19	930	781	0.096	75	147	0.1	0.1	5.099	A
C - A12 South	934	233	144	1882	0.496	934	882	1.0	1.0	3.796	A
D - B1079 East	102	25	924	895	0.114	102	63	0.1	0.1	4.538	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	748	187	58	2207	0.339	749	764	0.7	0.5	2.471	A
B - Grundisburgh Rd West	61	15	761	878	0.069	61	120	0.1	0.1	4.406	A
C - A12 South	762	191	118	1900	0.401	764	721	1.0	0.7	3.171	A
D - B1079 East	83	21	755	990	0.084	83	52	0.1	0.1	3.968	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	627	157	49	2214	0.283	627	639	0.5	0.4	2.268	A
B - Grundisburgh Rd West	51	13	637	950	0.054	51	101	0.1	0.1	4.006	A
C - A12 South	638	160	99	1914	0.334	639	603	0.7	0.5	2.824	A
D - B1079 East	69	17	632	1060	0.066	70	43	0.1	0.1	3.636	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	52.97	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1665	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	157	100.000
C - A12 South		ONE HOUR	✓	1487	100.000
D - B1079 East		ONE HOUR	✓	226	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	302	1304	52
	B - Grundisburgh Rd West	52	0	42	63
	C - A12 South	1406	79	2	0
	D - B1079 East	88	75	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	6	0
	B - Grundisburgh Rd West	3	0	12	4
	C - A12 South	13	4	0	0
	D - B1079 East	1	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	11.01	5.4	B	1528	2291
B - Grundisburgh Rd West	0.46	17.51	0.8	C	144	216
C - A12 South	1.05	104.72	52.0	F	1365	2047
D - B1079 East	0.62	23.31	1.6	C	207	311

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1253	313	80	2186	0.573	1248	1161	0.0	1.3	3.819	A
B - Grundisburgh Rd West	118	30	1124	643	0.184	117	341	0.0	0.2	6.836	A
C - A12 South	1120	280	354	1678	0.667	1112	1058	0.0	2.0	6.277	A
D - B1079 East	170	43	1243	750	0.227	169	86	0.0	0.3	6.178	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1497	374	96	2174	0.689	1493	1387	1.3	2.2	5.265	A
B - Grundisburgh Rd West	141	35	1343	515	0.274	141	409	0.2	0.4	9.605	A

C - A12 South	1337	334	423	1630	0.820	1328	1266	2.0	4.3	11.567	B
D - B1079 East	203	51	1487	604	0.336	202	103	0.3	0.5	8.939	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1833	458	117	2158	0.849	1821	1606	2.2	5.2	10.318	B
B - Grundisburgh Rd West	173	43	1552	392	0.441	171	493	0.4	0.8	16.192	C
C - A12 South	1637	409	515	1567	1.045	1530	1542	4.3	31.2	52.143	F
D - B1079 East	249	62	1813	409	0.608	245	125	0.5	1.5	21.456	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1833	458	118	2157	0.850	1832	1631	5.2	5.4	11.012	B
B - Grundisburgh Rd West	173	43	1576	378	0.458	173	497	0.8	0.8	17.511	C
C - A12 South	1637	409	520	1564	1.047	1554	1553	31.2	52.0	104.723	F
D - B1079 East	249	62	1824	402	0.619	248	126	1.5	1.6	23.307	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1497	374	98	2173	0.689	1509	1575	5.4	2.3	5.528	A
B - Grundisburgh Rd West	141	35	1530	404	0.349	142	423	0.8	0.5	13.804	B
C - A12 South	1337	334	430	1626	0.822	1523	1280	52.0	5.4	55.532	F
D - B1079 East	203	51	1503	594	0.342	207	104	1.6	0.5	9.395	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1253	313	82	2185	0.574	1257	1183	2.3	1.4	3.895	A
B - Grundisburgh Rd West	118	30	1145	631	0.188	120	345	0.5	0.2	7.060	A
C - A12 South	1120	280	357	1676	0.668	1133	1066	5.4	2.1	6.790	A
D - B1079 East	170	43	1252	745	0.228	171	87	0.5	0.3	6.285	A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	310.06	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1868	100.000
B - Grundisburgh Rd West		FLAT	✓	384	100.000
C - A12 South		FLAT	✓	1576	100.000
D - B1079 East		FLAT	✓	457	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	384	1380	88
	B - Grundisburgh Rd West	75	0	59	250
	C - A12 South	1288	109	1	179
	D - B1079 East	200	106	152	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	10	2
	B - Grundisburgh Rd West	13	0	8	0
	C - A12 South	14	5	0	10
	D - B1079 East	1	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	120.30	62.2	F	1868	2802
B - Grundisburgh Rd West	0.96	145.45	14.7	F	384	576
C - A12 South	1.08	410.49	179.0	F	1576	2364
D - B1079 East	1.19	888.95	102.7	F	457	686

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1868	467	452	1869	1.000	1784	1426	0.0	21.1	30.361	D
B - Grundisburgh Rd West	384	96	1519	416	0.923	359	557	0.0	6.3	50.784	F
C - A12 South	1576	394	646	1469	1.073	1430	1505	0.0	36.7	55.365	F
D - B1079 East	457	114	1756	420	1.087	395	480	0.0	15.5	91.105	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1868	467	466	1859	1.005	1826	1451	21.1	31.6	59.603	F
B - Grundisburgh Rd West	384	96	1545	400	0.960	372	567	6.3	9.3	91.588	F

C - A12 South	1576	394	653	1464	1.077	1459	1537	36.7	66.0	135.198	F
D - B1079 East	457	114	1798	395	1.159	391	494	15.5	32.1	240.154	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1868	467	470	1856	1.007	1833	1453	31.6	40.3	77.357	F
B - Grundisburgh Rd West	384	96	1546	399	0.962	376	568	9.3	11.3	112.299	F
C - A12 South	1576	394	652	1464	1.076	1462	1542	66.0	94.6	204.539	F
D - B1079 East	457	114	1806	390	1.172	389	497	32.1	49.2	393.965	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1868	467	471	1855	1.007	1837	1454	40.3	48.1	92.806	F
B - Grundisburgh Rd West	384	96	1547	399	0.963	378	568	11.3	12.7	126.319	F
C - A12 South	1576	394	652	1464	1.076	1463	1544	94.6	122.9	273.385	F
D - B1079 East	457	114	1809	388	1.179	387	499	49.2	66.7	555.034	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1868	467	473	1854	1.008	1839	1454	48.1	55.4	106.978	F
B - Grundisburgh Rd West	384	96	1547	399	0.963	379	568	12.7	13.8	136.945	F
C - A12 South	1576	394	652	1465	1.076	1464	1546	122.9	151.0	342.007	F
D - B1079 East	457	114	1812	386	1.184	386	500	66.7	84.6	720.827	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1868	467	473	1854	1.008	1841	1454	55.4	62.2	120.300	F
B - Grundisburgh Rd West	384	96	1547	399	0.963	380	569	13.8	14.7	145.448	F
C - A12 South	1576	394	652	1465	1.076	1464	1547	151.0	179.0	410.494	F
D - B1079 East	457	114	1813	385	1.187	385	501	84.6	102.7	888.955	F

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	89.07	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1601	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	317	100.000
C - A12 South		ONE HOUR	✓	1528	100.000
D - B1079 East		ONE HOUR	✓	397	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	243	1222	122
	B - Grundisburgh Rd West	84	1	78	154
	C - A12 South	1230	154	3	141
	D - B1079 East	199	111	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	10	2
	B - Grundisburgh Rd West	5	0	6	2
	C - A12 South	11	4	0	1
	D - B1079 East	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.93	24.66	11.3	C	1469	2203
B - Grundisburgh Rd West	0.90	68.61	6.2	F	291	437
C - A12 South	1.09	154.70	81.2	F	1402	2103
D - B1079 East	1.01	112.97	13.9	F	365	547

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1205	301	281	1974	0.611	1199	1140	0.0	1.5	4.610	A
B - Grundisburgh Rd West	239	60	1185	635	0.377	237	381	0.0	0.6	8.992	A
C - A12 South	1150	288	425	1670	0.689	1141	1041	0.0	2.2	6.706	A
D - B1079 East	299	75	1169	773	0.387	297	311	0.0	0.6	7.516	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1439	360	336	1936	0.744	1434	1360	1.5	2.8	7.106	A
B - Grundisburgh Rd West	285	71	1414	501	0.569	283	455	0.6	1.3	16.269	C

C - A12 South	1373	343	508	1611	0.853	1361	1245	2.2	5.2	13.763	B
D - B1079 East	357	89	1398	631	0.567	355	372	0.6	1.3	12.930	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1763	441	390	1898	0.929	1734	1535	2.8	9.9	19.329	C
B - Grundisburgh Rd West	349	87	1590	398	0.878	335	532	1.3	4.9	48.823	E
C - A12 South	1682	420	597	1547	1.087	1525	1499	5.2	44.6	69.043	F
D - B1079 East	438	109	1688	450	0.973	408	435	1.3	8.8	63.179	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1763	441	397	1892	0.931	1757	1551	9.9	11.3	24.659	C
B - Grundisburgh Rd West	349	87	1605	390	0.897	344	539	4.9	6.2	68.614	F
C - A12 South	1682	420	608	1539	1.093	1535	1520	44.6	81.2	154.697	F
D - B1079 East	438	109	1712	435	1.006	417	443	8.8	13.9	112.974	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1439	360	365	1915	0.751	1472	1550	11.3	3.1	8.683	A
B - Grundisburgh Rd West	285	71	1618	382	0.746	297	495	6.2	3.3	45.823	E
C - A12 South	1373	343	554	1578	0.870	1559	1289	81.2	34.8	136.386	F
D - B1079 East	357	89	1437	606	0.589	407	400	13.9	1.5	22.440	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1205	301	304	1958	0.615	1211	1258	3.1	1.6	4.859	A
B - Grundisburgh Rd West	239	60	1313	560	0.427	249	398	3.3	0.8	11.954	B
C - A12 South	1150	288	431	1665	0.691	1280	1055	34.8	2.3	12.994	B
D - B1079 East	299	75	1183	764	0.392	303	331	1.5	0.7	7.857	A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	38.51	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1501	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	274	100.000
C - A12 South		ONE HOUR	✓	1551	100.000
D - B1079 East		ONE HOUR	✓	339	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	219	1183	94
	B - Grundisburgh Rd West	95	0	39	140
	C - A12 South	1326	146	0	79
	D - B1079 East	146	115	78	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	7	2
	B - Grundisburgh Rd West	0	0	0	0
	C - A12 South	5	1	0	4
	D - B1079 East	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	9.21	4.1	A	1378	2066
B - Grundisburgh Rd West	0.73	30.98	2.5	D	251	377
C - A12 South	1.02	72.38	35.6	F	1423	2134
D - B1079 East	0.68	20.25	2.0	C	311	466

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1130	283	193	2105	0.537	1126	1176	0.0	1.1	3.661	A
B - Grundisburgh Rd West	206	52	1164	706	0.292	205	359	0.0	0.4	7.164	A
C - A12 South	1167	292	364	1805	0.647	1160	975	0.0	1.8	5.520	A
D - B1079 East	255	64	1085	858	0.297	253	234	0.0	0.4	5.935	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1350	337	231	2078	0.650	1347	1405	1.1	1.8	4.907	A
B - Grundisburgh Rd West	246	62	1391	574	0.429	245	430	0.4	0.7	10.885	B

C - A12 South	1394	348	435	1754	0.795	1386	1166	1.8	3.7	9.608	A
D - B1079 East	305	76	1298	728	0.418	303	280	0.4	0.7	8.447	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1653	413	277	2045	0.808	1644	1659	1.8	4.0	8.791	A
B - Grundisburgh Rd West	302	75	1639	432	0.699	296	518	0.7	2.1	25.599	D
C - A12 South	1707	427	529	1685	1.013	1628	1423	3.7	23.5	39.929	E
D - B1079 East	373	93	1584	555	0.673	368	337	0.7	1.9	18.837	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1653	413	281	2042	0.809	1653	1688	4.0	4.1	9.212	A
B - Grundisburgh Rd West	302	75	1669	414	0.728	300	524	2.1	2.5	30.984	D
C - A12 South	1707	427	534	1682	1.015	1659	1431	23.5	35.6	72.378	F
D - B1079 East	373	93	1593	550	0.679	373	341	1.9	2.0	20.250	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1350	337	242	2069	0.652	1359	1525	4.1	1.9	5.127	A
B - Grundisburgh Rd West	246	62	1515	503	0.490	252	446	2.5	1.0	14.673	B
C - A12 South	1394	348	442	1749	0.797	1519	1178	35.6	4.2	23.504	C
D - B1079 East	305	76	1310	721	0.422	310	291	2.0	0.7	8.853	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1130	283	196	2102	0.538	1133	1193	1.9	1.2	3.724	A
B - Grundisburgh Rd West	206	52	1180	696	0.296	209	363	1.0	0.4	7.418	A
C - A12 South	1167	292	367	1803	0.647	1177	982	4.2	1.9	5.834	A
D - B1079 East	255	64	1093	853	0.299	256	237	0.7	0.4	6.040	A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	3.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	863	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	66	100.000
C - A12 South		ONE HOUR	✓	682	100.000
D - B1079 East		ONE HOUR	✓	93	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	78	765	16
	B - Grundisburgh Rd West	27	0	23	17
	C - A12 South	587	50	2	43
	D - B1079 East	26	21	47	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	3
	B - Grundisburgh Rd West	0	0	14	3
	C - A12 South	9	2	0	0
	D - B1079 East	9	0	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.43	2.91	0.8	A	792	1188
B - Grundisburgh Rd West	0.08	4.40	0.1	A	60	91
C - A12 South	0.40	3.14	0.7	A	626	939
D - B1079 East	0.12	4.71	0.1	A	86	128

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	650	162	63	2208	0.294	648	484	0.0	0.4	2.306	A
B - Grundisburgh Rd West	50	12	498	1023	0.048	49	112	0.0	0.1	3.697	A
C - A12 South	514	128	97	1929	0.266	512	628	0.0	0.4	2.538	A
D - B1079 East	70	18	655	1039	0.068	70	57	0.0	0.1	3.716	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	776	194	76	2199	0.353	776	579	0.4	0.5	2.529	A
B - Grundisburgh Rd West	59	15	596	967	0.061	59	134	0.1	0.1	3.964	A

C - A12 South	613	153	117	1915	0.320	613	751	0.4	0.5	2.764	A
D - B1079 East	84	21	784	966	0.087	84	68	0.1	0.1	4.078	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	951	238	93	2186	0.435	950	709	0.5	0.8	2.910	A
B - Grundisburgh Rd West	72	18	729	891	0.081	72	164	0.1	0.1	4.397	A
C - A12 South	751	188	143	1897	0.396	750	920	0.5	0.7	3.139	A
D - B1079 East	103	26	960	868	0.118	103	83	0.1	0.1	4.703	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	951	238	93	2186	0.435	951	710	0.8	0.8	2.912	A
B - Grundisburgh Rd West	72	18	730	891	0.081	72	164	0.1	0.1	4.399	A
C - A12 South	751	188	143	1897	0.396	751	920	0.7	0.7	3.141	A
D - B1079 East	103	26	961	867	0.118	103	83	0.1	0.1	4.708	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	776	194	76	2199	0.353	777	580	0.8	0.5	2.533	A
B - Grundisburgh Rd West	59	15	597	967	0.061	59	134	0.1	0.1	3.969	A
C - A12 South	613	153	117	1915	0.320	614	752	0.7	0.5	2.767	A
D - B1079 East	84	21	785	966	0.087	84	68	0.1	0.1	4.085	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	650	162	64	2208	0.294	650	486	0.5	0.4	2.313	A
B - Grundisburgh Rd West	50	12	500	1022	0.049	50	112	0.1	0.1	3.704	A
C - A12 South	514	128	98	1929	0.266	514	630	0.5	0.4	2.547	A
D - B1079 East	70	18	657	1037	0.068	70	57	0.1	0.1	3.722	A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	36.01	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1656	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	156	100.000
C - A12 South		ONE HOUR	✓	1498	100.000
D - B1079 East		ONE HOUR	✓	246	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	265	1310	54
	B - Grundisburgh Rd West	36	0	54	66
	C - A12 South	1328	80	2	88
	D - B1079 East	86	81	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	5	0
	B - Grundisburgh Rd West	7	0	9	3
	C - A12 South	8	4	0	2
	D - B1079 East	1	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	12.89	6.3	B	1519	2279
B - Grundisburgh Rd West	0.45	16.92	0.8	C	143	215
C - A12 South	1.00	64.45	29.9	F	1375	2062
D - B1079 East	0.66	25.25	1.8	D	226	338

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1247	312	157	2152	0.579	1241	1090	0.0	1.4	3.930	A
B - Grundisburgh Rd West	118	29	1131	663	0.177	117	334	0.0	0.2	6.585	A
C - A12 South	1128	282	344	1758	0.642	1121	1083	0.0	1.8	5.589	A
D - B1079 East	185	46	1243	756	0.245	184	155	0.0	0.3	6.279	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1489	372	188	2129	0.699	1485	1303	1.4	2.3	5.560	A
B - Grundisburgh Rd West	140	35	1352	539	0.260	140	400	0.2	0.3	9.007	A

C - A12 South	1347	337	412	1710	0.788	1340	1296	1.8	3.5	9.551	A
D - B1079 East	221	55	1487	611	0.362	220	186	0.3	0.6	9.178	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1823	456	226	2100	0.868	1808	1542	2.3	6.0	11.770	B
B - Grundisburgh Rd West	172	43	1598	401	0.428	170	483	0.3	0.7	15.487	C
C - A12 South	1649	412	500	1646	1.002	1581	1577	3.5	20.6	37.245	E
D - B1079 East	271	68	1811	420	0.645	266	223	0.6	1.7	22.792	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1823	456	229	2098	0.869	1822	1571	6.0	6.3	12.892	B
B - Grundisburgh Rd West	172	43	1629	384	0.448	172	489	0.7	0.8	16.921	C
C - A12 South	1649	412	505	1643	1.004	1612	1590	20.6	29.9	64.451	F
D - B1079 East	271	68	1825	412	0.657	270	226	1.7	1.8	25.250	D

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1489	372	197	2123	0.701	1504	1404	6.3	2.4	5.960	A
B - Grundisburgh Rd West	140	35	1459	479	0.293	142	411	0.8	0.4	10.723	B
C - A12 South	1347	337	419	1704	0.790	1450	1314	29.9	4.0	19.556	C
D - B1079 East	221	55	1507	600	0.368	226	194	1.8	0.6	9.748	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1247	312	160	2150	0.580	1251	1105	2.4	1.4	4.020	A
B - Grundisburgh Rd West	118	29	1147	654	0.180	118	337	0.4	0.2	6.735	A
C - A12 South	1128	282	347	1756	0.642	1137	1092	4.0	1.8	5.896	A
D - B1079 East	185	46	1253	750	0.247	186	157	0.6	0.3	6.394	A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	592.56	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1843	100.000
B - Grundisburgh Rd West		FLAT	✓	482	100.000
C - A12 South		FLAT	✓	1750	100.000
D - B1079 East		FLAT	✓	518	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	398	1322	107
	B - Grundisburgh Rd West	92	0	126	264
	C - A12 South	1278	151	1	321
	D - B1079 East	217	124	178	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	8	1
	B - Grundisburgh Rd West	12	0	5	0
	C - A12 South	9	3	0	6
	D - B1079 East	1	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.04	238.95	124.2	F	1843	2765
B - Grundisburgh Rd West	1.15	772.75	96.5	F	482	723
C - A12 South	1.15	762.14	349.1	F	1750	2625
D - B1079 East	1.23	1132.71	143.1	F	518	777

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1843	461	606	1783	1.034	1725	1368	0.0	29.6	39.950	E
B - Grundisburgh Rd West	482	120	1566	430	1.121	408	604	0.0	18.5	100.594	F
C - A12 South	1750	438	670	1525	1.148	1501	1492	0.0	62.4	81.920	F
D - B1079 East	518	130	1732	448	1.156	429	599	0.0	22.3	111.606	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1843	461	618	1775	1.039	1762	1382	29.6	50.0	89.592	F
B - Grundisburgh Rd West	482	120	1582	421	1.145	418	613	18.5	34.6	247.775	F

C - A12 South	1750	438	675	1521	1.151	1520	1519	62.4	120.0	222.605	F
D - B1079 East	518	130	1769	426	1.217	424	610	22.3	45.8	307.523	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1843	461	619	1774	1.039	1767	1382	50.0	69.1	128.188	F
B - Grundisburgh Rd West	482	120	1582	421	1.145	419	613	34.6	50.2	379.884	F
C - A12 South	1750	438	674	1521	1.151	1521	1522	120.0	177.4	357.090	F
D - B1079 East	518	130	1775	423	1.226	422	611	45.8	69.9	508.581	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1843	461	620	1773	1.039	1769	1382	69.1	87.7	165.557	F
B - Grundisburgh Rd West	482	120	1581	421	1.145	420	614	50.2	65.7	511.057	F
C - A12 South	1750	438	674	1521	1.150	1521	1524	177.4	234.7	491.985	F
D - B1079 East	518	130	1777	421	1.230	421	612	69.9	94.1	714.699	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1843	461	620	1773	1.040	1770	1382	87.7	106.0	202.398	F
B - Grundisburgh Rd West	482	120	1581	421	1.145	420	614	65.7	81.1	641.962	F
C - A12 South	1750	438	674	1521	1.150	1521	1524	234.7	291.9	627.027	F
D - B1079 East	518	130	1778	421	1.232	420	612	94.1	118.6	923.256	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1843	461	620	1773	1.040	1771	1382	106.0	124.2	238.946	F
B - Grundisburgh Rd West	482	120	1581	421	1.145	421	614	81.1	96.5	772.753	F
C - A12 South	1750	438	674	1521	1.150	1521	1525	291.9	349.1	762.140	F
D - B1079 East	518	130	1779	420	1.233	420	612	118.6	143.1	1132.707	F

2034 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	159.94	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1627	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	384	100.000
C - A12 South		ONE HOUR	✓	1642	100.000
D - B1079 East		ONE HOUR	✓	463	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	273	1202	138
	B - Grundisburgh Rd West	98	1	113	172
	C - A12 South	1262	204	3	173
	D - B1079 East	217	139	107	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	7	2
	B - Grundisburgh Rd West	4	0	4	2
	C - A12 South	6	3	0	1
	D - B1079 East	1	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	29.84	14.0	D	1493	2239
B - Grundisburgh Rd West	0.98	107.37	12.1	F	353	529
C - A12 South	1.15	279.05	126.8	F	1506	2260
D - B1079 East	1.17	246.68	38.7	F	425	638

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1225	306	344	1981	0.618	1218	1187	0.0	1.6	4.683	A
B - Grundisburgh Rd West	289	72	1245	631	0.459	286	461	0.0	0.8	10.337	B
C - A12 South	1236	309	481	1700	0.727	1226	1067	0.0	2.6	7.438	A
D - B1079 East	349	87	1202	773	0.451	346	360	0.0	0.8	8.354	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1463	366	409	1934	0.756	1457	1411	1.6	3.0	7.455	A
B - Grundisburgh Rd West	346	86	1479	499	0.693	341	550	0.8	2.1	22.078	C

C - A12 South	1476	369	575	1631	0.905	1455	1275	2.6	7.8	18.591	C
D - B1079 East	417	104	1437	631	0.660	412	429	0.8	1.8	16.170	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1791	448	463	1896	0.945	1757	1525	3.0	11.7	21.874	C
B - Grundisburgh Rd West	423	106	1591	435	0.973	397	622	2.1	8.7	68.044	F
C - A12 South	1808	452	647	1577	1.146	1566	1519	7.8	68.2	96.644	F
D - B1079 East	510	128	1728	454	1.123	438	491	1.8	20.0	110.685	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1791	448	474	1888	0.949	1782	1533	11.7	14.0	29.838	D
B - Grundisburgh Rd West	423	106	1597	432	0.980	410	626	8.7	12.1	107.366	F
C - A12 South	1808	452	650	1574	1.148	1573	1541	68.2	126.8	230.275	F
D - B1079 East	510	128	1755	438	1.165	435	500	20.0	38.7	246.682	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1463	366	441	1912	0.765	1505	1546	14.0	3.4	9.711	A
B - Grundisburgh Rd West	346	86	1615	424	0.816	372	612	12.1	5.5	77.596	F
C - A12 South	1476	369	697	1542	0.957	1530	1354	126.8	113.2	279.051	F
D - B1079 East	417	104	1490	599	0.696	560	455	38.7	2.9	123.803	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1225	306	403	1939	0.632	1231	1540	3.4	1.7	5.133	A
B - Grundisburgh Rd West	289	72	1642	407	0.711	300	523	5.5	2.7	36.498	E
C - A12 South	1236	309	492	1692	0.731	1673	1084	113.2	4.0	129.151	F
D - B1079 East	349	87	1219	763	0.457	357	415	2.9	0.9	9.026	A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	65.86	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1555	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	310	100.000
C - A12 South		ONE HOUR	✓	1624	100.000
D - B1079 East		ONE HOUR	✓	391	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	255	1197	98
	B - Grundisburgh Rd West	78	0	63	169
	C - A12 South	1342	183	0	99
	D - B1079 East	154	131	106	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	3	2
	B - Grundisburgh Rd West	0	0	0	0
	C - A12 South	3	1	0	4
	D - B1079 East	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	10.54	4.9	B	1427	2141
B - Grundisburgh Rd West	0.77	33.94	3.0	D	284	427
C - A12 South	1.08	132.38	73.9	F	1490	2235
D - B1079 East	0.81	33.53	3.8	D	359	538

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1171	293	247	2131	0.549	1166	1180	0.0	1.2	3.712	A
B - Grundisburgh Rd West	233	58	1196	698	0.334	231	426	0.0	0.5	7.678	A
C - A12 South	1222	306	408	1803	0.678	1214	1024	0.0	2.1	6.027	A
D - B1079 East	294	74	1140	847	0.347	292	273	0.0	0.5	6.463	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1398	350	296	2096	0.667	1395	1409	1.2	2.0	5.116	A
B - Grundisburgh Rd West	279	70	1428	567	0.492	277	509	0.5	0.9	12.341	B

C - A12 South	1459	365	489	1744	0.837	1449	1225	2.1	4.8	11.770	B
D - B1079 East	351	88	1364	715	0.491	350	327	0.5	0.9	9.802	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1712	428	351	2055	0.833	1702	1611	2.0	4.7	9.880	A
B - Grundisburgh Rd West	341	85	1627	454	0.752	334	605	0.9	2.7	28.605	D
C - A12 South	1788	447	592	1668	1.071	1641	1492	4.8	41.4	60.580	F
D - B1079 East	430	108	1663	539	0.798	420	389	0.9	3.4	28.248	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1712	428	356	2052	0.835	1712	1630	4.7	4.9	10.537	B
B - Grundisburgh Rd West	341	85	1646	443	0.770	340	611	2.7	3.0	33.936	D
C - A12 South	1788	447	599	1663	1.075	1658	1503	41.4	73.9	132.378	F
D - B1079 East	430	108	1674	533	0.907	429	394	3.4	3.8	33.528	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1398	350	317	2080	0.672	1409	1634	4.9	2.1	5.453	A
B - Grundisburgh Rd West	279	70	1667	431	0.647	283	546	3.0	2.0	25.033	D
C - A12 South	1459	365	500	1736	0.841	1712	1241	73.9	10.7	93.695	F
D - B1079 East	351	88	1379	707	0.497	362	347	3.8	1.0	10.775	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1171	293	256	2125	0.551	1174	1219	2.1	1.2	3.801	A
B - Grundisburgh Rd West	233	58	1235	676	0.345	239	433	2.0	0.5	8.340	A
C - A12 South	1222	306	413	1800	0.679	1256	1033	10.7	2.2	7.021	A
D - B1079 East	294	74	1150	842	0.350	296	281	1.0	0.5	6.620	A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	3.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	864	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	66	100.000
C - A12 South		ONE HOUR	✓	683	100.000
D - B1079 East		ONE HOUR	✓	93	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	78	766	16
	B - Grundisburgh Rd West	27	0	23	17
	C - A12 South	588	50	2	43
	D - B1079 East	26	21	47	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	3
	B - Grundisburgh Rd West	0	0	14	3
	C - A12 South	9	2	0	0
	D - B1079 East	9	0	12	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.44	2.91	0.8	A	793	1190
B - Grundisburgh Rd West	0.08	4.40	0.1	A	60	91
C - A12 South	0.40	3.14	0.7	A	627	940
D - B1079 East	0.12	4.71	0.1	A	86	128

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	651	163	63	2208	0.295	649	484	0.0	0.4	2.307	A
B - Grundisburgh Rd West	50	12	498	1023	0.048	49	112	0.0	0.1	3.698	A
C - A12 South	514	129	97	1929	0.267	513	628	0.0	0.4	2.539	A
D - B1079 East	70	18	656	1038	0.068	70	57	0.0	0.1	3.718	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	777	194	76	2199	0.353	777	580	0.4	0.5	2.531	A
B - Grundisburgh Rd West	59	15	597	967	0.061	59	134	0.1	0.1	3.966	A

C - A12 South	614	154	117	1915	0.321	614	752	0.4	0.5	2.765	A
D - B1079 East	84	21	785	966	0.087	84	68	0.1	0.1	4.080	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	952	238	93	2186	0.435	951	710	0.5	0.8	2.912	A
B - Grundisburgh Rd West	72	18	730	891	0.081	72	164	0.1	0.1	4.400	A
C - A12 South	752	188	143	1897	0.397	751	921	0.5	0.7	3.141	A
D - B1079 East	103	26	961	867	0.118	103	83	0.1	0.1	4.706	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	952	238	93	2186	0.435	952	711	0.8	0.8	2.915	A
B - Grundisburgh Rd West	72	18	731	890	0.081	72	164	0.1	0.1	4.402	A
C - A12 South	752	188	143	1897	0.397	752	922	0.7	0.7	3.144	A
D - B1079 East	103	26	962	867	0.118	103	83	0.1	0.1	4.711	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	777	194	76	2199	0.353	778	581	0.8	0.5	2.536	A
B - Grundisburgh Rd West	59	15	598	966	0.061	59	134	0.1	0.1	3.969	A
C - A12 South	614	154	117	1915	0.321	615	753	0.7	0.5	2.771	A
D - B1079 East	84	21	786	965	0.087	84	68	0.1	0.1	4.087	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	651	163	64	2208	0.295	651	486	0.5	0.4	2.312	A
B - Grundisburgh Rd West	50	12	500	1022	0.049	50	112	0.1	0.1	3.706	A
C - A12 South	514	129	98	1929	0.267	515	631	0.5	0.4	2.548	A
D - B1079 East	70	18	658	1037	0.068	70	57	0.1	0.1	3.723	A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	37.02	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1656	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	156	100.000
C - A12 South		ONE HOUR	✓	1498	100.000
D - B1079 East		ONE HOUR	✓	246	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	285	1310	54
	B - Grundisburgh Rd West	36	0	54	66
	C - A12 South	1335	83	2	78
	D - B1079 East	86	81	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	5	0
	B - Grundisburgh Rd West	5	0	9	3
	C - A12 South	9	4	0	2
	D - B1079 East	1	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	12.55	6.1	B	1519	2279
B - Grundisburgh Rd West	0.44	16.72	0.8	C	143	215
C - A12 South	1.01	67.08	31.4	F	1375	2062
D - B1079 East	0.66	25.26	1.8	D	226	338

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1247	312	150	2157	0.578	1241	1095	0.0	1.4	3.909	A
B - Grundisburgh Rd West	118	29	1128	666	0.177	117	336	0.0	0.2	6.547	A
C - A12 South	1128	282	344	1752	0.644	1121	1083	0.0	1.8	5.640	A
D - B1079 East	185	46	1243	756	0.245	184	148	0.0	0.3	6.279	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1489	372	179	2135	0.697	1485	1309	1.4	2.3	5.507	A
B - Grundisburgh Rd West	140	35	1349	541	0.259	140	402	0.2	0.3	8.955	A

C - A12 South	1347	337	412	1704	0.790	1340	1296	1.8	3.6	9.685	A
D - B1079 East	221	55	1487	611	0.362	220	177	0.3	0.6	9.179	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1823	456	216	2108	0.865	1809	1547	2.3	5.9	11.514	B
B - Grundisburgh Rd West	172	43	1592	404	0.426	170	486	0.3	0.7	15.316	C
C - A12 South	1649	412	500	1641	1.005	1578	1578	3.6	21.3	38.254	E
D - B1079 East	271	68	1812	420	0.645	266	213	0.6	1.7	22.828	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1823	456	218	2106	0.866	1822	1576	5.9	6.1	12.552	B
B - Grundisburgh Rd West	172	43	1623	387	0.445	172	492	0.7	0.8	16.717	C
C - A12 South	1649	412	505	1637	1.007	1609	1590	21.3	31.4	67.082	F
D - B1079 East	271	68	1825	412	0.658	270	215	1.7	1.8	25.260	D

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1489	372	187	2129	0.699	1504	1416	6.1	2.4	5.887	A
B - Grundisburgh Rd West	140	35	1461	478	0.294	142	414	0.8	0.4	10.757	B
C - A12 South	1347	337	419	1699	0.793	1456	1313	31.4	4.1	20.924	C
D - B1079 East	221	55	1506	600	0.368	226	184	1.8	0.6	9.743	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1247	312	152	2155	0.578	1251	1111	2.4	1.4	3.996	A
B - Grundisburgh Rd West	118	29	1145	657	0.179	118	340	0.4	0.2	6.695	A
C - A12 South	1128	282	347	1750	0.644	1137	1092	4.1	1.8	5.956	A
D - B1079 East	185	46	1253	750	0.247	186	150	0.6	0.3	6.394	A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	610.27	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1837	100.000
B - Grundisburgh Rd West		FLAT	✓	487	100.000
C - A12 South		FLAT	✓	1748	100.000
D - B1079 East		FLAT	✓	518	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	397	1317	107
	B - Grundisburgh Rd West	92	0	133	262
	C - A12 South	1284	126	1	338
	D - B1079 East	217	124	178	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	8	1
	B - Grundisburgh Rd West	12	0	4	0
	C - A12 South	9	4	0	6
	D - B1079 East	1	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.04	239.61	124.1	F	1837	2756
B - Grundisburgh Rd West	1.19	983.01	120.0	F	487	730
C - A12 South	1.15	756.73	346.5	F	1748	2622
D - B1079 East	1.23	1107.66	140.5	F	518	777

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1837	459	615	1776	1.035	1718	1372	0.0	29.8	40.311	E
B - Grundisburgh Rd West	487	122	1588	418	1.164	400	582	0.0	21.7	116.200	F
C - A12 South	1748	437	669	1525	1.147	1500	1489	0.0	61.9	81.420	F
D - B1079 East	518	130	1728	450	1.151	431	605	0.0	21.9	109.643	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1837	459	625	1769	1.039	1756	1386	29.8	50.2	90.326	F
B - Grundisburgh Rd West	487	122	1604	409	1.190	407	591	21.7	41.7	299.074	F

C - A12 South	1748	437	675	1521	1.150	1519	1517	61.9	119.1	221.094	F
D - B1079 East	518	130	1765	428	1.212	426	615	21.9	45.0	301.146	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1837	459	626	1768	1.039	1761	1386	50.2	69.3	128.987	F
B - Grundisburgh Rd West	487	122	1604	409	1.191	408	591	41.7	61.4	470.022	F
C - A12 South	1748	437	675	1521	1.149	1520	1520	119.1	176.1	354.593	F
D - B1079 East	518	130	1771	424	1.221	424	616	45.0	68.6	497.541	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1837	459	626	1768	1.039	1763	1386	69.3	87.8	166.341	F
B - Grundisburgh Rd West	487	122	1604	409	1.190	409	591	61.4	81.0	640.954	F
C - A12 South	1748	437	674	1521	1.149	1521	1521	176.1	232.9	488.513	F
D - B1079 East	518	130	1773	423	1.225	423	617	68.6	92.4	698.975	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1837	459	627	1768	1.039	1764	1386	87.8	106.0	203.135	F
B - Grundisburgh Rd West	487	122	1603	409	1.190	409	592	81.0	100.5	811.953	F
C - A12 South	1748	437	674	1521	1.149	1521	1522	232.9	289.8	622.584	F
D - B1079 East	518	130	1774	422	1.227	422	617	92.4	116.4	902.857	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1837	459	627	1767	1.039	1765	1386	106.0	124.1	239.608	F
B - Grundisburgh Rd West	487	122	1603	409	1.190	409	592	100.5	120.0	983.007	F
C - A12 South	1748	437	674	1521	1.149	1521	1522	289.8	346.5	766.731	F
D - B1079 East	518	130	1775	422	1.228	422	617	116.4	140.5	1107.656	F

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	162.39	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1627	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	385	100.000
C - A12 South		ONE HOUR	✓	1644	100.000
D - B1079 East		ONE HOUR	✓	463	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	274	1201	138
	B - Grundisburgh Rd West	98	1	114	172
	C - A12 South	1266	202	3	173
	D - B1079 East	217	139	107	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	7	2
	B - Grundisburgh Rd West	4	0	4	2
	C - A12 South	6	3	0	1
	D - B1079 East	1	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	30.07	14.1	D	1493	2239
B - Grundisburgh Rd West	0.98	110.66	12.5	F	354	530
C - A12 South	1.15	283.40	128.2	F	1508	2262
D - B1079 East	1.17	249.35	39.2	F	425	638

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1225	306	345	1979	0.619	1218	1190	0.0	1.6	4.693	A
B - Grundisburgh Rd West	290	73	1248	629	0.461	287	461	0.0	0.8	10.409	B
C - A12 South	1237	309	482	1699	0.728	1227	1067	0.0	2.6	7.471	A
D - B1079 East	349	87	1203	773	0.452	346	360	0.0	0.8	8.371	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1463	366	410	1933	0.757	1457	1414	1.6	3.0	7.478	A
B - Grundisburgh Rd West	346	87	1483	497	0.697	341	549	0.8	2.1	22.435	C

C - A12 South	1478	369	576	1630	0.907	1456	1275	2.6	7.9	18.792	C
D - B1079 East	417	104	1438	630	0.661	412	429	0.8	1.9	16.237	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1791	448	463	1894	0.946	1756	1526	3.0	11.7	21.992	C
B - Grundisburgh Rd West	424	106	1592	434	0.977	397	621	2.1	9.0	69.517	F
C - A12 South	1810	452	647	1576	1.148	1566	1518	7.9	69.0	97.596	F
D - B1079 East	510	128	1729	453	1.125	437	491	1.9	20.2	111.634	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1791	448	474	1887	0.949	1782	1534	11.7	14.1	30.072	D
B - Grundisburgh Rd West	424	106	1598	431	0.985	410	625	9.0	12.5	110.662	F
C - A12 South	1810	452	650	1574	1.150	1573	1540	69.0	128.2	232.778	F
D - B1079 East	510	128	1756	437	1.168	434	500	20.2	39.2	249.347	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1463	366	442	1910	0.766	1505	1548	14.1	3.4	9.779	A
B - Grundisburgh Rd West	346	87	1616	423	0.820	374	611	12.5	5.7	81.217	F
C - A12 South	1478	369	699	1541	0.959	1529	1355	128.2	115.4	283.402	F
D - B1079 East	417	104	1492	597	0.697	562	455	39.2	2.9	127.137	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1225	306	404	1937	0.632	1231	1545	3.4	1.7	5.146	A
B - Grundisburgh Rd West	290	73	1648	404	0.719	302	522	5.7	2.8	38.197	E
C - A12 South	1237	309	493	1691	0.732	1676	1084	115.4	5.7	134.311	F
D - B1079 East	349	87	1220	762	0.458	357	415	2.9	0.9	9.058	A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	67.48	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1553	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	314	100.000
C - A12 South		ONE HOUR	✓	1627	100.000
D - B1079 East		ONE HOUR	✓	391	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	257	1193	98
	B - Grundisburgh Rd West	78	0	66	170
	C - A12 South	1345	183	0	99
	D - B1079 East	154	131	106	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	3	2
	B - Grundisburgh Rd West	0	0	0	0
	C - A12 South	3	1	0	4
	D - B1079 East	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	10.56	4.9	B	1425	2138
B - Grundisburgh Rd West	0.78	35.15	3.2	E	288	432
C - A12 South	1.08	135.83	76.1	F	1493	2239
D - B1079 East	0.81	33.71	3.8	D	359	538

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1169	292	250	2129	0.549	1165	1183	0.0	1.2	3.715	A
B - Grundisburgh Rd West	236	59	1199	697	0.339	234	427	0.0	0.5	7.746	A
C - A12 South	1225	306	410	1802	0.679	1216	1023	0.0	2.1	6.059	A
D - B1079 East	294	74	1141	847	0.348	292	274	0.0	0.5	6.468	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1396	349	299	2093	0.667	1393	1412	1.2	2.0	5.123	A
B - Grundisburgh Rd West	282	71	1431	565	0.499	280	511	0.5	1.0	12.548	B

C - A12 South	1462	366	490	1743	0.839	1451	1224	2.1	4.8	11.908	B
D - B1079 East	351	88	1365	715	0.492	350	328	0.5	0.9	9.813	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1710	428	354	2053	0.833	1699	1611	2.0	4.7	9.899	A
B - Grundisburgh Rd West	346	86	1627	454	0.762	338	607	1.0	2.8	29.454	D
C - A12 South	1791	448	594	1667	1.074	1640	1491	4.8	42.5	61.774	F
D - B1079 East	430	108	1664	539	0.799	420	390	0.9	3.4	28.356	D

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1710	428	360	2049	0.835	1710	1629	4.7	4.9	10.561	B
B - Grundisburgh Rd West	346	86	1645	444	0.779	344	613	2.8	3.2	35.148	E
C - A12 South	1791	448	602	1661	1.078	1656	1502	42.5	76.1	135.827	F
D - B1079 East	430	108	1675	533	0.808	429	394	3.4	3.8	33.707	D

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1396	349	320	2077	0.672	1408	1634	4.9	2.1	5.462	A
B - Grundisburgh Rd West	282	71	1667	431	0.655	287	547	3.2	2.0	25.735	D
C - A12 South	1462	366	502	1734	0.843	1712	1240	76.1	13.7	98.770	F
D - B1079 East	351	88	1380	706	0.498	362	348	3.8	1.0	10.798	B

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1169	292	260	2122	0.551	1173	1231	2.1	1.2	3.807	A
B - Grundisburgh Rd West	236	59	1248	669	0.353	242	436	2.0	0.6	8.553	A
C - A12 South	1225	306	414	1799	0.681	1270	1032	13.7	2.2	7.394	A
D - B1079 East	294	74	1150	841	0.350	296	282	1.0	0.5	6.629	A

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: 2019.08.13_J27_Model_CV_Adjusted v12_Sens_Fixed.j9
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 Report generation date: 16/03/2020 13:32:24

- »2019 Base Year, 6-7 AM
- »2019 Base Year, 7-8 AM
- »2019 Base Year, 8-9 AM
- »2019 Base Year, 3-4 PM
- »2019 Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
- »2023 Reference Case, 8-9 AM
- »2023 Reference Case, 3-4 PM
- »2023 Reference Case, 5-6 PM
- »2023 Early Years, 6-7 AM
- »2023 Early Years, 7-8 AM
- »2023 Early Years, 8-9 AM
- »2023 Early Years, 3-4 PM
- »2023 Early Years, 5-6 PM
- »2028 Reference Case, 6-7 AM
- »2028 Reference Case, 7-8 AM
- »2028 Reference Case, 8-9 AM
- »2028 Reference Case, 3-4 PM
- »2028 Reference Case, 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case, 6-7 AM
- »2034 Reference Case, 7-8 AM
- »2034 Reference Case, 8-9 AM
- »2034 Reference Case, 3-4 PM
- »2034 Reference Case, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North	D1	0.6	2.65	0.38	A	D2	5.0	10.64	0.84	B	D3	35.0	74.16	0.99	F	D4	5.1	11.68	0.84	B	D5	2.6	6.27	0.73	A
B - Grundisburgh Rd West		0.1	4.02	0.07	A		0.7	11.94	0.41	B		14.4	122.08	0.96	F		7.8	79.33	0.93	F		1.7	20.91	0.64	C
C - A12 South		0.4	2.78	0.31	A		5.0	13.47	0.84	B		9.5	25.26	0.91	D		20.1	46.96	0.98	E		8.7	20.65	0.91	C
D - B1079 East		0.1	4.34	0.08	A		0.8	15.26	0.44	C		11.4	123.17	0.95	F		3.0	30.02	0.76	D		1.0	11.64	0.50	B
2023 Reference Case																									
A - A12 North	D6	0.7	2.77	0.40	A	D7	5.8	12.63	0.86	B	D8	15.6	34.78	0.95	D	D9	6.1	14.10	0.87	B	D10	3.1	7.38	0.76	A
B - Grundisburgh Rd West		0.1	4.32	0.11	A		1.6	20.66	0.63	C		91.0	779.27	1.15	F		36.7	265.32	1.18	F		5.1	50.35	0.86	F
C - A12 South		0.5	2.85	0.34	A		7.7	19.92	0.89	C		10.0	23.80	0.90	C		23.3	53.81	0.99	F		9.2	21.98	0.91	C
D - B1079 East		0.1	4.53	0.09	A		1.0	18.90	0.51	C		6.8	78.81	0.89	F		5.5	53.34	0.87	F		1.4	15.91	0.60	C
2023 Early Years																									
A - A12 North	D11	0.7	2.88	0.42	A	D12	5.6	11.85	0.85	B	D13	11.0	24.52	0.92	C	D14	6.9	15.98	0.88	C	D15	4.2	9.67	0.81	A
B - Grundisburgh Rd West		0.2	4.88	0.13	A		3.9	47.88	0.82	E		234.7	1860.06	1.39	F		79.9	542.38	1.42	F		8.7	77.47	0.94	F
C - A12 South		0.7	3.33	0.42	A		27.4	62.82	1.00	F		7.8	54.46	0.96	F		27.1	62.08	1.00	F		9.8	23.76	0.92	C
D - B1079 East		0.1	4.71	0.10	A		1.9	29.56	0.67	D		7.4	81.33	0.90	F		16.0	130.21	1.02	F		2.1	22.12	0.69	C
2028 Reference Case																									
A - A12 North	D16	0.7	2.73	0.40	A	D17	6.8	13.94	0.88	B	D18	119.1	225.03	1.04	F	D19	7.7	16.81	0.89	C	D20	3.7	8.18	0.79	A
B - Grundisburgh Rd West		0.1	4.16	0.06	A		0.6	13.95	0.37	B		4.9	56.64	0.84	F		5.0	56.39	0.87	F		1.4	19.56	0.59	C
C - A12 South		0.5	2.92	0.35	A		15.7	37.90	0.96	E		73.0	169.82	1.02	F		25.0	57.10	0.99	F		12.1	28.82	0.94	D
D - B1079 East		0.1	4.43	0.09	A		1.1	18.87	0.52	C		68.0	565.99	1.11	F		8.1	73.01	0.93	F		1.7	17.69	0.64	C
2028 Peak Construction																									
A - A12 North	D21	0.7	2.75	0.41	A	D22	5.3	10.80	0.85	B	D23	56.9	109.67	1.00	F	D24	10.0	21.80	0.92	C	D25	3.7	8.22	0.79	A
B - Grundisburgh Rd West		0.1	5.04	0.09	A		0.7	16.11	0.41	C		5.2	58.00	0.85	F		6.6	71.92	0.91	F		1.5	19.68	0.60	C
C - A12 South		0.9	3.72	0.48	A		30.2	67.62	1.01	F		29.3	76.21	0.98	F		27.0	62.61	1.00	F		10.2	24.93	0.92	C
D - B1079 East		0.1	4.47	0.11	A		1.4	21.59	0.59	C		89.9	811.50	1.17	F		13.1	109.98	1.00	F		1.7	17.33	0.63	C
2034 Reference Case																									
A - A12 North	D26	0.7	2.81	0.42	A	D27	6.4	13.16	0.87	B	D28	110.8	214.73	1.03	F	D29	10.2	22.09	0.92	C	D30	4.0	8.80	0.81	A
B - Grundisburgh Rd West		0.1	4.29	0.07	A		0.6	14.81	0.37	B		48.0	417.29	1.07	F		13.0	113.16	1.00	F		1.9	22.73	0.66	C
C - A12 South		0.6	3.04	0.38	A		22.0	50.27	0.98	F		50.6	120.93	1.00	F		33.5	72.44	1.01	F		14.6	34.59	0.95	D
D - B1079 East		0.1	4.58	0.11	A		1.4	21.52	0.60	C		110.1	874.01	1.18	F		26.4	180.23	1.09	F		2.5	23.39	0.72	C
2034 Operational Led																									
A - A12 North	D31	0.7	2.81	0.42	A	D32	6.4	13.11	0.87	B	D33	100.1	190.19	1.03	F	D34	10.0	21.85	0.92	C	D35	4.0	8.72	0.80	A
B - Grundisburgh Rd West		0.1	4.29	0.07	A		0.6	14.56	0.37	B		31.4	281.46	1.03	F		12.9	112.85	1.00	F		1.9	22.89	0.66	C

C - A12 South	D31	0.6	3.04	0.38	A	D32	20.9	47.96	0.98	E	D33	49.0	117.76	1.00	F	D34	33.3	72.21	1.01	F	D35	14.4	34.24	0.95	D
D - B1079 East		0.1	4.58	0.11	A		1.5	21.61	0.60	C		121.6	992.65	1.20	F		25.9	177.41	1.09	F		2.5	23.31	0.72	C

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

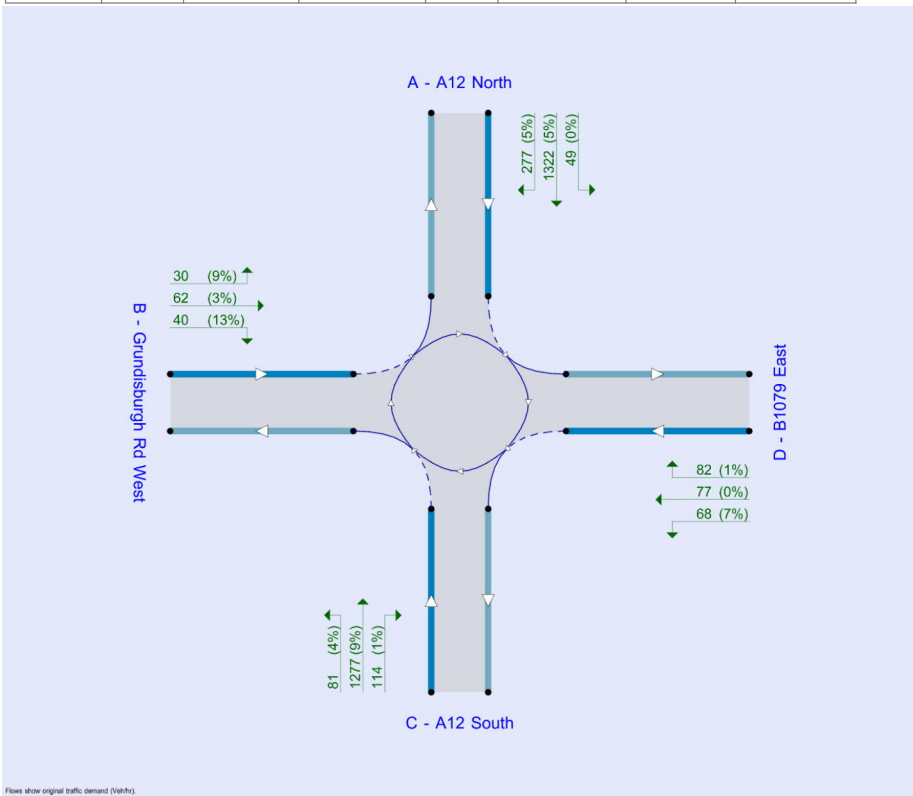
File summary

File Description

Title	A12 / B1079 Grundsburgh Road
Location	52° 5'45.80"N, 1° 17'54.03"E
Site number	27
Date	02/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	SR
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).
The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D3	2019 Base Year	8-9 AM	FLAT	07:45	09:15	90	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D8	2023 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D13	2023 Early Years	8-9 AM	FLAT	07:45	09:15	90	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D18	2028 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓

D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D23	2028 Peak Construction	8-9 AM	FLAT	07:45	09:15	90	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D28	2034 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D33	2034 Operational Led	8-9 AM	FLAT	07:45	09:15	90	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15		15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	2.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	Grundisburgh Rd West	
C	A12 South	
D	B1079 East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	7.40	7.40	0.0	32.9	55.1	9.0	
B - Grundisburgh Rd West	2.70	6.10	12.0	22.1	55.1	13.5	
C - A12 South	6.70	7.80	5.2	25.1	55.1	3.5	
D - B1079 East	2.60	7.10	11.6	26.6	55.1	6.5	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct		-80
B - Grundisburgh Rd West	Direct		-65
C - A12 South	Direct		-300
D - B1079 East	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.745	2369
B - Grundisburgh Rd West	0.554	1377
C - A12 South	0.749	2156
D - B1079 East	0.578	1525

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	752	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	62	100.000
C - A12 South		ONE HOUR	✓	528	100.000
D - B1079 East		ONE HOUR	✓	63	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	63	676	8
	B - Grundisburgh Rd West	17	0	34	11
	C - A12 South	484	32	2	10
	D - B1079 East	20	15	28	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
A - A12 North		0	2	7	0

	B - Grundisburgh Rd West	0	0	12	0
From	C - A12 South	11	3	0	0
	D - B1079 East	10	0	18	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.38	2.65	0.6	A	690	1035
B - Grundisburgh Rd West	0.07	4.02	0.1	A	57	85
C - A12 South	0.31	2.78	0.4	A	485	727
D - B1079 East	0.08	4.34	0.1	A	58	87

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	566	142	43	2203	0.257	565	395	0.0	0.3	2.195	A
B - Grundisburgh Rd West	47	12	391	1069	0.044	46	83	0.0	0.0	3.521	A
C - A12 South	398	99	77	1902	0.209	396	556	0.0	0.3	2.390	A
D - B1079 East	47	12	586	1049	0.045	47	22	0.0	0.0	3.593	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	676	169	51	2196	0.308	676	473	0.3	0.4	2.367	A
B - Grundisburgh Rd West	56	14	468	1024	0.054	56	99	0.0	0.1	3.715	A
C - A12 South	475	119	93	1892	0.251	474	665	0.3	0.3	2.540	A
D - B1079 East	57	14	701	985	0.057	57	26	0.0	0.1	3.875	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	828	207	63	2188	0.378	827	579	0.4	0.6	2.645	A
B - Grundisburgh Rd West	68	17	573	964	0.071	68	121	0.1	0.1	4.018	A
C - A12 South	581	145	113	1877	0.310	581	814	0.3	0.4	2.777	A
D - B1079 East	69	17	858	898	0.077	69	32	0.1	0.1	4.341	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	828	207	63	2188	0.378	828	579	0.6	0.6	2.647	A
B - Grundisburgh Rd West	68	17	574	964	0.071	68	121	0.1	0.1	4.019	A
C - A12 South	581	145	113	1877	0.310	581	815	0.4	0.4	2.778	A
D - B1079 East	69	17	859	898	0.077	69	32	0.1	0.1	4.343	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	676	169	51	2196	0.308	677	473	0.6	0.4	2.369	A
B - Grundisburgh Rd West	56	14	469	1024	0.054	56	99	0.1	0.1	3.717	A
C - A12 South	475	119	93	1891	0.251	475	666	0.4	0.3	2.542	A
D - B1079 East	57	14	702	985	0.058	57	26	0.1	0.1	3.880	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	566	142	43	2203	0.257	567	396	0.4	0.3	2.202	A
B - Grundisburgh Rd West	47	12	393	1068	0.044	47	83	0.1	0.0	3.524	A
C - A12 South	398	99	78	1902	0.209	398	558	0.3	0.3	2.393	A
D - B1079 East	47	12	588	1048	0.045	47	22	0.1	0.0	3.597	A

2019 Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	12.09	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1594	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	191	100.000
C - A12 South		ONE HOUR	✓	1258	100.000
D - B1079 East		ONE HOUR	✓	167	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	285	1261	41
	B - Grundisburgh Rd West	35	0	96	60
	C - A12 South	1113	76	2	67
	D - B1079 East	74	53	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	4	0
	B - Grundisburgh Rd West	6	0	6	3
	C - A12 South	10	4	0	0
	D - B1079 East	1	0	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	10.64	5.0	B	1463	2194
B - Grundisburgh Rd West	0.41	11.94	0.7	B	175	263
C - A12 South	0.84	13.47	5.0	B	1154	1732
D - B1079 East	0.44	15.26	0.8	C	153	230

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1200	300	168	2150	0.558	1195	921	0.0	1.3	3.751	A
B - Grundisburgh Rd West	144	36	946	766	0.188	143	310	0.0	0.2	5.788	A
C - A12 South	947	237	314	1754	0.540	942	1049	0.0	1.2	4.414	A
D - B1079 East	126	31	1238	761	0.165	125	126	0.0	0.2	5.655	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1433	358	202	2125	0.674	1430	1102	1.3	2.0	5.155	A
B - Grundisburgh Rd West	172	43	1132	659	0.260	171	371	0.2	0.3	7.368	A

C - A12 South	1131	283	376	1710	0.661	1128	1255	1.2	1.9	6.155	A
D - B1079 East	150	38	1481	617	0.243	150	151	0.2	0.3	7.688	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1755	439	246	2092	0.839	1744	1342	2.0	4.9	10.018	B
B - Grundisburgh Rd West	210	53	1379	518	0.406	209	453	0.3	0.7	11.611	B
C - A12 South	1385	346	458	1652	0.839	1374	1530	1.9	4.8	12.461	B
D - B1079 East	184	46	1806	426	0.432	182	184	0.3	0.7	14.670	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1755	439	248	2091	0.839	1754	1352	4.9	5.0	10.640	B
B - Grundisburgh Rd West	210	53	1390	512	0.411	210	456	0.7	0.7	11.939	B
C - A12 South	1385	346	461	1649	0.840	1384	1540	4.8	5.0	13.468	B
D - B1079 East	184	46	1817	419	0.438	184	185	0.7	0.8	15.263	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1433	358	204	2123	0.675	1445	1117	5.0	2.1	5.395	A
B - Grundisburgh Rd West	172	43	1148	651	0.264	173	376	0.7	0.4	7.557	A
C - A12 South	1131	283	380	1707	0.663	1143	1268	5.0	2.0	6.516	A
D - B1079 East	150	38	1496	608	0.247	152	152	0.8	0.3	7.916	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1200	300	170	2148	0.559	1203	928	2.1	1.3	3.824	A
B - Grundisburgh Rd West	144	36	954	761	0.189	144	313	0.4	0.2	5.839	A
C - A12 South	947	237	316	1752	0.541	950	1056	2.0	1.2	4.511	A
D - B1079 East	126	31	1246	756	0.166	126	127	0.3	0.2	5.725	A

2019 Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	65.85	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1756	100.000
B - Grundisburgh Rd West		FLAT	✓	446	100.000
C - A12 South		FLAT	✓	1406	100.000
D - B1079 East		FLAT	✓	355	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	373	1298	69
	B - Grundisburgh Rd West	61	0	185	200
	C - A12 South	1077	89	1	239
	D - B1079 East	154	71	130	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	7	1
	B - Grundisburgh Rd West	15	0	4	1
	C - A12 South	11	6	0	4
	D - B1079 East	2	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.99	74.16	35.0	F	1756	2634
B - Grundisburgh Rd West	0.96	122.08	14.4	F	446	669
C - A12 South	0.91	25.26	9.5	D	1406	2109
D - B1079 East	0.95	123.17	11.4	F	355	532

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1756	439	598	1798	0.977	1692	1273	0.0	16.0	26.117	D
B - Grundisburgh Rd West	446	111	1451	485	0.919	420	514	0.0	6.5	45.095	E
C - A12 South	1406	351	588	1560	0.901	1376	1549	0.0	7.5	17.430	C
D - B1079 East	355	89	1801	412	0.863	337	489	0.0	4.5	41.567	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1756	439	614	1785	0.984	1732	1299	16.0	22.1	46.444	E
B - Grundisburgh Rd West	446	111	1479	469	0.951	435	526	6.5	9.3	79.091	F

C - A12 South	1406	351	603	1550	0.907	1402	1588	7.5	8.5	23.103	C
D - B1079 East	355	89	1845	385	0.922	346	501	4.5	6.9	73.619	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1756	439	618	1783	0.985	1739	1303	22.1	26.4	56.147	F
B - Grundisburgh Rd West	446	111	1482	467	0.955	439	528	9.3	11.1	95.741	F
C - A12 South	1406	351	606	1548	0.909	1404	1596	8.5	9.0	24.199	C
D - B1079 East	355	89	1853	380	0.935	349	504	6.9	8.4	91.674	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1756	439	620	1781	0.986	1742	1304	26.4	29.8	63.371	F
B - Grundisburgh Rd West	446	111	1484	466	0.957	441	529	11.1	12.5	106.935	F
C - A12 South	1406	351	608	1546	0.909	1405	1600	9.0	9.2	24.726	C
D - B1079 East	355	89	1858	377	0.941	350	505	8.4	9.6	104.435	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1756	439	621	1781	0.986	1745	1305	29.8	32.6	69.220	F
B - Grundisburgh Rd West	446	111	1485	466	0.958	442	530	12.5	13.5	115.367	F
C - A12 South	1406	351	609	1546	0.910	1405	1603	9.2	9.4	25.043	D
D - B1079 East	355	89	1861	376	0.945	351	506	9.6	10.6	114.622	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1756	439	622	1780	0.987	1746	1306	32.6	35.0	74.157	F
B - Grundisburgh Rd West	446	111	1485	465	0.958	443	530	13.5	14.4	122.080	F
C - A12 South	1406	351	610	1545	0.910	1405	1604	9.4	9.5	25.255	D
D - B1079 East	355	89	1862	374	0.948	352	506	10.6	11.4	123.171	F

2019 Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	33.90	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1466	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	340	100.000
C - A12 South		ONE HOUR	✓	1448	100.000
D - B1079 East		ONE HOUR	✓	344	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	225	1129	98
	B - Grundisburgh Rd West	70	1	141	128
	C - A12 South	1200	125	3	120
	D - B1079 East	164	95	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	4	7	3
	B - Grundisburgh Rd West	6	0	4	2
	C - A12 South	7	5	0	1
	D - B1079 East	2	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	11.68	5.1	B	1345	2018
B - Grundisburgh Rd West	0.93	79.33	7.8	F	312	468
C - A12 South	0.98	46.96	20.1	E	1329	1993
D - B1079 East	0.76	30.02	3.0	D	316	473

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1104	276	293	2013	0.548	1099	1083	0.0	1.2	3.920	A
B - Grundisburgh Rd West	256	64	1123	690	0.371	254	334	0.0	0.6	8.200	A
C - A12 South	1090	273	373	1760	0.619	1084	1017	0.0	1.6	5.273	A
D - B1079 East	259	65	1134	816	0.318	257	259	0.0	0.5	6.427	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1318	329	351	1971	0.669	1315	1296	1.2	2.0	5.457	A
B - Grundisburgh Rd West	306	76	1343	566	0.540	303	400	0.6	1.1	13.603	B

C - A12 South	1302	325	447	1706	0.763	1296	1217	1.6	3.1	8.652	A
D - B1079 East	309	77	1356	680	0.455	308	310	0.5	0.8	9.625	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1614	404	415	1926	0.838	1603	1547	2.0	4.8	10.785	B
B - Grundisburgh Rd West	374	94	1604	418	0.896	357	483	1.1	5.5	49.658	E
C - A12 South	1594	399	542	1636	0.975	1546	1477	3.1	15.3	30.318	D
D - B1079 East	379	95	1648	503	0.752	371	370	0.8	2.7	25.896	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1614	404	424	1919	0.841	1613	1576	4.8	5.1	11.679	B
B - Grundisburgh Rd West	374	94	1635	401	0.934	365	489	5.5	7.8	79.330	F
C - A12 South	1594	399	548	1631	0.978	1575	1490	15.3	20.1	46.962	E
D - B1079 East	379	95	1661	495	0.765	378	376	2.7	3.0	30.020	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1318	329	379	1951	0.675	1330	1366	5.1	2.1	5.897	A
B - Grundisburgh Rd West	306	76	1414	526	0.581	331	411	7.8	1.5	20.689	C
C - A12 South	1302	325	457	1699	0.766	1368	1243	20.1	3.4	12.982	B
D - B1079 East	309	77	1382	665	0.465	318	327	3.0	0.9	10.605	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1104	276	299	2008	0.550	1107	1098	2.1	1.2	4.009	A
B - Grundisburgh Rd West	256	64	1137	682	0.375	259	337	1.5	0.6	8.574	A
C - A12 South	1090	273	378	1757	0.620	1097	1027	3.4	1.7	5.512	A
D - B1079 East	259	65	1144	809	0.320	261	263	0.9	0.5	6.581	A

2019 Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	14.07	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1379	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	275	100.000
C - A12 South		ONE HOUR	✓	1454	100.000
D - B1079 East		ONE HOUR	✓	280	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	195	1103	76
	B - Grundisburgh Rd West	63	0	90	122
	C - A12 South	1260	131	0	63
	D - B1079 East	118	98	64	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	3	3
	B - Grundisburgh Rd West	0	0	1	0
	C - A12 South	3	2	0	5
	D - B1079 East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	6.27	2.6	A	1265	1898
B - Grundisburgh Rd West	0.64	20.91	1.7	C	252	379
C - A12 South	0.91	20.65	8.7	C	1334	2001
D - B1079 East	0.50	11.64	1.0	B	257	385

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1038	260	206	2163	0.480	1035	1083	0.0	0.9	3.179	A
B - Grundisburgh Rd West	207	52	1083	760	0.272	206	318	0.0	0.4	6.477	A
C - A12 South	1095	274	312	1873	0.584	1089	943	0.0	1.4	4.559	A
D - B1079 East	211	53	1045	905	0.233	210	195	0.0	0.3	5.169	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1240	310	246	2133	0.581	1238	1296	0.9	1.4	4.014	A
B - Grundisburgh Rd West	247	62	1296	640	0.387	246	380	0.4	0.6	9.125	A

C - A12 South	1307	327	373	1828	0.715	1303	1128	1.4	2.4	6.797	A
D - B1079 East	252	63	1250	784	0.321	251	234	0.3	0.5	6.746	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1518	380	299	2094	0.725	1513	1571	1.4	2.6	6.149	A
B - Grundisburgh Rd West	303	76	1571	484	0.626	299	463	0.6	1.6	19.078	C
C - A12 South	1601	400	456	1767	0.906	1579	1378	2.4	8.0	17.377	C
D - B1079 East	308	77	1528	621	0.497	306	284	0.5	1.0	11.385	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1518	380	302	2092	0.726	1518	1589	2.6	2.6	6.274	A
B - Grundisburgh Rd West	303	76	1589	474	0.639	302	467	1.6	1.7	20.907	C
C - A12 South	1601	400	458	1766	0.907	1598	1384	8.0	8.7	20.649	C
D - B1079 East	308	77	1533	617	0.499	308	287	1.0	1.0	11.640	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1240	310	251	2129	0.582	1245	1323	2.6	1.4	4.092	A
B - Grundisburgh Rd West	247	62	1323	624	0.396	251	385	1.7	0.7	9.758	A
C - A12 South	1307	327	376	1826	0.716	1331	1136	8.7	2.6	7.624	A
D - B1079 East	252	63	1258	779	0.323	254	238	1.0	0.5	6.876	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1038	260	208	2161	0.480	1040	1093	1.4	0.9	3.218	A
B - Grundisburgh Rd West	207	52	1093	754	0.275	208	320	0.7	0.4	6.608	A
C - A12 South	1095	274	314	1872	0.585	1099	948	2.6	1.4	4.689	A
D - B1079 East	211	53	1051	901	0.234	211	197	0.5	0.3	5.223	A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	2.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	793	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	91	100.000
C - A12 South		ONE HOUR	✓	579	100.000
D - B1079 East		ONE HOUR	✓	72	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	67	711	10
	B - Grundisburgh Rd West	21	0	58	12
	C - A12 South	527	35	2	16
	D - B1079 East	23	17	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	0
	B - Grundisburgh Rd West	0	0	11	0
	C - A12 South	9	3	0	0
	D - B1079 East	9	0	15	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.40	2.77	0.7	A	727	1091
B - Grundisburgh Rd West	0.11	4.32	0.1	A	84	126
C - A12 South	0.34	2.85	0.5	A	532	797
D - B1079 East	0.09	4.53	0.1	A	66	99

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	597	149	66	2197	0.272	595	432	0.0	0.4	2.245	A
B - Grundisburgh Rd West	69	17	429	1047	0.066	68	89	0.0	0.1	3.679	A
C - A12 South	436	109	83	1928	0.226	435	604	0.0	0.3	2.411	A
D - B1079 East	54	13	633	1039	0.052	54	28	0.0	0.1	3.653	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	712	178	79	2187	0.326	712	517	0.4	0.5	2.440	A
B - Grundisburgh Rd West	82	21	514	999	0.082	82	106	0.1	0.1	3.924	A

C - A12 South	521	130	99	1917	0.272	520	722	0.3	0.4	2.578	A
D - B1079 East	64	16	757	970	0.066	64	33	0.1	0.1	3.976	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	873	218	97	2174	0.401	872	633	0.5	0.7	2.764	A
B - Grundisburgh Rd West	100	25	629	934	0.108	100	130	0.1	0.1	4.317	A
C - A12 South	638	159	122	1901	0.336	637	885	0.4	0.5	2.847	A
D - B1079 East	79	20	927	875	0.090	79	41	0.1	0.1	4.522	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	873	218	97	2174	0.401	873	633	0.7	0.7	2.766	A
B - Grundisburgh Rd West	100	25	630	934	0.108	100	130	0.1	0.1	4.318	A
C - A12 South	638	159	122	1901	0.336	638	885	0.5	0.5	2.850	A
D - B1079 East	79	20	928	874	0.090	79	41	0.1	0.1	4.525	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	712	178	79	2187	0.326	713	518	0.7	0.5	2.443	A
B - Grundisburgh Rd West	82	21	515	999	0.082	82	106	0.1	0.1	3.927	A
C - A12 South	521	130	100	1916	0.272	521	724	0.5	0.4	2.580	A
D - B1079 East	64	16	759	969	0.067	65	33	0.1	0.1	3.980	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	597	149	66	2197	0.272	597	433	0.5	0.4	2.250	A
B - Grundisburgh Rd West	69	17	431	1046	0.066	69	89	0.1	0.1	3.682	A
C - A12 South	436	109	83	1928	0.226	436	606	0.4	0.3	2.413	A
D - B1079 East	54	13	635	1038	0.052	54	28	0.1	0.1	3.660	A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	16.56	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1564	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	267	100.000
C - A12 South		ONE HOUR	✓	1335	100.000
D - B1079 East		ONE HOUR	✓	177	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	288	1225	44
	B - Grundisburgh Rd West	39	0	166	63
	C - A12 South	1176	82	2	75
	D - B1079 East	76	55	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	6	0
	B - Grundisburgh Rd West	5	0	5	3
	C - A12 South	10	4	0	0
	D - B1079 East	1	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	12.63	5.8	B	1435	2152
B - Grundisburgh Rd West	0.63	20.66	1.6	C	245	368
C - A12 South	0.89	19.92	7.7	C	1225	1837
D - B1079 East	0.51	18.90	1.0	C	162	243

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1177	294	228	2082	0.566	1172	972	0.0	1.3	3.936	A
B - Grundisburgh Rd West	201	50	1000	738	0.273	200	318	0.0	0.4	6.678	A
C - A12 South	1005	251	319	1748	0.575	1000	1078	0.0	1.3	4.776	A
D - B1079 East	133	33	1265	737	0.181	132	136	0.0	0.2	5.944	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1406	351	274	2049	0.686	1402	1163	1.3	2.1	5.540	A
B - Grundisburgh Rd West	240	60	1197	624	0.385	239	381	0.4	0.6	9.332	A

C - A12 South	1200	300	382	1704	0.704	1196	1290	1.3	2.3	7.035	A
D - B1079 East	159	40	1513	589	0.270	158	162	0.2	0.4	8.349	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1722	430	332	2006	0.858	1708	1410	2.1	5.6	11.593	B
B - Grundisburgh Rd West	294	74	1452	477	0.617	291	463	0.6	1.5	18.963	C
C - A12 South	1470	367	464	1645	0.893	1451	1571	2.3	7.1	17.038	C
D - B1079 East	195	49	1843	393	0.495	192	197	0.4	0.9	17.740	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1722	430	336	2003	0.860	1721	1427	5.6	5.8	12.630	B
B - Grundisburgh Rd West	294	74	1468	468	0.630	294	467	1.5	1.6	20.663	C
C - A12 South	1470	367	468	1643	0.895	1467	1583	7.1	7.7	19.920	C
D - B1079 East	195	49	1857	384	0.506	194	199	0.9	1.0	18.902	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1406	351	279	2044	0.688	1420	1187	5.8	2.2	5.892	A
B - Grundisburgh Rd West	240	60	1222	610	0.394	244	387	1.6	0.7	9.949	A
C - A12 South	1200	300	387	1700	0.706	1221	1308	7.7	2.5	7.830	A
D - B1079 East	159	40	1534	577	0.275	161	166	1.0	0.4	8.712	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1177	294	231	2080	0.566	1181	981	2.2	1.3	4.022	A
B - Grundisburgh Rd West	201	50	1010	732	0.275	202	321	0.7	0.4	6.811	A
C - A12 South	1005	251	322	1746	0.576	1009	1087	2.5	1.4	4.913	A
D - B1079 East	133	33	1275	731	0.182	134	137	0.4	0.2	6.034	A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	133.57	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1682	100.000
B - Grundisburgh Rd West		FLAT	✓	548	100.000
C - A12 South		FLAT	✓	1407	100.000
D - B1079 East		FLAT	✓	326	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	361	1234	71
	B - Grundisburgh Rd West	54	0	279	215
	C - A12 South	1155	97	1	153
	D - B1079 East	124	71	131	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	9	1
	B - Grundisburgh Rd West	19	0	4	0
	C - A12 South	11	5	0	11
	D - B1079 East	3	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.95	34.78	15.6	D	1682	2523
B - Grundisburgh Rd West	1.15	779.27	110.5	F	548	822
C - A12 South	0.90	23.80	9.0	C	1407	2110
D - B1079 East	0.89	78.81	6.8	F	326	489

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1682	421	575	1784	0.943	1637	1311	0.0	11.2	20.520	C
B - Grundisburgh Rd West	548	137	1416	494	1.109	470	514	0.0	19.5	92.159	F
C - A12 South	1407	352	553	1568	0.897	1378	1567	0.0	7.2	16.965	C
D - B1079 East	326	81	1809	394	0.826	311	404	0.0	3.7	38.233	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1682	421	583	1779	0.946	1674	1336	11.2	13.3	30.242	D
B - Grundisburgh Rd West	548	137	1443	478	1.146	475	526	19.5	37.7	234.128	F

C - A12 South	1407	352	566	1558	0.903	1403	1600	7.2	8.2	22.166	C
D - B1079 East	326	81	1846	372	0.876	320	410	3.7	5.2	61.217	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1682	421	583	1779	0.946	1678	1339	13.3	14.3	32.485	D
B - Grundisburgh Rd West	548	137	1446	477	1.150	475	527	37.7	55.9	368.916	F
C - A12 South	1407	352	569	1556	0.904	1405	1604	8.2	8.6	23.061	C
D - B1079 East	326	81	1850	369	0.882	323	411	5.2	5.9	69.960	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1682	421	583	1779	0.946	1680	1340	14.3	14.9	33.617	D
B - Grundisburgh Rd West	548	137	1448	476	1.152	475	528	55.9	74.1	505.099	F
C - A12 South	1407	352	570	1555	0.904	1406	1606	8.6	8.8	23.449	C
D - B1079 East	326	81	1852	368	0.885	324	411	5.9	6.3	74.335	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1682	421	583	1779	0.946	1680	1340	14.9	15.3	34.309	D
B - Grundisburgh Rd West	548	137	1448	476	1.152	475	528	74.1	92.3	642.019	F
C - A12 South	1407	352	570	1555	0.904	1406	1607	8.8	8.9	23.663	C
D - B1079 East	326	81	1852	368	0.886	325	411	6.3	6.6	77.006	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1682	421	583	1779	0.946	1681	1341	15.3	15.6	34.779	D
B - Grundisburgh Rd West	548	137	1448	476	1.153	475	528	92.3	110.5	779.269	F
C - A12 South	1407	352	571	1555	0.905	1406	1607	8.9	9.0	23.798	C
D - B1079 East	326	81	1853	368	0.886	325	411	6.6	6.8	78.806	F

2023 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	60.99	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1479	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	414	100.000
C - A12 South		ONE HOUR	✓	1439	100.000
D - B1079 East		ONE HOUR	✓	360	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	231	1130	104
	B - Grundisburgh Rd West	75	1	208	131
	C - A12 South	1194	117	3	124
	D - B1079 East	189	98	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	8	3
	B - Grundisburgh Rd West	5	0	5	2
	C - A12 South	7	5	0	0
	D - B1079 East	1	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	14.10	6.1	B	1357	2035
B - Grundisburgh Rd West	1.18	265.32	36.7	F	380	570
C - A12 South	0.99	53.81	23.3	F	1320	1980
D - B1079 East	0.87	53.34	5.5	F	330	495

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1113	278	348	1954	0.570	1108	1101	0.0	1.3	4.229	A
B - Grundisburgh Rd West	312	78	1140	676	0.461	309	334	0.0	0.8	9.710	A
C - A12 South	1083	271	398	1737	0.623	1077	1059	0.0	1.6	5.397	A
D - B1079 East	271	68	1188	774	0.350	269	268	0.0	0.5	7.100	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1329	332	415	1906	0.697	1326	1316	1.3	2.3	6.161	A
B - Grundisburgh Rd West	373	93	1363	550	0.677	368	400	0.8	2.0	19.293	C

C - A12 South	1293	323	476	1680	0.770	1287	1266	1.6	3.2	9.018	A
D - B1079 East	324	81	1421	632	0.512	322	320	0.5	1.0	11.539	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1628	407	454	1879	0.867	1614	1555	2.3	5.9	12.932	B
B - Grundisburgh Rd West	456	114	1620	405	1.127	389	481	2.0	18.7	118.303	F
C - A12 South	1584	396	572	1610	0.984	1530	1510	3.2	16.8	32.903	D
D - B1079 East	396	99	1700	461	0.860	382	368	1.0	4.6	40.201	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1628	407	453	1880	0.866	1627	1584	5.9	6.1	14.095	B
B - Grundisburgh Rd West	456	114	1652	387	1.179	384	488	18.7	36.7	265.325	F
C - A12 South	1584	396	582	1602	0.989	1558	1520	16.8	23.3	53.807	F
D - B1079 East	396	99	1710	455	0.872	393	370	4.6	5.5	53.338	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1329	332	521	1830	0.726	1343	1418	6.1	2.7	7.588	A
B - Grundisburgh Rd West	373	93	1451	501	0.744	487	415	36.7	7.9	173.227	F
C - A12 South	1293	323	494	1667	0.776	1372	1344	23.3	3.7	15.280	C
D - B1079 East	324	81	1497	586	0.553	340	367	5.5	1.3	15.608	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1113	278	375	1935	0.575	1119	1121	2.7	1.4	4.441	A
B - Grundisburgh Rd West	312	78	1156	667	0.468	340	338	7.9	0.9	11.941	B
C - A12 South	1083	271	404	1733	0.625	1091	1084	3.7	1.7	5.675	A
D - B1079 East	271	68	1214	758	0.357	274	280	1.3	0.6	7.475	A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	18.45	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1386	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	356	100.000
C - A12 South		ONE HOUR	✓	1444	100.000
D - B1079 East		ONE HOUR	✓	304	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	184	1116	81
	B - Grundisburgh Rd West	67	0	164	124
	C - A12 South	1265	120	0	60
	D - B1079 East	139	97	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	2	4	2
	B - Grundisburgh Rd West	0	0	0	0
	C - A12 South	4	2	0	5
	D - B1079 East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	7.38	3.1	A	1272	1907
B - Grundisburgh Rd West	0.86	50.35	5.1	F	326	489
C - A12 South	0.91	21.98	9.2	C	1325	1988
D - B1079 East	0.60	15.91	1.4	C	279	418

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1043	261	260	2100	0.497	1039	1105	0.0	1.0	3.382	A
B - Grundisburgh Rd West	268	67	1099	747	0.358	265	300	0.0	0.6	7.443	A
C - A12 South	1087	272	318	1852	0.587	1082	1011	0.0	1.4	4.639	A
D - B1079 East	229	57	1102	866	0.264	227	198	0.0	0.4	5.626	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1246	311	311	2063	0.604	1244	1322	1.0	1.5	4.383	A
B - Grundisburgh Rd West	320	80	1315	624	0.513	318	359	0.6	1.0	11.695	B

C - A12 South	1298	325	381	1806	0.719	1294	1209	1.4	2.5	6.965	A
D - B1079 East	273	68	1318	737	0.370	272	237	0.4	0.6	7.730	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1526	381	372	2018	0.756	1520	1600	1.5	3.0	7.134	A
B - Grundisburgh Rd West	391	98	1594	465	0.842	379	438	1.0	4.2	37.514	E
C - A12 South	1590	398	464	1745	0.911	1567	1473	2.5	8.3	18.187	C
D - B1079 East	334	84	1606	565	0.591	331	286	0.6	1.4	15.155	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1526	381	380	2012	0.758	1525	1621	3.0	3.1	7.380	A
B - Grundisburgh Rd West	391	98	1613	454	0.863	388	441	4.2	5.1	50.346	F
C - A12 South	1590	398	467	1743	0.912	1587	1483	8.3	9.2	21.983	C
D - B1079 East	334	84	1616	560	0.597	334	290	1.4	1.4	15.913	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1246	311	327	2051	0.607	1252	1354	3.1	1.6	4.535	A
B - Grundisburgh Rd West	320	80	1345	607	0.527	335	364	5.1	1.1	14.001	B
C - A12 South	1298	325	385	1803	0.720	1324	1225	9.2	2.6	7.905	A
D - B1079 East	273	68	1334	728	0.375	276	245	1.4	0.6	8.036	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1043	261	264	2097	0.497	1045	1116	1.6	1.0	3.433	A
B - Grundisburgh Rd West	268	67	1110	741	0.361	270	303	1.1	0.6	7.683	A
C - A12 South	1087	272	321	1850	0.588	1092	1018	2.6	1.4	4.777	A
D - B1079 East	229	57	1109	861	0.266	230	200	0.6	0.4	5.710	A

2023 Early Years, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	3.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	831	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	104	100.000
C - A12 South		ONE HOUR	✓	706	100.000
D - B1079 East		ONE HOUR	✓	80	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	71	743	12
	B - Grundisburgh Rd West	27	0	64	13
	C - A12 South	645	38	2	22
	D - B1079 East	27	18	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	2	6	0
	B - Grundisburgh Rd West	0	0	10	0
	C - A12 South	11	3	0	2
	D - B1079 East	7	0	15	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.88	0.7	A	762	1143
B - Grundisburgh Rd West	0.13	4.88	0.2	A	96	143
C - A12 South	0.42	3.33	0.7	A	648	972
D - B1079 East	0.10	4.71	0.1	A	73	110

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	625	156	76	2192	0.285	624	528	0.0	0.4	2.294	A
B - Grundisburgh Rd West	78	20	525	995	0.079	78	95	0.0	0.1	3.926	A
C - A12 South	532	133	90	1888	0.282	530	635	0.0	0.4	2.649	A
D - B1079 East	60	15	665	1025	0.059	60	35	0.0	0.1	3.730	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	747	187	91	2180	0.342	746	632	0.4	0.5	2.510	A
B - Grundisburgh Rd West	94	23	629	935	0.100	94	113	0.1	0.1	4.278	A

C - A12 South	635	159	108	1876	0.338	634	759	0.4	0.5	2.900	A
D - B1079 East	72	18	795	952	0.075	72	42	0.1	0.1	4.089	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	914	229	111	2165	0.422	914	773	0.5	0.7	2.875	A
B - Grundisburgh Rd West	115	29	770	853	0.134	115	139	0.1	0.2	4.871	A
C - A12 South	778	194	132	1859	0.418	777	930	0.5	0.7	3.325	A
D - B1079 East	88	22	974	852	0.103	88	51	0.1	0.1	4.709	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	914	229	111	2165	0.422	914	774	0.7	0.7	2.878	A
B - Grundisburgh Rd West	115	29	770	853	0.135	115	139	0.2	0.2	4.876	A
C - A12 South	778	194	132	1859	0.418	778	930	0.7	0.7	3.327	A
D - B1079 East	88	22	975	852	0.103	88	51	0.1	0.1	4.713	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	747	187	91	2180	0.342	747	633	0.7	0.5	2.513	A
B - Grundisburgh Rd West	94	23	630	934	0.100	94	114	0.2	0.1	4.286	A
C - A12 South	635	159	108	1876	0.338	636	761	0.7	0.5	2.904	A
D - B1079 East	72	18	797	951	0.075	72	42	0.1	0.1	4.094	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	625	156	76	2191	0.285	626	530	0.5	0.4	2.299	A
B - Grundisburgh Rd West	78	20	527	994	0.079	79	95	0.1	0.1	3.934	A
C - A12 South	532	133	90	1888	0.282	532	637	0.5	0.4	2.655	A
D - B1079 East	60	15	667	1024	0.059	60	35	0.1	0.1	3.738	A

2023 Early Years, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	37.18	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1596	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	287	100.000
C - A12 South		ONE HOUR	✓	1422	100.000
D - B1079 East		ONE HOUR	✓	220	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	292	1250	47
	B - Grundisburgh Rd West	54	0	171	63
	C - A12 South	1354	66	2	0
	D - B1079 East	90	73	57	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	6	0
	B - Grundisburgh Rd West	4	0	5	3
	C - A12 South	13	4	0	0
	D - B1079 East	1	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	11.85	5.6	B	1464	2196
B - Grundisburgh Rd West	0.82	47.88	3.9	E	264	396
C - A12 South	1.00	62.82	27.4	F	1305	1957
D - B1079 East	0.67	29.56	1.9	D	202	302

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1201	300	176	2117	0.567	1196	1125	0.0	1.3	3.888	A
B - Grundisburgh Rd West	216	54	1086	670	0.323	215	323	0.0	0.5	7.872	A
C - A12 South	1070	268	346	1676	0.639	1063	1109	0.0	1.7	5.811	A
D - B1079 East	165	41	1290	720	0.230	164	82	0.0	0.3	6.461	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1435	359	210	2091	0.686	1431	1345	1.3	2.1	5.424	A
B - Grundisburgh Rd West	258	65	1299	544	0.475	257	386	0.5	0.9	12.476	B

C - A12 South	1278	320	414	1630	0.784	1271	1327	1.7	3.5	9.853	A
D - B1079 East	198	49	1544	569	0.347	197	98	0.3	0.5	9.631	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1757	439	252	2061	0.853	1744	1593	2.1	5.3	10.950	B
B - Grundisburgh Rd West	316	79	1537	402	0.787	308	467	0.9	3.1	35.306	E
C - A12 South	1565	391	502	1569	0.998	1502	1613	3.5	19.2	37.055	E
D - B1079 East	242	60	1878	371	0.653	237	118	0.5	1.7	26.109	D

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1757	439	256	2057	0.854	1756	1625	5.3	5.6	11.853	B
B - Grundisburgh Rd West	316	79	1568	384	0.825	313	472	3.1	3.9	47.884	E
C - A12 South	1565	391	508	1565	1.000	1533	1627	19.2	27.4	62.821	F
D - B1079 East	242	60	1893	362	0.669	241	119	1.7	1.9	29.559	D

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1435	359	221	2084	0.688	1448	1446	5.6	2.3	5.778	A
B - Grundisburgh Rd West	258	65	1398	485	0.533	269	396	3.9	1.2	17.506	C
C - A12 South	1278	320	422	1624	0.787	1372	1349	27.4	3.9	19.145	C
D - B1079 East	198	49	1568	555	0.356	203	101	1.9	0.6	10.365	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1201	300	179	2114	0.568	1205	1142	2.3	1.3	3.975	A
B - Grundisburgh Rd West	216	54	1102	661	0.328	219	326	1.2	0.5	8.204	A
C - A12 South	1070	268	349	1674	0.639	1079	1119	3.9	1.8	6.135	A
D - B1079 East	165	41	1302	714	0.232	166	83	0.6	0.3	6.591	A

2023 Early Years, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	290.66	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1661	100.000
B - Grundisburgh Rd West		FLAT	✓	579	100.000
C - A12 South		FLAT	✓	1442	100.000
D - B1079 East		FLAT	✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	359	1217	69
	B - Grundisburgh Rd West	61	0	297	221
	C - A12 South	1201	88	1	151
	D - B1079 East	129	74	143	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	10	1
	B - Grundisburgh Rd West	18	0	4	0
	C - A12 South	16	6	0	11
	D - B1079 East	3	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	24.52	11.0	C	1661	2492
B - Grundisburgh Rd West	1.39	1860.06	234.7	F	579	869
C - A12 South	0.96	54.46	20.8	F	1442	2162
D - B1079 East	0.90	81.33	7.4	F	346	519

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1661	415	537	1798	0.924	1624	1344	0.0	9.3	17.980	C
B - Grundisburgh Rd West	579	145	1445	448	1.294	435	506	0.0	35.9	164.532	F
C - A12 South	1442	360	559	1507	0.956	1393	1550	0.0	12.2	25.257	D
D - B1079 East	346	86	1780	403	0.858	328	380	0.0	4.4	41.695	E

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1661	415	531	1802	0.922	1657	1376	9.3	10.3	23.632	C
B - Grundisburgh Rd West	579	145	1483	425	1.363	424	518	35.9	74.6	485.478	F

C - A12 South	1442	360	573	1498	0.962	1428	1574	12.2	15.6	41.055	E
D - B1079 East	346	86	1807	386	0.895	340	381	4.4	5.9	66.364	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1661	415	528	1803	0.921	1660	1382	10.3	10.6	24.160	C
B - Grundisburgh Rd West	579	145	1489	421	1.376	421	520	74.6	114.2	821.719	F
C - A12 South	1442	360	576	1496	0.964	1433	1575	15.6	17.7	46.724	E
D - B1079 East	346	86	1807	386	0.896	343	380	5.9	6.6	74.306	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1661	415	527	1804	0.921	1660	1385	10.6	10.8	24.355	C
B - Grundisburgh Rd West	579	145	1492	419	1.381	419	520	114.2	154.1	1163.794	F
C - A12 South	1442	360	576	1496	0.964	1436	1575	17.7	19.0	50.220	F
D - B1079 East	346	86	1807	386	0.896	344	380	6.6	7.0	77.907	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1661	415	526	1805	0.920	1661	1386	10.8	10.9	24.458	C
B - Grundisburgh Rd West	579	145	1494	418	1.385	418	520	154.1	194.4	1511.863	F
C - A12 South	1442	360	577	1495	0.964	1437	1575	19.0	20.1	52.651	F
D - B1079 East	346	86	1807	386	0.895	345	380	7.0	7.3	79.981	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1661	415	526	1805	0.920	1661	1387	10.9	11.0	24.521	C
B - Grundisburgh Rd West	579	145	1495	418	1.387	418	520	194.4	234.7	1860.059	F
C - A12 South	1442	360	577	1495	0.964	1438	1575	20.1	20.8	54.456	F
D - B1079 East	346	86	1807	386	0.895	345	380	7.3	7.4	81.331	F

2023 Early Years, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	110.50	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1479	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	490	100.000
C - A12 South		ONE HOUR	✓	1420	100.000
D - B1079 East		ONE HOUR	✓	398	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	232	1127	106
	B - Grundisburgh Rd West	92	1	255	143
	C - A12 South	1185	112	3	119
	D - B1079 East	200	106	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	11	3
	B - Grundisburgh Rd West	5	0	5	2
	C - A12 South	10	5	0	0
	D - B1079 East	1	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	15.98	6.9	C	1357	2035
B - Grundisburgh Rd West	1.42	542.38	79.9	F	450	675
C - A12 South	1.00	62.08	27.1	F	1303	1954
D - B1079 East	1.02	130.21	16.0	F	365	548

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1113	278	388	1886	0.590	1108	1114	0.0	1.4	4.593	A
B - Grundisburgh Rd West	369	92	1138	668	0.553	364	337	0.0	1.2	11.701	B
C - A12 South	1069	267	412	1690	0.632	1062	1105	0.0	1.7	5.673	A
D - B1079 East	300	75	1221	737	0.407	297	275	0.0	0.7	8.139	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1329	332	459	1836	0.724	1325	1331	1.4	2.6	6.981	A
B - Grundisburgh Rd West	441	110	1359	539	0.818	431	403	1.2	3.8	30.640	D

C - A12 South	1276	319	493	1632	0.782	1269	1319	1.7	3.4	9.733	A
D - B1079 East	358	89	1457	590	0.606	354	327	0.7	1.5	15.076	C

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1628	407	450	1843	0.884	1612	1545	2.6	6.7	14.627	B
B - Grundisburgh Rd West	540	135	1600	399	1.352	395	479	3.8	40.1	222.520	F
C - A12 South	1563	391	577	1572	0.995	1502	1531	3.4	18.6	36.164	E
D - B1079 East	438	110	1705	435	1.007	402	356	1.5	10.6	74.165	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1628	407	441	1849	0.880	1627	1572	6.7	6.9	15.976	C
B - Grundisburgh Rd West	540	135	1632	381	1.416	381	487	40.1	79.9	538.783	F
C - A12 South	1563	391	590	1562	1.001	1529	1538	18.6	27.1	62.078	F
D - B1079 East	438	110	1713	430	1.018	416	356	10.6	16.0	130.210	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1329	332	495	1811	0.734	1346	1449	6.9	2.8	7.999	A
B - Grundisburgh Rd West	441	110	1480	470	0.938	464	430	79.9	74.0	542.378	F
C - A12 South	1276	319	542	1597	0.799	1368	1367	27.1	4.3	21.076	C
D - B1079 East	358	89	1495	567	0.630	415	346	16.0	1.8	31.719	D

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1113	278	620	1723	0.646	1117	1185	2.8	1.9	5.986	A
B - Grundisburgh Rd West	369	92	1156	657	0.562	648	342	74.0	4.3	224.916	F
C - A12 South	1069	267	420	1685	0.634	1079	1262	4.3	1.8	6.034	A
D - B1079 East	300	75	1378	643	0.466	303	359	1.8	0.9	10.693	B

2023 Early Years, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	23.43	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1446	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	387	100.000
C - A12 South		ONE HOUR	✓	1433	100.000
D - B1079 East		ONE HOUR	✓	323	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	198	1125	118
	B - Grundisburgh Rd West	81	0	175	130
	C - A12 South	1259	119	0	56
	D - B1079 East	144	101	78	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	7	2
	B - Grundisburgh Rd West	1	0	1	0
	C - A12 South	4	2	0	5
	D - B1079 East	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	9.67	4.2	A	1327	1990
B - Grundisburgh Rd West	0.94	77.47	8.7	F	355	532
C - A12 South	0.92	23.76	9.8	C	1315	1973
D - B1079 East	0.69	22.12	2.1	C	296	444

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1088	272	270	2048	0.532	1084	1114	0.0	1.1	3.719	A
B - Grundisburgh Rd West	291	73	1096	744	0.391	288	313	0.0	0.6	7.853	A
C - A12 South	1079	270	335	1831	0.589	1073	1033	0.0	1.4	4.717	A
D - B1079 East	243	61	1127	834	0.291	241	227	0.0	0.4	6.060	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1300	325	323	2010	0.647	1297	1333	1.1	1.8	5.030	A
B - Grundisburgh Rd West	347	87	1311	621	0.559	345	375	0.6	1.2	12.921	B

C - A12 South	1288	322	401	1783	0.723	1284	1236	1.4	2.5	7.148	A
D - B1079 East	290	73	1348	700	0.414	289	272	0.4	0.7	8.738	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1592	398	381	1969	0.809	1583	1610	1.8	4.0	9.127	A
B - Grundisburgh Rd West	426	106	1586	464	0.917	405	455	1.2	6.4	49.989	E
C - A12 South	1578	395	488	1720	0.917	1553	1500	2.5	8.8	19.207	C
D - B1079 East	355	89	1638	524	0.678	350	326	0.7	2.0	20.162	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1592	398	390	1962	0.811	1591	1633	4.0	4.2	9.672	A
B - Grundisburgh Rd West	426	106	1607	452	0.942	416	460	6.4	8.7	77.471	F
C - A12 South	1578	395	492	1717	0.919	1574	1513	8.8	9.8	23.759	C
D - B1079 East	355	89	1650	516	0.688	355	331	2.0	2.1	22.119	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1300	325	349	1991	0.653	1309	1371	4.2	1.9	5.341	A
B - Grundisburgh Rd West	347	87	1344	602	0.577	377	381	8.7	1.4	17.901	C
C - A12 South	1288	322	408	1778	0.725	1317	1261	9.8	2.7	8.253	A
D - B1079 East	290	73	1373	685	0.423	295	285	2.1	0.7	9.370	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1088	272	275	2044	0.532	1091	1126	1.9	1.1	3.789	A
B - Grundisburgh Rd West	291	73	1107	738	0.394	294	316	1.4	0.7	8.160	A
C - A12 South	1079	270	338	1829	0.590	1084	1042	2.7	1.5	4.867	A
D - B1079 East	243	61	1136	828	0.293	244	230	0.7	0.4	6.177	A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	2.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	805	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	53	100.000
C - A12 South		ONE HOUR	✓	609	100.000
D - B1079 East		ONE HOUR	✓	77	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	70	718	12
	B - Grundisburgh Rd West	23	0	17	13
	C - A12 South	545	39	2	24
	D - B1079 East	24	18	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	0
	B - Grundisburgh Rd West	0	0	19	0
	C - A12 South	9	3	0	1
	D - B1079 East	8	0	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.40	2.73	0.7	A	738	1107
B - Grundisburgh Rd West	0.06	4.16	0.1	A	49	73
C - A12 South	0.35	2.92	0.5	A	559	839
D - B1079 East	0.09	4.43	0.1	A	70	106

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	606	151	42	2219	0.273	604	448	0.0	0.4	2.228	A
B - Grundisburgh Rd West	40	10	450	1042	0.038	40	95	0.0	0.0	3.591	A
C - A12 South	459	115	87	1931	0.238	457	581	0.0	0.3	2.441	A
D - B1079 East	58	14	610	1056	0.055	58	36	0.0	0.1	3.605	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	723	181	50	2212	0.327	723	536	0.4	0.5	2.417	A
B - Grundisburgh Rd West	48	12	538	992	0.048	48	113	0.0	0.1	3.811	A

C - A12 South	548	137	104	1918	0.286	547	695	0.3	0.4	2.625	A
D - B1079 East	69	17	730	989	0.070	69	43	0.1	0.1	3.912	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	886	221	61	2204	0.402	885	656	0.5	0.7	2.728	A
B - Grundisburgh Rd West	59	15	659	924	0.063	59	139	0.1	0.1	4.160	A
C - A12 South	671	168	127	1902	0.353	670	850	0.4	0.5	2.921	A
D - B1079 East	84	21	893	898	0.094	84	53	0.1	0.1	4.427	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	886	221	61	2204	0.402	886	656	0.7	0.7	2.730	A
B - Grundisburgh Rd West	59	15	659	923	0.063	59	139	0.1	0.1	4.162	A
C - A12 South	671	168	127	1902	0.353	671	851	0.5	0.5	2.923	A
D - B1079 East	84	21	894	897	0.094	84	53	0.1	0.1	4.429	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	723	181	50	2212	0.327	724	537	0.7	0.5	2.419	A
B - Grundisburgh Rd West	48	12	539	992	0.048	48	114	0.1	0.1	3.814	A
C - A12 South	548	137	104	1918	0.286	548	696	0.5	0.4	2.628	A
D - B1079 East	69	17	731	988	0.070	69	43	0.1	0.1	3.917	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	606	151	42	2219	0.273	606	449	0.5	0.4	2.234	A
B - Grundisburgh Rd West	40	10	451	1041	0.038	40	95	0.1	0.0	3.597	A
C - A12 South	459	115	87	1930	0.238	459	582	0.4	0.3	2.448	A
D - B1079 East	58	14	612	1055	0.055	58	36	0.1	0.1	3.612	A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	24.41	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1669	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	139	100.000
C - A12 South		ONE HOUR	✓	1432	100.000
D - B1079 East		ONE HOUR	✓	191	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	293	1323	46
	B - Grundisburgh Rd West	41	0	39	60
	C - A12 South	1239	89	2	102
	D - B1079 East	78	58	55	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	5	0
	B - Grundisburgh Rd West	5	0	13	3
	C - A12 South	10	4	0	1
	D - B1079 East	1	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	13.94	6.8	B	1531	2297
B - Grundisburgh Rd West	0.37	13.95	0.6	B	128	192
C - A12 South	0.96	37.90	15.7	E	1314	1971
D - B1079 East	0.52	18.87	1.1	C	175	263

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1256	314	152	2142	0.586	1251	1021	0.0	1.4	4.013	A
B - Grundisburgh Rd West	105	26	1069	689	0.152	104	329	0.0	0.2	6.148	A
C - A12 South	1078	270	326	1752	0.615	1072	1063	0.0	1.6	5.243	A
D - B1079 East	144	36	1247	747	0.192	143	155	0.0	0.2	5.952	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1500	375	181	2120	0.708	1496	1222	1.4	2.4	5.733	A
B - Grundisburgh Rd West	125	31	1278	571	0.220	125	394	0.2	0.3	8.065	A

C - A12 South	1287	322	391	1707	0.754	1282	1272	1.6	3.0	8.364	A
D - B1079 East	171	43	1492	601	0.285	171	186	0.2	0.4	8.352	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1837	459	219	2092	0.878	1821	1467	2.4	6.5	12.563	B
B - Grundisburgh Rd West	154	38	1534	426	0.360	152	478	0.3	0.6	13.085	B
C - A12 South	1577	394	475	1647	0.958	1537	1548	3.0	12.8	26.571	D
D - B1079 East	210	53	1816	409	0.514	208	225	0.4	1.0	17.666	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1837	459	222	2090	0.879	1836	1492	6.5	6.8	13.943	B
B - Grundisburgh Rd West	154	38	1561	411	0.373	153	483	0.6	0.6	13.954	B
C - A12 South	1577	394	479	1644	0.959	1565	1561	12.8	15.7	37.896	E
D - B1079 East	210	53	1831	400	0.525	210	227	1.0	1.1	18.874	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1500	375	186	2117	0.709	1518	1271	6.8	2.5	6.174	A
B - Grundisburgh Rd West	125	31	1331	541	0.232	126	402	0.6	0.3	8.712	A
C - A12 South	1287	322	397	1702	0.756	1337	1291	15.7	3.2	11.122	B
D - B1079 East	171	43	1513	589	0.291	174	191	1.1	0.4	8.738	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1256	314	153	2141	0.587	1261	1033	2.5	1.4	4.109	A
B - Grundisburgh Rd West	105	26	1081	682	0.154	105	332	0.3	0.2	6.251	A
C - A12 South	1078	270	329	1750	0.616	1084	1072	3.2	1.6	5.460	A
D - B1079 East	144	36	1257	741	0.194	144	157	0.4	0.2	6.041	A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	226.41	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1876	100.000
B - Grundisburgh Rd West		FLAT	✓	327	100.000
C - A12 South		FLAT	✓	1541	100.000
D - B1079 East		FLAT	✓	452	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	377	1405	78
	B - Grundisburgh Rd West	58	0	55	214
	C - A12 South	1149	96	1	294
	D - B1079 East	199	103	150	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	8	1
	B - Grundisburgh Rd West	18	0	10	0
	C - A12 South	11	5	0	6
	D - B1079 East	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.04	225.03	119.1	F	1876	2814
B - Grundisburgh Rd West	0.84	56.64	4.9	F	327	491
C - A12 South	1.02	169.82	73.0	F	1541	2311
D - B1079 East	1.11	565.99	68.0	F	452	678

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1876	469	538	1823	1.029	1762	1332	0.0	28.6	38.234	E
B - Grundisburgh Rd West	327	82	1555	417	0.784	315	536	0.0	3.1	32.158	D
C - A12 South	1541	385	638	1520	1.014	1453	1507	0.0	21.8	37.145	E
D - B1079 East	452	113	1742	435	1.038	403	557	0.0	12.3	75.201	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1876	469	552	1813	1.035	1798	1364	28.6	48.0	84.951	F
B - Grundisburgh Rd West	327	82	1592	395	0.827	323	547	3.1	4.0	46.785	E

C - A12 South	1541	385	648	1513	1.018	1491	1537	21.8	34.1	76.499	F
D - B1079 East	452	113	1779	413	1.093	407	572	12.3	23.6	179.763	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1876	469	555	1811	1.036	1803	1369	48.0	66.4	121.090	F
B - Grundisburgh Rd West	327	82	1599	392	0.835	325	548	4.0	4.4	51.588	F
C - A12 South	1541	385	649	1512	1.019	1498	1541	34.1	44.8	102.613	F
D - B1079 East	452	113	1783	410	1.101	407	575	23.6	34.7	275.720	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1876	469	556	1810	1.037	1805	1372	66.4	84.2	156.124	F
B - Grundisburgh Rd West	327	82	1602	390	0.839	326	549	4.4	4.6	54.022	F
C - A12 South	1541	385	650	1511	1.019	1501	1543	44.8	54.6	126.209	F
D - B1079 East	452	113	1785	409	1.104	407	576	34.7	45.8	371.927	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1876	469	557	1810	1.037	1806	1373	84.2	101.7	190.699	F
B - Grundisburgh Rd West	327	82	1604	389	0.841	326	549	4.6	4.8	55.560	F
C - A12 South	1541	385	650	1511	1.019	1503	1544	54.6	64.0	148.453	F
D - B1079 East	452	113	1786	409	1.106	407	576	45.8	56.9	468.778	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1876	469	557	1809	1.037	1807	1374	101.7	119.1	225.033	F
B - Grundisburgh Rd West	327	82	1605	388	0.843	327	550	4.8	4.9	56.638	F
C - A12 South	1541	385	650	1511	1.019	1505	1544	64.0	73.0	169.820	F
D - B1079 East	452	113	1787	408	1.107	407	577	56.9	68.0	565.987	F

2028 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	41.40	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1570	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	313	100.000
C - A12 South		ONE HOUR	✓	1439	100.000
D - B1079 East		ONE HOUR	✓	388	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	230	1215	111
	B - Grundisburgh Rd West	79	1	90	144
	C - A12 South	1180	134	3	121
	D - B1079 East	196	106	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	4	7	3
	B - Grundisburgh Rd West	5	0	5	2
	C - A12 South	7	4	0	0
	D - B1079 East	1	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.89	16.81	7.7	C	1440	2161
B - Grundisburgh Rd West	0.87	56.39	5.0	F	288	431
C - A12 South	0.99	57.10	25.0	F	1320	1980
D - B1079 East	0.93	73.01	8.1	F	356	534

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1182	295	268	2021	0.585	1176	1098	0.0	1.4	4.233	A
B - Grundisburgh Rd West	236	59	1133	684	0.345	234	352	0.0	0.5	7.965	A
C - A12 South	1083	271	408	1731	0.626	1077	1045	0.0	1.6	5.451	A
D - B1079 East	292	73	1163	789	0.370	290	281	0.0	0.6	7.179	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1411	353	321	1984	0.711	1407	1313	1.4	2.4	6.198	A
B - Grundisburgh Rd West	282	70	1354	558	0.505	280	421	0.5	1.0	12.847	B

C - A12 South	1293	323	488	1672	0.774	1287	1250	1.6	3.3	9.201	A
D - B1079 East	349	87	1392	650	0.536	347	336	0.6	1.1	11.776	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1728	432	382	1940	0.891	1710	1557	2.4	7.1	14.547	B
B - Grundisburgh Rd West	345	86	1605	416	0.830	334	504	1.0	3.9	39.493	E
C - A12 South	1584	396	583	1602	0.989	1527	1513	3.3	17.6	34.149	D
D - B1079 East	427	107	1689	469	0.910	407	402	1.1	6.1	47.899	E

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1728	432	389	1935	0.893	1726	1588	7.1	7.7	16.808	C
B - Grundisburgh Rd West	345	86	1636	398	0.867	340	513	3.9	5.0	56.388	F
C - A12 South	1584	396	594	1594	0.994	1555	1531	17.6	25.0	57.098	F
D - B1079 East	427	107	1706	459	0.931	419	409	6.1	8.1	73.014	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1411	353	341	1969	0.717	1432	1407	7.7	2.6	6.937	A
B - Grundisburgh Rd West	282	70	1452	503	0.560	297	441	5.0	1.3	18.582	C
C - A12 South	1293	323	515	1652	0.783	1378	1280	25.0	3.8	16.898	C
D - B1079 East	349	87	1419	633	0.551	376	353	8.1	1.3	15.431	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1182	295	273	2018	0.586	1186	1115	2.6	1.4	4.357	A
B - Grundisburgh Rd West	236	59	1149	675	0.350	239	356	1.3	0.5	8.322	A
C - A12 South	1083	271	414	1727	0.627	1092	1055	3.8	1.7	5.742	A
D - B1079 East	292	73	1174	782	0.373	295	285	1.3	0.6	7.422	A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	18.35	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1520	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	240	100.000
C - A12 South		ONE HOUR	✓	1466	100.000
D - B1079 East		ONE HOUR	✓	321	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	205	1225	85
	B - Grundisburgh Rd West	76	0	37	126
	C - A12 South	1274	129	0	64
	D - B1079 East	142	102	77	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	2	4	2
	B - Grundisburgh Rd West	0	0	0	0
	C - A12 South	4	2	0	4
	D - B1079 East	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	8.18	3.7	A	1394	2092
B - Grundisburgh Rd West	0.59	19.56	1.4	C	220	330
C - A12 South	0.94	28.82	12.1	D	1345	2018
D - B1079 East	0.64	17.69	1.7	C	294	441

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1144	286	170	2170	0.527	1140	1120	0.0	1.1	3.480	A
B - Grundisburgh Rd West	180	45	1111	742	0.243	179	327	0.0	0.3	6.380	A
C - A12 South	1104	276	340	1838	0.601	1098	1004	0.0	1.5	4.829	A
D - B1079 East	241	60	1104	862	0.280	240	206	0.0	0.4	5.769	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1366	342	204	2146	0.637	1364	1340	1.1	1.7	4.589	A
B - Grundisburgh Rd West	215	54	1329	617	0.349	214	391	0.3	0.5	8.917	A

C - A12 South	1318	330	407	1789	0.737	1313	1202	1.5	2.7	7.495	A
D - B1079 East	288	72	1321	733	0.393	287	246	0.4	0.6	8.048	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1673	418	247	2114	0.791	1666	1618	1.7	3.6	7.892	A
B - Grundisburgh Rd West	264	66	1604	460	0.573	261	475	0.5	1.3	17.768	C
C - A12 South	1614	404	495	1724	0.937	1583	1467	2.7	10.5	21.978	C
D - B1079 East	353	88	1613	560	0.630	349	299	0.6	1.6	16.762	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1673	418	250	2112	0.792	1673	1641	3.6	3.7	8.181	A
B - Grundisburgh Rd West	264	66	1628	447	0.591	263	479	1.3	1.4	19.561	C
C - A12 South	1614	404	499	1721	0.938	1608	1474	10.5	12.1	28.824	D
D - B1079 East	353	88	1621	556	0.635	353	302	1.6	1.7	17.689	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1366	342	208	2142	0.638	1374	1380	3.7	1.8	4.731	A
B - Grundisburgh Rd West	215	54	1370	594	0.362	219	397	1.4	0.6	9.661	A
C - A12 South	1318	330	412	1785	0.739	1355	1212	12.1	2.9	9.054	A
D - B1079 East	288	72	1332	727	0.396	292	251	1.7	0.7	8.349	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1144	286	172	2169	0.528	1147	1132	1.8	1.1	3.531	A
B - Grundisburgh Rd West	180	45	1123	735	0.245	181	329	0.6	0.3	6.511	A
C - A12 South	1104	276	343	1835	0.601	1109	1011	2.9	1.5	4.997	A
D - B1079 East	241	60	1111	858	0.281	242	208	0.7	0.4	5.856	A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	3.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	813	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	65	100.000
C - A12 South		ONE HOUR	✓	827	100.000
D - B1079 East		ONE HOUR	✓	87	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	71	725	12
	B - Grundisburgh Rd West	34	0	18	13
	C - A12 South	763	39	2	24
	D - B1079 East	34	18	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	1	6	0
	B - Grundisburgh Rd West	0	0	18	0
	C - A12 South	10	3	0	1
	D - B1079 East	6	0	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.41	2.75	0.7	A	746	1118
B - Grundisburgh Rd West	0.09	5.04	0.1	A	60	90
C - A12 South	0.48	3.72	0.9	A	759	1139
D - B1079 East	0.11	4.47	0.1	A	80	119

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	612	153	43	2219	0.276	610	627	0.0	0.4	2.236	A
B - Grundisburgh Rd West	49	12	621	953	0.052	49	95	0.0	0.1	3.978	A
C - A12 South	623	156	95	1910	0.326	621	587	0.0	0.5	2.790	A
D - B1079 East	65	16	617	1063	0.061	65	36	0.0	0.1	3.608	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	730	183	51	2213	0.330	730	750	0.4	0.5	2.428	A
B - Grundisburgh Rd West	59	15	743	883	0.066	59	114	0.1	0.1	4.365	A

C - A12 South	744	186	114	1897	0.392	743	702	0.5	0.6	3.119	A
D - B1079 East	78	19	738	994	0.078	78	43	0.1	0.1	3.927	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	895	224	62	2204	0.406	894	918	0.5	0.7	2.746	A
B - Grundisburgh Rd West	72	18	909	787	0.091	72	140	0.1	0.1	5.031	A
C - A12 South	911	228	139	1879	0.485	910	859	0.6	0.9	3.709	A
D - B1079 East	95	24	903	901	0.106	95	53	0.1	0.1	4.468	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	895	224	63	2204	0.406	895	920	0.7	0.7	2.749	A
B - Grundisburgh Rd West	72	18	910	787	0.091	72	140	0.1	0.1	5.036	A
C - A12 South	911	228	139	1879	0.485	911	860	0.9	0.9	3.719	A
D - B1079 East	95	24	904	901	0.106	95	53	0.1	0.1	4.470	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	730	183	51	2212	0.330	731	752	0.7	0.5	2.431	A
B - Grundisburgh Rd West	59	15	744	882	0.066	59	115	0.1	0.1	4.374	A
C - A12 South	744	186	114	1896	0.392	745	703	0.9	0.6	3.128	A
D - B1079 East	78	19	739	994	0.078	78	43	0.1	0.1	3.933	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	612	153	43	2219	0.276	612	629	0.5	0.4	2.241	A
B - Grundisburgh Rd West	49	12	623	952	0.052	49	96	0.1	0.1	3.987	A
C - A12 South	623	156	95	1910	0.326	623	589	0.6	0.5	2.800	A
D - B1079 East	65	16	619	1062	0.062	65	36	0.1	0.1	3.615	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	36.15	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1668	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	140	100.000
C - A12 South		ONE HOUR	✓	1437	100.000
D - B1079 East		ONE HOUR	✓	215	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	295	1318	48
	B - Grundisburgh Rd West	48	0	33	60
	C - A12 South	1367	68	2	0
	D - B1079 East	86	73	56	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	4	6	0
	B - Grundisburgh Rd West	4	0	15	3
	C - A12 South	13	4	0	0
	D - B1079 East	1	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.85	10.80	5.3	B	1530	2296
B - Grundisburgh Rd West	0.41	16.11	0.7	C	129	193
C - A12 South	1.01	67.62	30.2	F	1318	1978
D - B1079 East	0.59	21.59	1.4	C	197	296

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1256	314	71	2192	0.573	1250	1128	0.0	1.3	3.801	A
B - Grundisburgh Rd West	106	26	1093	657	0.161	105	326	0.0	0.2	6.510	A
C - A12 South	1082	270	345	1683	0.643	1075	1056	0.0	1.8	5.851	A
D - B1079 East	162	40	1241	749	0.216	161	80	0.0	0.3	6.104	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1499	375	84	2182	0.687	1496	1348	1.3	2.2	5.225	A
B - Grundisburgh Rd West	126	32	1307	533	0.237	126	391	0.2	0.3	8.837	A

C - A12 South	1292	323	413	1636	0.789	1284	1264	1.8	3.6	10.023	B
D - B1079 East	193	48	1484	604	0.320	192	96	0.3	0.5	8.735	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1836	459	103	2168	0.847	1824	1593	2.2	5.2	10.140	B
B - Grundisburgh Rd West	155	39	1543	395	0.391	153	473	0.3	0.6	14.803	B
C - A12 South	1582	395	503	1575	1.004	1513	1541	3.6	20.7	38.882	E
D - B1079 East	236	59	1810	409	0.578	233	117	0.5	1.3	20.096	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1836	459	104	2167	0.847	1835	1624	5.2	5.3	10.795	B
B - Grundisburgh Rd West	155	39	1573	378	0.410	154	478	0.6	0.7	16.110	C
C - A12 South	1582	395	507	1572	1.006	1544	1551	20.7	30.2	67.622	F
D - B1079 East	236	59	1821	402	0.588	236	118	1.3	1.4	21.591	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1499	375	86	2181	0.688	1512	1457	5.3	2.2	5.479	A
B - Grundisburgh Rd West	126	32	1415	469	0.269	127	400	0.7	0.4	10.569	B
C - A12 South	1292	323	419	1632	0.791	1396	1278	30.2	4.1	21.366	C
D - B1079 East	193	48	1500	594	0.325	197	97	1.4	0.5	9.135	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1256	314	71	2191	0.573	1259	1144	2.2	1.4	3.876	A
B - Grundisburgh Rd West	106	26	1109	648	0.163	106	329	0.4	0.2	6.655	A
C - A12 South	1082	270	348	1681	0.643	1091	1064	4.1	1.8	6.187	A
D - B1079 East	162	40	1250	744	0.217	163	81	0.5	0.3	6.202	A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	162.96	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1885	100.000
B - Grundisburgh Rd West		FLAT	✓	339	100.000
C - A12 South		FLAT	✓	1438	100.000
D - B1079 East		FLAT	✓	434	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	380	1407	82
	B - Grundisburgh Rd West	65	0	53	221
	C - A12 South	1201	69	1	166
	D - B1079 East	185	102	147	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	9	1
	B - Grundisburgh Rd West	16	0	10	0
	C - A12 South	15	7	0	9
	D - B1079 East	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.00	109.67	56.9	F	1885	2828
B - Grundisburgh Rd West	0.85	58.00	5.2	F	339	509
C - A12 South	0.98	76.21	29.3	F	1438	2156
D - B1079 East	1.17	811.50	89.9	F	434	651

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1885	471	424	1890	0.998	1803	1390	0.0	20.6	29.672	D
B - Grundisburgh Rd West	339	85	1488	427	0.794	326	519	0.0	3.2	32.467	D
C - A12 South	1438	359	629	1471	0.977	1378	1526	0.0	14.8	29.522	D
D - B1079 East	434	108	1776	407	1.067	379	451	0.0	13.7	85.975	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1885	471	436	1881	1.002	1846	1424	20.6	30.4	57.363	F
B - Grundisburgh Rd West	339	85	1525	405	0.837	335	528	3.2	4.2	47.771	E

C - A12 South	1438	359	636	1466	0.981	1417	1559	14.8	20.0	51.592	F
D - B1079 East	434	108	1819	380	1.140	376	463	13.7	28.1	221.875	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1885	471	439	1879	1.003	1854	1429	30.4	38.3	73.324	F
B - Grundisburgh Rd West	339	85	1531	402	0.844	337	530	4.2	4.6	52.851	F
C - A12 South	1438	359	636	1466	0.981	1424	1564	20.0	23.3	60.938	F
D - B1079 East	434	108	1827	376	1.155	374	466	28.1	43.0	360.904	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1885	471	440	1879	1.003	1858	1432	38.3	45.1	86.736	F
B - Grundisburgh Rd West	339	85	1533	400	0.848	338	530	4.6	4.9	55.376	F
C - A12 South	1438	359	636	1466	0.981	1428	1567	23.3	25.8	67.386	F
D - B1079 East	434	108	1831	373	1.162	372	467	43.0	58.4	506.940	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1885	471	440	1878	1.004	1861	1433	45.1	51.2	98.695	F
B - Grundisburgh Rd West	339	85	1535	399	0.850	338	531	4.9	5.1	56.933	F
C - A12 South	1438	359	636	1466	0.980	1430	1569	25.8	27.7	72.289	F
D - B1079 East	434	108	1833	372	1.167	371	467	58.4	74.0	657.902	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1885	471	440	1878	1.004	1862	1434	51.2	56.9	109.673	F
B - Grundisburgh Rd West	339	85	1536	398	0.851	339	531	5.1	5.2	57.998	F
C - A12 South	1438	359	636	1466	0.980	1431	1570	27.7	29.3	76.206	F
D - B1079 East	434	108	1835	370	1.171	370	468	74.0	89.9	811.501	F

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	50.34	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1592	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	320	100.000
C - A12 South		ONE HOUR	✓	1400	100.000
D - B1079 East		ONE HOUR	✓	389	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	242	1218	118
	B - Grundisburgh Rd West	84	1	91	145
	C - A12 South	1172	113	3	111
	D - B1079 East	197	106	87	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	10	3
	B - Grundisburgh Rd West	5	0	5	2
	C - A12 South	11	5	0	0
	D - B1079 East	1	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	21.80	10.0	C	1461	2191
B - Grundisburgh Rd West	0.91	71.92	6.6	F	294	441
C - A12 South	1.00	62.61	27.0	F	1284	1927
D - B1079 East	1.00	109.98	13.1	F	357	535

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1198	300	262	1986	0.603	1192	1097	0.0	1.5	4.501	A
B - Grundisburgh Rd West	241	60	1120	673	0.358	239	345	0.0	0.6	8.257	A
C - A12 South	1054	263	418	1670	0.631	1047	1047	0.0	1.7	5.717	A
D - B1079 East	293	73	1175	768	0.381	290	279	0.0	0.6	7.499	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1431	358	313	1950	0.734	1426	1311	1.5	2.7	6.810	A
B - Grundisburgh Rd West	288	72	1338	545	0.528	286	413	0.6	1.1	13.780	B

C - A12 South	1258	315	500	1612	0.781	1252	1253	1.7	3.4	9.795	A
D - B1079 East	350	87	1405	625	0.559	347	334	0.6	1.2	12.845	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1753	438	371	1910	0.917	1728	1545	2.7	8.9	17.705	C
B - Grundisburgh Rd West	353	88	1578	405	0.872	338	492	1.1	4.7	46.634	E
C - A12 South	1541	385	589	1549	0.995	1480	1510	3.4	18.6	36.605	E
D - B1079 East	428	107	1700	442	0.969	399	398	1.2	8.5	62.642	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1753	438	378	1905	0.920	1748	1575	8.9	10.0	21.799	C
B - Grundisburgh Rd West	353	88	1608	387	0.912	345	500	4.7	6.6	71.921	F
C - A12 South	1541	385	600	1541	1.000	1508	1531	18.6	27.0	62.612	F
D - B1079 East	428	107	1721	429	0.999	410	405	8.5	13.1	109.983	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1431	358	338	1933	0.740	1459	1424	10.0	2.9	8.023	A
B - Grundisburgh Rd West	288	72	1453	478	0.602	308	439	6.6	1.6	23.313	C
C - A12 South	1258	315	543	1582	0.796	1349	1295	27.0	4.2	20.813	C
D - B1079 East	350	87	1442	602	0.581	396	354	13.1	1.4	21.400	C

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1198	300	288	1982	0.605	1204	1115	2.9	1.5	4.659	A
B - Grundisburgh Rd West	241	60	1138	662	0.364	245	350	1.6	0.6	8.712	A
C - A12 South	1054	263	424	1666	0.633	1064	1059	4.2	1.8	6.071	A
D - B1079 East	293	73	1187	760	0.385	296	284	1.4	0.6	7.808	A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	16.67	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1483	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	249	100.000
C - A12 South		ONE HOUR	✓	1427	100.000
D - B1079 East		ONE HOUR	✓	323	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	206	1181	91
	B - Grundisburgh Rd West	86	0	34	128
	C - A12 South	1251	121	0	56
	D - B1079 East	144	102	77	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	2	7	2
	B - Grundisburgh Rd West	0	0	0	0
	C - A12 South	5	2	0	4
	D - B1079 East	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.79	8.22	3.7	A	1361	2041
B - Grundisburgh Rd West	0.60	19.68	1.5	C	228	342
C - A12 South	0.92	24.93	10.2	C	1310	1965
D - B1079 East	0.63	17.33	1.7	C	296	444

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1116	279	163	2124	0.526	1112	1112	0.0	1.1	3.543	A
B - Grundisburgh Rd West	187	47	1090	749	0.250	186	321	0.0	0.3	6.382	A
C - A12 South	1075	269	342	1819	0.591	1069	969	0.0	1.4	4.765	A
D - B1079 East	243	61	1070	867	0.280	241	206	0.0	0.4	5.743	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1333	333	196	2101	0.634	1330	1330	1.1	1.7	4.657	A
B - Grundisburgh Rd West	223	56	1303	625	0.357	223	385	0.3	0.5	8.919	A

C - A12 South	1283	321	409	1770	0.725	1279	1159	1.4	2.6	7.260	A
D - B1079 East	290	73	1280	739	0.393	289	246	0.4	0.6	7.988	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1632	408	237	2071	0.788	1625	1610	1.7	3.6	7.935	A
B - Grundisburgh Rd West	274	68	1576	468	0.585	270	468	0.5	1.3	17.957	C
C - A12 South	1571	393	499	1705	0.922	1545	1416	2.6	9.1	19.934	C
D - B1079 East	355	89	1563	566	0.627	351	299	0.6	1.6	16.452	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1632	408	240	2069	0.789	1632	1631	3.6	3.7	8.218	A
B - Grundisburgh Rd West	274	68	1598	455	0.601	273	472	1.3	1.5	19.676	C
C - A12 South	1571	393	503	1702	0.923	1567	1422	9.1	10.2	24.930	C
D - B1079 East	355	89	1570	562	0.632	355	302	1.6	1.7	17.330	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1333	333	200	2098	0.635	1340	1364	3.7	1.8	4.797	A
B - Grundisburgh Rd West	223	56	1337	606	0.369	227	390	1.5	0.6	9.586	A
C - A12 South	1283	321	415	1766	0.727	1313	1169	10.2	2.7	8.446	A
D - B1079 East	290	73	1290	733	0.396	294	250	1.7	0.7	8.281	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1116	279	165	2123	0.526	1119	1123	1.8	1.1	3.597	A
B - Grundisburgh Rd West	187	47	1101	742	0.252	188	324	0.6	0.3	6.509	A
C - A12 South	1075	269	345	1816	0.592	1080	975	2.7	1.5	4.920	A
D - B1079 East	243	61	1076	863	0.282	244	208	0.7	0.4	5.831	A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	3.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	833	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	58	100.000
C - A12 South		ONE HOUR	✓	648	100.000
D - B1079 East		ONE HOUR	✓	87	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	74	740	14
	B - Grundisburgh Rd West	25	0	19	14
	C - A12 South	569	44	2	34
	D - B1079 East	25	20	43	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	2	6	0
	B - Grundisburgh Rd West	0	0	18	0
	C - A12 South	9	3	0	2
	D - B1079 East	8	0	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.81	0.7	A	764	1146
B - Grundisburgh Rd West	0.07	4.29	0.1	A	53	80
C - A12 South	0.38	3.04	0.6	A	595	892
D - B1079 East	0.11	4.58	0.1	A	80	119

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	627	157	52	2216	0.283	625	468	0.0	0.4	2.261	A
B - Grundisburgh Rd West	44	11	476	1030	0.043	44	103	0.0	0.0	3.649	A
C - A12 South	488	122	92	1927	0.253	487	604	0.0	0.3	2.497	A
D - B1079 East	65	16	631	1046	0.062	65	46	0.0	0.1	3.668	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	748	187	62	2208	0.339	748	560	0.4	0.5	2.465	A
B - Grundisburgh Rd West	52	13	569	977	0.054	52	123	0.0	0.1	3.893	A

C - A12 South	583	146	110	1914	0.304	582	722	0.3	0.4	2.703	A
D - B1079 East	78	19	755	977	0.080	78	55	0.1	0.1	4.003	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	917	229	76	2198	0.417	916	686	0.5	0.7	2.807	A
B - Grundisburgh Rd West	64	16	697	904	0.071	64	151	0.1	0.1	4.283	A
C - A12 South	714	178	135	1897	0.376	713	885	0.4	0.6	3.040	A
D - B1079 East	95	24	924	883	0.108	95	67	0.1	0.1	4.573	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	917	229	76	2198	0.417	917	686	0.7	0.7	2.809	A
B - Grundisburgh Rd West	64	16	698	904	0.071	64	151	0.1	0.1	4.285	A
C - A12 South	714	178	135	1897	0.376	714	885	0.6	0.6	3.042	A
D - B1079 East	95	24	925	882	0.108	95	67	0.1	0.1	4.576	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	748	187	62	2208	0.339	749	561	0.7	0.5	2.470	A
B - Grundisburgh Rd West	52	13	570	976	0.054	52	123	0.1	0.1	3.897	A
C - A12 South	583	146	110	1914	0.304	583	724	0.6	0.4	2.708	A
D - B1079 East	78	19	756	976	0.080	78	55	0.1	0.1	4.009	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	627	157	52	2216	0.283	627	470	0.5	0.4	2.266	A
B - Grundisburgh Rd West	44	11	478	1029	0.043	44	103	0.1	0.0	3.656	A
C - A12 South	488	122	92	1927	0.253	488	606	0.4	0.3	2.504	A
D - B1079 East	65	16	633	1045	0.062	65	46	0.1	0.1	3.676	A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	29.73	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1655	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	131	100.000
C - A12 South		ONE HOUR	✓	1474	100.000
D - B1079 East		ONE HOUR	✓	227	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	277	1322	49
	B - Grundisburgh Rd West	30	0	40	62
	C - A12 South	1277	81	2	114
	D - B1079 East	82	77	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	5	5	0
	B - Grundisburgh Rd West	9	0	13	3
	C - A12 South	9	4	0	1
	D - B1079 East	1	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.16	6.4	B	1518	2278
B - Grundisburgh Rd West	0.37	14.81	0.6	B	121	181
C - A12 South	0.98	50.27	22.0	F	1353	2029
D - B1079 East	0.60	21.52	1.4	C	208	312

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1246	311	163	2147	0.580	1240	1044	0.0	1.4	3.949	A
B - Grundisburgh Rd West	99	25	1109	666	0.149	98	326	0.0	0.2	6.333	A
C - A12 South	1110	277	332	1761	0.630	1103	1073	0.0	1.7	5.415	A
D - B1079 East	171	43	1235	757	0.226	170	168	0.0	0.3	6.122	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1488	372	195	2123	0.701	1484	1249	1.4	2.3	5.601	A
B - Grundisburgh Rd West	118	30	1326	545	0.217	118	390	0.2	0.3	8.410	A

C - A12 South	1325	331	397	1715	0.773	1319	1284	1.7	3.3	8.949	A
D - B1079 East	204	51	1478	614	0.332	203	201	0.3	0.5	8.750	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1822	455	234	2093	0.870	1807	1489	2.3	6.1	11.967	B
B - Grundisburgh Rd West	145	36	1580	404	0.358	144	472	0.3	0.5	13.754	B
C - A12 South	1623	406	482	1653	0.982	1570	1563	3.3	16.5	31.794	D
D - B1079 East	250	62	1799	424	0.589	246	242	0.5	1.4	19.867	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1822	455	238	2091	0.871	1821	1517	6.1	6.4	13.159	B
B - Grundisburgh Rd West	145	36	1611	387	0.374	145	477	0.5	0.6	14.814	B
C - A12 South	1623	406	487	1650	0.983	1601	1575	16.5	22.0	50.270	F
D - B1079 East	250	62	1813	416	0.600	249	245	1.4	1.4	21.522	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1488	372	202	2117	0.703	1504	1320	6.4	2.4	6.010	A
B - Grundisburgh Rd West	118	30	1403	502	0.235	119	399	0.6	0.3	9.424	A
C - A12 South	1325	331	403	1710	0.775	1399	1302	22.0	3.6	14.155	B
D - B1079 East	204	51	1497	602	0.339	208	208	1.4	0.5	9.209	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1246	311	165	2145	0.581	1250	1058	2.4	1.4	4.040	A
B - Grundisburgh Rd West	99	25	1123	658	0.150	99	329	0.3	0.2	6.450	A
C - A12 South	1110	277	335	1759	0.631	1117	1082	3.6	1.7	5.671	A
D - B1079 East	171	43	1245	751	0.227	172	170	0.5	0.3	6.224	A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	273.56	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1830	100.000
B - Grundisburgh Rd West		FLAT	✓	426	100.000
C - A12 South		FLAT	✓	1527	100.000
D - B1079 East		FLAT	✓	496	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	383	1341	90
	B - Grundisburgh Rd West	81	0	101	244
	C - A12 South	1131	89	1	305
	D - B1079 East	210	114	172	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	8	1
	B - Grundisburgh Rd West	14	0	6	0
	C - A12 South	10	5	0	5
	D - B1079 East	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.03	214.73	110.8	F	1830	2745
B - Grundisburgh Rd West	1.07	417.29	48.0	F	426	639
C - A12 South	1.00	120.93	50.6	F	1527	2290
D - B1079 East	1.18	874.01	110.1	F	496	744

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	458	605	1783	1.026	1720	1343	0.0	27.4	37.889	E
B - Grundisburgh Rd West	426	107	1561	427	0.997	387	542	0.0	9.7	65.415	F
C - A12 South	1527	382	652	1527	1.000	1451	1501	0.0	19.0	33.666	D
D - B1079 East	496	124	1728	449	1.104	425	597	0.0	17.7	94.123	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	458	619	1773	1.032	1757	1374	27.4	45.6	83.206	F
B - Grundisburgh Rd West	426	107	1599	405	1.051	394	552	9.7	17.6	145.415	F

C - A12 South	1527	382	659	1522	1.003	1491	1529	19.0	27.8	64.917	F
D - B1079 East	496	124	1765	427	1.162	424	611	17.7	35.8	246.707	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	458	621	1771	1.033	1762	1380	45.6	62.6	117.529	F
B - Grundisburgh Rd West	426	107	1605	401	1.061	396	553	17.6	25.2	213.557	F
C - A12 South	1527	382	660	1522	1.003	1499	1533	27.8	34.7	82.407	F
D - B1079 East	496	124	1770	424	1.171	422	613	35.8	54.1	399.181	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	458	622	1770	1.034	1765	1382	62.6	78.9	150.491	F
B - Grundisburgh Rd West	426	107	1609	399	1.067	396	554	25.2	32.8	280.826	F
C - A12 South	1527	382	660	1522	1.003	1503	1534	34.7	40.6	96.796	F
D - B1079 East	496	124	1773	422	1.174	422	614	54.1	72.7	555.620	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	458	623	1770	1.034	1766	1384	78.9	95.0	182.806	F
B - Grundisburgh Rd West	426	107	1611	398	1.070	396	554	32.8	40.4	348.716	F
C - A12 South	1527	382	660	1522	1.003	1506	1535	40.6	45.8	109.444	F
D - B1079 East	496	124	1774	421	1.176	421	615	72.7	91.3	714.299	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1830	458	623	1770	1.034	1767	1385	95.0	110.8	214.726	F
B - Grundisburgh Rd West	426	107	1613	397	1.073	395	554	40.4	48.0	417.290	F
C - A12 South	1527	382	660	1522	1.003	1507	1536	45.8	50.6	120.927	F
D - B1079 East	496	124	1775	421	1.178	421	615	91.3	110.1	874.009	F

2034 Reference Case, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	67.17	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1600	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	377	100.000
C - A12 South		ONE HOUR	✓	1464	100.000
D - B1079 East		ONE HOUR	✓	441	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	253	1204	129
	B - Grundisburgh Rd West	94	1	116	167
	C - A12 South	1176	154	3	130
	D - B1079 East	211	122	109	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	7	2
	B - Grundisburgh Rd West	4	0	4	2
	C - A12 South	6	4	0	0
	D - B1079 East	1	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	22.09	10.2	C	1468	2202
B - Grundisburgh Rd West	1.00	113.16	13.0	F	346	519
C - A12 South	1.01	72.44	33.5	F	1343	2015
D - B1079 East	1.09	180.23	26.4	F	405	607

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1204	301	311	2003	0.601	1198	1117	0.0	1.5	4.440	A
B - Grundisburgh Rd West	284	71	1147	686	0.414	281	396	0.0	0.7	8.831	A
C - A12 South	1102	275	448	1721	0.640	1095	1072	0.0	1.8	5.693	A
D - B1079 East	332	83	1191	777	0.427	329	318	0.0	0.7	7.978	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1438	360	372	1960	0.734	1433	1335	1.5	2.7	6.773	A
B - Grundisburgh Rd West	339	85	1371	560	0.606	336	474	0.7	1.5	15.864	C

C - A12 South	1316	329	536	1656	0.795	1308	1282	1.8	3.7	10.130	B
D - B1079 East	396	99	1425	636	0.623	393	380	0.7	1.6	14.600	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1761	440	432	1917	0.919	1736	1554	2.7	9.1	17.820	C
B - Grundisburgh Rd West	416	104	1598	431	0.964	389	557	1.5	8.2	63.615	F
C - A12 South	1612	403	617	1596	1.010	1538	1536	3.7	22.1	40.242	E
D - B1079 East	485	121	1720	458	1.061	433	448	1.6	14.7	88.110	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1761	440	440	1911	0.922	1757	1582	9.1	10.2	22.089	C
B - Grundisburgh Rd West	416	104	1626	415	1.001	396	565	8.2	13.0	113.158	F
C - A12 South	1612	403	624	1590	1.014	1566	1556	22.1	33.5	72.437	F
D - B1079 East	485	121	1741	445	1.092	439	456	14.7	26.4	180.229	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1438	360	415	1929	0.746	1467	1491	10.2	3.0	8.246	A
B - Grundisburgh Rd West	339	85	1527	472	0.718	380	519	13.0	2.9	49.167	E
C - A12 South	1316	329	618	1597	0.824	1429	1345	33.5	5.2	31.133	D
D - B1079 East	396	99	1469	609	0.650	494	413	26.4	2.0	53.781	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1204	301	321	1996	0.603	1210	1141	3.0	1.5	4.615	A
B - Grundisburgh Rd West	284	71	1169	674	0.422	293	402	2.9	0.7	9.644	A
C - A12 South	1102	275	456	1715	0.643	1115	1086	5.2	1.8	6.139	A
D - B1079 East	332	83	1206	769	0.432	337	326	2.0	0.8	8.433	A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	21.71	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1530	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	279	100.000
C - A12 South		ONE HOUR	✓	1465	100.000
D - B1079 East		ONE HOUR	✓	364	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	232	1202	91
	B - Grundisburgh Rd West	74	0	50	154
	C - A12 South	1251	147	0	68
	D - B1079 East	149	122	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	2	3	2
	B - Grundisburgh Rd West	0	0	0	0
	C - A12 South	3	1	0	4
	D - B1079 East	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	8.80	4.0	A	1404	2105
B - Grundisburgh Rd West	0.66	22.73	1.9	C	256	383
C - A12 South	0.95	34.59	14.6	D	1345	2017
D - B1079 East	0.72	23.39	2.5	C	334	500

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1152	288	204	2162	0.533	1147	1107	0.0	1.1	3.532	A
B - Grundisburgh Rd West	210	52	1102	752	0.279	208	375	0.0	0.4	6.599	A
C - A12 South	1103	276	380	1824	0.605	1097	1009	0.0	1.5	4.916	A
D - B1079 East	274	68	1117	860	0.318	272	234	0.0	0.5	6.102	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1375	344	244	2132	0.645	1373	1324	1.1	1.8	4.722	A
B - Grundisburgh Rd West	250	63	1318	630	0.398	249	449	0.4	0.6	9.441	A

C - A12 South	1317	329	455	1768	0.745	1312	1207	1.5	2.8	7.797	A
D - B1079 East	327	82	1336	731	0.447	326	280	0.5	0.8	8.853	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1684	421	295	2095	0.804	1676	1592	1.8	3.9	8.426	A
B - Grundisburgh Rd West	307	77	1585	478	0.641	303	544	0.6	1.7	20.036	C
C - A12 South	1613	403	553	1696	0.951	1576	1472	2.8	12.1	24.757	C
D - B1079 East	400	100	1631	557	0.718	394	340	0.8	2.4	21.315	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1684	421	299	2092	0.805	1684	1619	3.9	4.0	8.799	A
B - Grundisburgh Rd West	307	77	1612	463	0.662	306	550	1.7	1.9	22.731	C
C - A12 South	1613	403	559	1692	0.953	1603	1481	12.1	14.6	34.592	D
D - B1079 East	400	100	1639	552	0.725	400	343	2.4	2.5	23.393	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1375	344	250	2127	0.646	1384	1372	4.0	1.9	4.897	A
B - Grundisburgh Rd West	250	63	1368	601	0.416	255	458	1.9	0.7	10.521	B
C - A12 South	1317	329	463	1763	0.747	1363	1219	14.6	3.1	10.002	B
D - B1079 East	327	82	1348	724	0.451	334	286	2.5	0.8	9.370	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1152	288	206	2160	0.533	1154	1119	1.9	1.2	3.592	A
B - Grundisburgh Rd West	210	52	1114	745	0.281	211	379	0.7	0.4	6.757	A
C - A12 South	1103	276	384	1821	0.606	1109	1016	3.1	1.6	5.099	A
D - B1079 East	274	68	1124	856	0.320	275	237	0.8	0.5	6.217	A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	3.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	834	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	57	100.000
C - A12 South		ONE HOUR	✓	649	100.000
D - B1079 East		ONE HOUR	✓	87	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	74	741	14
	B - Grundisburgh Rd West	24	0	19	14
	C - A12 South	570	44	2	34
	D - B1079 East	25	20	43	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	2	6	0
	B - Grundisburgh Rd West	0	0	18	1
	C - A12 South	9	3	0	2
	D - B1079 East	8	0	14	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.42	2.81	0.7	A	765	1147
B - Grundisburgh Rd West	0.07	4.29	0.1	A	53	79
C - A12 South	0.38	3.04	0.6	A	596	894
D - B1079 East	0.11	4.58	0.1	A	80	119

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	628	157	52	2216	0.283	626	468	0.0	0.4	2.262	A
B - Grundisburgh Rd West	43	11	477	1029	0.042	43	103	0.0	0.0	3.651	A
C - A12 South	489	122	92	1927	0.254	487	605	0.0	0.3	2.498	A
D - B1079 East	65	16	632	1046	0.062	65	46	0.0	0.1	3.669	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	749	187	62	2208	0.339	749	560	0.4	0.5	2.466	A
B - Grundisburgh Rd West	51	13	570	976	0.053	51	123	0.0	0.1	3.895	A

C - A12 South	584	146	110	1915	0.305	583	723	0.3	0.4	2.704	A
D - B1079 East	78	19	756	977	0.080	78	55	0.1	0.1	4.005	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	918	229	76	2198	0.418	917	686	0.5	0.7	2.809	A
B - Grundisburgh Rd West	63	16	698	903	0.070	63	151	0.1	0.1	4.285	A
C - A12 South	715	179	135	1897	0.377	714	886	0.4	0.6	3.042	A
D - B1079 East	95	24	925	882	0.108	95	67	0.1	0.1	4.576	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	918	229	76	2198	0.418	918	686	0.7	0.7	2.811	A
B - Grundisburgh Rd West	63	16	699	903	0.070	63	151	0.1	0.1	4.287	A
C - A12 South	715	179	135	1897	0.377	715	886	0.6	0.6	3.044	A
D - B1079 East	95	24	926	882	0.108	95	67	0.1	0.1	4.579	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	749	187	62	2208	0.339	750	561	0.7	0.5	2.471	A
B - Grundisburgh Rd West	51	13	571	975	0.053	52	123	0.1	0.1	3.900	A
C - A12 South	584	146	110	1914	0.305	584	725	0.6	0.4	2.707	A
D - B1079 East	78	19	757	976	0.080	78	55	0.1	0.1	4.011	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	628	157	52	2216	0.283	628	470	0.5	0.4	2.269	A
B - Grundisburgh Rd West	43	11	478	1028	0.042	43	103	0.1	0.0	3.658	A
C - A12 South	489	122	92	1927	0.254	489	607	0.4	0.3	2.505	A
D - B1079 East	65	16	634	1045	0.062	65	46	0.1	0.1	3.677	A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	28.68	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1656	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	129	100.000
C - A12 South		ONE HOUR	✓	1471	100.000
D - B1079 East		ONE HOUR	✓	227	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	7	277	1323	49
	B - Grundisburgh Rd West	29	0	40	61
	C - A12 South	1277	80	2	112
	D - B1079 East	82	77	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	5	5	0
	B - Grundisburgh Rd West	8	0	13	4
	C - A12 South	9	4	0	1
	D - B1079 East	1	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	13.11	6.4	B	1519	2279
B - Grundisburgh Rd West	0.37	14.56	0.6	B	119	178
C - A12 South	0.98	47.96	20.9	E	1350	2025
D - B1079 East	0.60	21.61	1.5	C	208	312

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1247	312	160	2148	0.580	1241	1044	0.0	1.4	3.945	A
B - Grundisburgh Rd West	97	24	1107	669	0.146	97	325	0.0	0.2	6.286	A
C - A12 South	1107	277	332	1765	0.628	1101	1074	0.0	1.7	5.372	A
D - B1079 East	171	43	1236	756	0.226	170	166	0.0	0.3	6.126	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1488	372	192	2125	0.701	1485	1248	1.4	2.3	5.592	A
B - Grundisburgh Rd West	116	29	1324	548	0.212	116	389	0.2	0.3	8.320	A

C - A12 South	1322	331	397	1718	0.770	1316	1285	1.7	3.2	8.826	A
D - B1079 East	204	51	1479	613	0.332	203	198	0.3	0.5	8.761	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1823	456	231	2096	0.870	1808	1490	2.3	6.1	11.930	B
B - Grundisburgh Rd West	143	36	1580	406	0.351	141	471	0.3	0.5	13.542	B
C - A12 South	1620	405	482	1656	0.978	1569	1564	3.2	15.9	30.842	D
D - B1079 East	250	62	1800	423	0.590	246	239	0.5	1.4	19.938	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1823	456	235	2093	0.871	1822	1518	6.1	6.4	13.106	B
B - Grundisburgh Rd West	143	36	1610	389	0.366	142	476	0.5	0.6	14.557	B
C - A12 South	1620	405	487	1653	0.980	1600	1577	15.9	20.9	47.960	E
D - B1079 East	250	62	1814	415	0.601	249	242	1.4	1.5	21.606	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1488	372	199	2120	0.702	1504	1316	6.4	2.4	5.997	A
B - Grundisburgh Rd West	116	29	1397	508	0.229	117	398	0.6	0.3	9.252	A
C - A12 South	1322	331	403	1713	0.772	1392	1303	20.9	3.6	13.474	B
D - B1079 East	204	51	1498	602	0.339	208	205	1.5	0.5	9.219	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1247	312	162	2147	0.581	1251	1057	2.4	1.4	4.034	A
B - Grundisburgh Rd West	97	24	1121	661	0.147	98	328	0.3	0.2	6.401	A
C - A12 South	1107	277	335	1762	0.628	1115	1083	3.6	1.7	5.619	A
D - B1079 East	171	43	1245	751	0.227	172	168	0.5	0.3	6.228	A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	260.43	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1867	100.000
B - Grundisburgh Rd West		FLAT	✓	412	100.000
C - A12 South		FLAT	✓	1521	100.000
D - B1079 East		FLAT	✓	492	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	16	385	1374	92
	B - Grundisburgh Rd West	77	0	72	263
	C - A12 South	1195	90	1	234
	D - B1079 East	207	113	172	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	13	3	8	1
	B - Grundisburgh Rd West	14	0	8	0
	C - A12 South	10	5	0	7
	D - B1079 East	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.03	190.19	100.1	F	1867	2801
B - Grundisburgh Rd West	1.03	281.46	31.4	F	412	618
C - A12 South	1.00	117.76	49.0	F	1521	2281
D - B1079 East	1.20	992.65	121.6	F	492	738

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1867	467	533	1831	1.020	1763	1397	0.0	26.1	35.743	E
B - Grundisburgh Rd West	412	103	1549	429	0.960	381	545	0.0	7.8	56.783	F
C - A12 South	1521	380	649	1522	0.999	1445	1510	0.0	18.8	33.614	D
D - B1079 East	492	123	1743	438	1.123	416	553	0.0	19.0	101.200	F

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1867	467	547	1820	1.026	1802	1429	26.1	42.4	76.700	F
B - Grundisburgh Rd West	412	103	1587	408	1.011	390	554	7.8	13.3	117.117	F

C - A12 South	1521	380	655	1518	1.002	1486	1539	18.8	27.4	64.421	F
D - B1079 East	492	123	1782	414	1.187	412	567	19.0	38.9	272.240	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1867	467	551	1818	1.027	1807	1435	42.4	57.5	106.602	F
B - Grundisburgh Rd West	412	103	1593	404	1.021	393	555	13.3	18.1	162.116	F
C - A12 South	1521	380	655	1518	1.002	1494	1543	27.4	34.0	81.296	F
D - B1079 East	492	123	1787	411	1.196	410	570	38.9	59.3	446.782	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1867	467	552	1817	1.028	1809	1438	57.5	72.0	135.050	F
B - Grundisburgh Rd West	412	103	1597	402	1.026	394	556	18.1	22.7	203.166	F
C - A12 South	1521	380	654	1518	1.002	1498	1545	34.0	39.6	95.023	F
D - B1079 East	492	123	1790	410	1.200	409	572	59.3	79.9	626.495	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1867	467	553	1816	1.028	1811	1440	72.0	86.1	162.820	F
B - Grundisburgh Rd West	412	103	1599	400	1.029	395	556	22.7	27.1	242.703	F
C - A12 South	1521	380	654	1518	1.002	1501	1545	39.6	44.5	106.984	F
D - B1079 East	492	123	1791	409	1.203	409	573	79.9	100.7	808.989	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1867	467	554	1816	1.028	1811	1442	86.1	100.1	190.193	F
B - Grundisburgh Rd West	412	103	1601	399	1.032	395	556	27.1	31.4	281.456	F
C - A12 South	1521	380	654	1518	1.002	1503	1546	44.5	49.0	117.763	F
D - B1079 East	492	123	1792	408	1.204	408	573	100.7	121.6	992.648	F

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	66.67	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1597	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	377	100.000
C - A12 South		ONE HOUR	✓	1463	100.000
D - B1079 East		ONE HOUR	✓	441	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	14	253	1201	129
	B - Grundisburgh Rd West	94	1	116	167
	C - A12 South	1175	154	3	130
	D - B1079 East	211	122	109	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	71	3	7	2
	B - Grundisburgh Rd West	4	0	4	2
	C - A12 South	6	4	0	0
	D - B1079 East	1	2	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	21.85	10.0	C	1465	2198
B - Grundisburgh Rd West	1.00	112.85	12.9	F	346	519
C - A12 South	1.01	72.21	33.3	F	1342	2013
D - B1079 East	1.09	177.41	25.9	F	405	607

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1202	301	311	2002	0.600	1196	1117	0.0	1.5	4.436	A
B - Grundisburgh Rd West	284	71	1146	687	0.414	281	396	0.0	0.7	8.822	A
C - A12 South	1101	275	448	1720	0.640	1094	1070	0.0	1.7	5.688	A
D - B1079 East	332	83	1189	778	0.426	329	318	0.0	0.7	7.962	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1436	359	372	1959	0.733	1431	1334	1.5	2.7	6.755	A
B - Grundisburgh Rd West	339	85	1370	560	0.605	336	474	0.7	1.5	15.836	C

C - A12 South	1315	329	536	1656	0.794	1307	1279	1.7	3.7	10.111	B
D - B1079 East	396	99	1422	637	0.622	393	380	0.7	1.6	14.536	B

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1758	440	432	1916	0.918	1733	1554	2.7	9.0	17.683	C
B - Grundisburgh Rd West	416	104	1597	431	0.964	389	557	1.5	8.2	63.478	F
C - A12 South	1611	403	617	1595	1.010	1537	1533	3.7	22.0	40.145	E
D - B1079 East	485	121	1717	459	1.058	434	448	1.6	14.5	87.115	F

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1758	440	441	1910	0.921	1754	1582	9.0	10.0	21.846	C
B - Grundisburgh Rd West	416	104	1626	415	1.001	396	565	8.2	12.9	112.848	F
C - A12 South	1611	403	625	1589	1.013	1565	1553	22.0	33.3	72.212	F
D - B1079 East	485	121	1738	446	1.089	440	456	14.5	25.9	177.410	F

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1436	359	415	1928	0.745	1464	1489	10.0	3.0	8.199	A
B - Grundisburgh Rd West	339	85	1525	474	0.716	380	519	12.9	2.8	48.573	E
C - A12 South	1315	329	616	1598	0.823	1428	1342	33.3	5.2	30.727	D
D - B1079 East	396	99	1466	611	0.649	492	413	25.9	2.0	51.817	F

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1202	301	321	1995	0.603	1208	1140	3.0	1.5	4.608	A
B - Grundisburgh Rd West	284	71	1169	674	0.421	292	402	2.8	0.7	9.627	A
C - A12 South	1101	275	456	1715	0.642	1115	1084	5.2	1.8	6.129	A
D - B1079 East	332	83	1203	770	0.431	337	326	2.0	0.8	8.409	A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J27	A12 / B1079 Grundisburgh Road	Standard Roundabout		A, D, C, B	21.55	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1528	100.000
B - Grundisburgh Rd West		ONE HOUR	✓	276	100.000
C - A12 South		ONE HOUR	✓	1465	100.000
D - B1079 East		ONE HOUR	✓	364	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	5	230	1202	91
	B - Grundisburgh Rd West	74	0	51	150
	C - A12 South	1257	140	0	69
	D - B1079 East	149	122	93	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 North	B - Grundisburgh Rd West	C - A12 South	D - B1079 East
From	A - A12 North	0	2	3	2
	B - Grundisburgh Rd West	0	0	0	0
	C - A12 South	3	1	0	4
	D - B1079 East	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	8.72	4.0	A	1402	2103
B - Grundisburgh Rd West	0.66	22.89	1.9	C	253	379
C - A12 South	0.95	34.24	14.4	D	1345	2017
D - B1079 East	0.72	23.31	2.5	C	334	500

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1150	288	202	2163	0.532	1146	1111	0.0	1.1	3.524	A
B - Grundisburgh Rd West	207	52	1107	749	0.277	206	368	0.0	0.4	6.608	A
C - A12 South	1103	276	379	1825	0.605	1097	1009	0.0	1.5	4.909	A
D - B1079 East	274	68	1116	860	0.318	272	232	0.0	0.5	6.098	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1373	343	242	2133	0.644	1371	1329	1.1	1.8	4.705	A
B - Grundisburgh Rd West	248	62	1324	626	0.396	247	441	0.4	0.6	9.462	A

C - A12 South	1317	329	453	1770	0.744	1312	1208	1.5	2.8	7.778	A
D - B1079 East	327	82	1335	731	0.447	326	277	0.5	0.8	8.843	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1682	420	293	2096	0.803	1674	1599	1.8	3.9	8.360	A
B - Grundisburgh Rd West	303	76	1593	474	0.640	299	535	0.6	1.7	20.166	C
C - A12 South	1613	403	551	1697	0.950	1577	1473	2.8	12.0	24.588	C
D - B1079 East	400	100	1630	558	0.718	394	336	0.8	2.3	21.256	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1682	420	297	2093	0.804	1682	1625	3.9	4.0	8.724	A
B - Grundisburgh Rd West	303	76	1619	459	0.661	303	540	1.7	1.9	22.895	C
C - A12 South	1613	403	556	1693	0.953	1603	1482	12.0	14.4	34.235	D
D - B1079 East	400	100	1638	553	0.724	400	340	2.3	2.5	23.309	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1373	343	249	2129	0.645	1382	1377	4.0	1.8	4.877	A
B - Grundisburgh Rd West	248	62	1374	598	0.414	252	450	1.9	0.7	10.541	B
C - A12 South	1317	329	461	1764	0.747	1363	1220	14.4	3.1	9.938	A
D - B1079 East	327	82	1347	724	0.451	333	283	2.5	0.8	9.358	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1150	288	205	2161	0.532	1153	1124	1.8	1.1	3.581	A
B - Grundisburgh Rd West	207	52	1120	742	0.279	209	372	0.7	0.4	6.766	A
C - A12 South	1103	276	382	1822	0.605	1109	1016	3.1	1.6	5.091	A
D - B1079 East	274	68	1123	856	0.320	275	234	0.8	0.5	6.213	A

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: 2019.08.13_J28_Model_CV_Adjusted v11.j9
 Path: \\ser01cam1uk.uk.wspgroup.com\projects\50400326 - Sizewell C transport planning\ID Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\For Issue\Scoped In\w11\J28\Model
 Report generation date: 13/03/2020 15:02:56

- »2019 Base Year, 6-7 AM
- »2019 Base Year, 7-8 AM
- »2019 Base Year, 8-9 AM
- »2019 Base Year, 3-4 PM
- »2019 Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
- »2023 Reference Case, 8-9 AM
- »2023 Reference Case, 3-4 PM
- »2023 Reference Case, 5-6 PM
- »2023 Early Years, 6-7 AM
- »2023 Early Years, 7-8 AM
- »2023 Early Years, 8-9 AM
- »2023 Early Years, 3-4 PM
- »2023 Early Years, 5-6 PM
- »2028 Reference Case, 6-7 AM
- »2028 Reference Case, 7-8 AM
- »2028 Reference Case, 8-9 AM
- »2028 Reference Case, 3-4 PM
- »2028 Reference Case, 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case, 6-7 AM
- »2034 Reference Case, 7-8 AM
- »2034 Reference Case, 8-9 AM
- »2034 Reference Case, 3-4 PM
- »2034 Reference Case, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North	D1	0.5	3.22	0.32	A	D2	2.9	10.18	0.75	B	D3	21.5	64.07	0.97	F	D4	3.5	11.97	0.78	B	D5	1.9	7.36	0.65	A
B - A12 South West		0.5	2.96	0.34	A		4.9	11.90	0.83	B		5.9	14.01	0.86	B		15.4	33.52	0.96	D		11.7	25.08	0.93	D
C - A1152 East		0.3	3.52	0.24	A		2.5	11.60	0.72	B		6.0	26.53	0.86	D		3.4	15.33	0.78	C		2.1	9.53	0.68	A
2023 Reference Case																									
A - A12 North	D6	0.5	3.33	0.35	A	D7	4.3	14.15	0.82	B	D8	74.1	198.24	1.03	F	D9	6.0	19.24	0.87	C	D10	3.1	10.94	0.76	B
B - A12 South West		0.6	3.07	0.37	A		7.7	17.99	0.89	C		8.1	18.82	0.89	C		46.5	83.61	1.03	F		27.1	52.41	0.99	F
C - A1152 East		0.4	3.66	0.26	A		2.0	10.39	0.67	B		3.6	18.06	0.79	C		3.2	15.60	0.77	C		1.9	9.48	0.66	A
2023 Early Years																									
A - A12 North	D11	0.5	3.36	0.35	A	D12	4.4	14.32	0.82	B	D13	115.1	303.33	1.05	F	D14	9.3	29.55	0.92	D	D15	6.8	21.93	0.88	C
B - A12 South West		0.8	3.52	0.44	A		50.9	92.96	1.04	F		23.3	52.51	0.97	F		62.4	107.74	1.05	F		33.7	62.60	1.01	F
C - A1152 East		0.4	3.70	0.27	A		2.1	11.09	0.69	B		3.2	16.36	0.76	C		3.0	15.50	0.76	C		1.6	9.44	0.62	A
2028 Reference Case																									
A - A12 North	D16	0.5	3.36	0.35	A	D17	4.1	13.82	0.81	B	D18	107.5	296.45	1.05	F	D19	4.5	15.12	0.83	C	D20	2.8	10.04	0.74	B
B - A12 South West		0.6	3.14	0.39	A		12.5	28.15	0.94	D		32.8	69.89	0.98	F		51.0	89.44	1.04	F		39.7	71.00	1.02	F
C - A1152 East		0.4	3.74	0.28	A		3.9	16.66	0.80	C		20.2	80.39	0.97	F		9.0	36.76	0.92	E		3.8	15.57	0.80	C
2028 Peak Construction																									
A - A12 North	D21	0.5	3.39	0.35	A	D22	4.1	13.74	0.81	B	D23	107.5	291.19	1.05	F	D24	8.7	27.02	0.91	D	D25	4.9	16.33	0.84	C
B - A12 South West		1.1	4.12	0.53	A		68.4	118.50	1.06	F		118.5	233.83	1.04	F		48.8	88.58	1.03	F		46.2	80.80	1.03	F
C - A1152 East		0.4	3.78	0.29	A		3.4	15.42	0.78	C		14.1	58.64	0.94	F		6.2	28.70	0.88	D		2.8	13.18	0.74	B
2034 Reference Case																									
A - A12 North	D26	0.6	3.45	0.36	A	D27	4.8	16.02	0.84	C	D28	175.9	481.60	1.09	F	D29	5.6	17.78	0.86	C	D30	3.2	10.89	0.77	B
B - A12 South West		0.7	3.24	0.41	A		19.4	41.49	0.97	E		90.3	176.53	1.02	F		59.9	102.38	1.05	F		41.0	72.61	1.02	F
C - A1152 East		0.4	3.88	0.30	A		3.2	14.71	0.77	B		9.0	37.50	0.91	E		9.6	40.12	0.93	E		3.9	16.45	0.80	C
2034 Operational Led																									
A - A12 North	D31	0.6	3.46	0.36	A	D32	4.8	15.86	0.84	C	D33	172.5	468.93	1.09	F	D34	5.8	18.19	0.86	C	D35	3.1	10.64	0.76	B
B - A12 South West		0.7	3.25	0.41	A		22.2	46.72	0.98	E		97.4	189.47	1.03	F		61.6	104.79	1.05	F		42.0	73.95	1.02	F
C - A1152 East		0.4	3.88	0.30	A		3.6	15.91	0.79	C		8.3	34.81	0.90	D		9.5	40.08	0.93	E		4.0	16.69	0.81	C

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / A1152 Woods Lane
Location	52° 6'21.15"N, 1°18'34.71"E
Site number	28
Date	01/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D3	2019 Base Year	8-9 AM	FLAT	07:45	09:15	90	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D8	2023 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D13	2023 Early Years	8-9 AM	FLAT	07:45	09:15	90	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D18	2028 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D23	2028 Peak Construction	8-9 AM	FLAT	07:45	09:15	90	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D28	2034 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D33	2034 Operational Led	8-9 AM	FLAT	07:45	09:15	90	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15		15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	A12 South West	
C	A1152 East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	3.70	8.20	71.5	22.2	64.9	24.0	
B - A12 South West	7.70	7.80	0.9	20.6	64.9	9.0	
C - A1152 East	3.10	8.40	25.9	31.8	64.9	38.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-370
B - A12 South West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-470
C - A1152 East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-150

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.638	1944
B - A12 South West	0.686	2060
C - A1152 East	0.559	1741

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	483	100.000
B - A12 South West		ONE HOUR	✓	574	100.000
C - A1152 East		ONE HOUR	✓	294	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	456	27
	B - A12 South West	355	23	196
	C - A1152 East	37	257	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
A - A12 North		0	8	7

From	B - A12 South West	10	26	7
	C - A1152 East	11	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.32	3.22	0.5	A	443	665
B - A12 South West	0.34	2.96	0.5	A	527	790
C - A1152 East	0.24	3.52	0.3	A	270	405

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	364	91	164	1699	0.214	363	294	0.0	0.3	2.690	A
B - A12 South West	432	108	28	1855	0.233	431	552	0.0	0.3	2.525	A
C - A1152 East	221	55	360	1444	0.153	221	167	0.0	0.2	2.942	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	434	109	197	1678	0.259	434	352	0.3	0.3	2.892	A
B - A12 South West	516	129	33	1851	0.279	516	661	0.3	0.4	2.695	A
C - A1152 East	264	66	430	1403	0.188	264	200	0.2	0.2	3.160	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	532	133	241	1650	0.322	531	431	0.3	0.5	3.216	A
B - A12 South West	632	158	41	1846	0.342	631	810	0.4	0.5	2.961	A
C - A1152 East	324	81	527	1347	0.240	323	245	0.2	0.3	3.515	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	532	133	241	1650	0.322	532	432	0.5	0.5	3.219	A
B - A12 South West	632	158	41	1846	0.342	632	810	0.5	0.5	2.964	A
C - A1152 East	324	81	527	1347	0.240	324	246	0.3	0.3	3.516	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	434	109	197	1678	0.259	435	353	0.5	0.4	2.895	A
B - A12 South West	516	129	33	1851	0.279	517	662	0.5	0.4	2.699	A
C - A1152 East	264	66	431	1403	0.188	265	201	0.3	0.2	3.163	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	364	91	165	1699	0.214	364	295	0.4	0.3	2.698	A
B - A12 South West	432	108	28	1855	0.233	432	555	0.4	0.3	2.532	A
C - A1152 East	221	55	361	1443	0.153	222	168	0.2	0.2	2.947	A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	11.30	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	954	100.000
B - A12 South West		ONE HOUR	✓	1375	100.000
C - A1152 East		ONE HOUR	✓	723	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	888	66
	B - A12 South West	745	45	585
	C - A1152 East	118	605	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	5
	B - A12 South West	10	13	6
	C - A1152 East	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	10.18	2.9	B	875	1313
B - A12 South West	0.83	11.90	4.9	B	1262	1893
C - A1152 East	0.72	11.60	2.5	B	663	995

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	718	180	472	1547	0.464	715	646	0.0	0.9	4.308	A
B - A12 South West	1035	259	88	1841	0.562	1030	1152	0.0	1.3	4.412	A
C - A1152 East	544	136	699	1293	0.421	541	488	0.0	0.7	4.770	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	858	214	565	1487	0.577	856	774	0.9	1.3	5.688	A

B - A12 South West	1236	309	106	1830	0.676	1233	1379	1.3	2.0	6.002	A
C - A1152 East	650	162	837	1214	0.535	648	584	0.7	1.1	6.340	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1050	263	689	1406	0.747	1044	944	1.3	2.8	9.795	A
B - A12 South West	1514	378	129	1815	0.834	1503	1683	2.0	4.7	11.200	B
C - A1152 East	796	199	1021	1109	0.718	791	712	1.1	2.4	11.144	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1050	263	693	1403	0.749	1050	950	2.8	2.9	10.177	B
B - A12 South West	1514	378	130	1814	0.835	1513	1693	4.7	4.9	11.899	B
C - A1152 East	796	199	1027	1105	0.720	796	716	2.4	2.5	11.598	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	858	214	571	1482	0.579	864	783	2.9	1.4	5.875	A
B - A12 South West	1236	309	107	1829	0.676	1247	1393	4.9	2.1	6.299	A
C - A1152 East	650	162	845	1210	0.537	655	590	2.5	1.2	6.554	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	718	180	476	1545	0.465	720	652	1.4	0.9	4.377	A
B - A12 South West	1035	259	89	1841	0.562	1038	1161	2.1	1.3	4.505	A
C - A1152 East	544	136	704	1290	0.422	546	492	1.2	0.7	4.850	A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	33.98	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1262	100.000
B - A12 South West		FLAT	✓	1529	100.000
C - A1152 East		FLAT	✓	837	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1113	148
	B - A12 South West	701	67	761
	C - A1152 East	159	677	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	5
	B - A12 South West	10	16	7
	C - A1152 East	6	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	64.07	21.5	F	1262	1893
B - A12 South West	0.86	14.01	5.9	B	1529	2293
C - A1152 East	0.86	26.53	6.0	D	837	1256

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	315	817	1313	0.961	1213	848	0.0	12.2	28.529	D
B - A12 South West	1529	382	157	1787	0.855	1507	1798	0.0	5.4	12.065	B
C - A1152 East	837	209	1137	993	0.843	818	894	0.0	4.7	18.939	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	315	828	1306	0.967	1247	860	12.2	15.9	47.423	E

B - A12 South West	1529	382	160	1785	0.856	1528	1842	5.4	5.7	13.831	B
C - A1152 East	837	209	1168	976	0.857	834	908	4.7	5.4	24.490	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	315	829	1305	0.967	1253	861	15.9	18.0	54.338	F
B - A12 South West	1529	382	161	1785	0.856	1529	1848	5.7	5.8	13.939	B
C - A1152 East	837	209	1173	973	0.860	836	909	5.4	5.7	25.596	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	315	829	1305	0.967	1256	861	18.0	19.5	58.663	F
B - A12 South West	1529	382	161	1785	0.857	1529	1851	5.8	5.8	13.978	B
C - A1152 East	837	209	1176	972	0.861	836	909	5.7	5.8	26.078	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	315	829	1305	0.967	1258	861	19.5	20.6	61.737	F
B - A12 South West	1529	382	161	1785	0.857	1529	1853	5.8	5.8	13.999	B
C - A1152 East	837	209	1177	971	0.862	837	909	5.8	5.9	26.353	D

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	315	829	1305	0.967	1259	861	20.6	21.5	64.066	F
B - A12 South West	1529	382	161	1785	0.857	1529	1854	5.8	5.9	14.011	B
C - A1152 East	837	209	1178	971	0.862	837	910	5.9	6.0	26.528	D

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	23.13	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	972	100.000
B - A12 South West		ONE HOUR	✓	1597	100.000
C - A1152 East		ONE HOUR	✓	741	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	863	107
	B - A12 South West	943	96	558
	C - A1152 East	129	607	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	3
	B - A12 South West	6	8	6
	C - A1152 East	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	11.97	3.5	B	892	1338
B - A12 South West	0.96	33.52	15.4	D	1465	2198
C - A1152 East	0.78	15.33	3.4	C	680	1020

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	732	183	493	1515	0.483	728	804	0.0	0.9	4.553	A
B - A12 South West	1202	301	102	1872	0.642	1195	1173	0.0	1.8	5.265	A
C - A1152 East	558	139	720	1239	0.450	555	502	0.0	0.8	5.237	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	874	218	590	1453	0.601	872	962	0.9	1.5	6.165	A

B - A12 South West	1436	359	122	1859	0.772	1430	1404	1.8	3.3	8.277	A
C - A1152 East	666	167	862	1159	0.575	664	600	0.8	1.3	7.245	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1070	268	710	1377	0.777	1063	1158	1.5	3.3	11.219	B
B - A12 South West	1758	440	148	1841	0.955	1720	1709	3.3	12.9	24.335	C
C - A1152 East	816	204	1049	1053	0.775	808	723	1.3	3.2	14.288	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1070	268	721	1369	0.782	1070	1176	3.3	3.5	11.967	B
B - A12 South West	1758	440	150	1840	0.956	1748	1723	12.9	15.4	33.519	D
C - A1152 East	816	204	1057	1049	0.778	815	734	3.2	3.4	15.334	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	874	218	612	1439	0.607	881	995	3.5	1.6	6.536	A
B - A12 South West	1436	359	124	1857	0.773	1483	1424	15.4	3.6	10.753	B
C - A1152 East	666	167	873	1152	0.578	674	620	3.4	1.4	7.650	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	732	183	499	1512	0.484	734	813	1.6	0.9	4.646	A
B - A12 South West	1202	301	103	1871	0.642	1209	1183	3.6	1.8	5.491	A
C - A1152 East	558	139	726	1235	0.452	560	507	1.4	0.8	5.350	A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	16.88	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	833	100.000
B - A12 South West		ONE HOUR	✓	1629	100.000
C - A1152 East		ONE HOUR	✓	730	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	757	74
	B - A12 South West	924	90	615
	C - A1152 East	131	594	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	3	1
	B - A12 South West	2	2	1
	C - A1152 East	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	7.36	1.9	A	764	1147
B - A12 South West	0.93	25.08	11.7	D	1495	2242
C - A1152 East	0.68	9.53	2.1	A	670	1005

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	627	157	532	1562	0.401	624	792	0.0	0.7	3.827	A
B - A12 South West	1226	307	103	1954	0.628	1220	1080	0.0	1.7	4.858	A
C - A1152 East	550	137	636	1348	0.408	547	520	0.0	0.7	4.477	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	749	187	636	1497	0.500	748	947	0.7	1.0	4.799	A

B - A12 South West	1464	366	124	1940	0.755	1459	1293	1.7	3.0	7.400	A
C - A1152 East	656	164	762	1278	0.514	655	622	0.7	1.0	5.766	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	917	229	769	1413	0.649	914	1146	1.0	1.8	7.171	A
B - A12 South West	1794	448	151	1922	0.933	1764	1579	3.0	10.4	19.863	C
C - A1152 East	804	201	930	1183	0.679	800	753	1.0	2.1	9.290	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	917	229	779	1406	0.652	917	1161	1.8	1.9	7.358	A
B - A12 South West	1794	448	152	1921	0.934	1788	1586	10.4	11.7	25.076	D
C - A1152 East	804	201	934	1181	0.681	804	762	2.1	2.1	9.532	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	749	187	653	1486	0.504	752	970	1.9	1.0	4.930	A
B - A12 South West	1464	366	125	1940	0.755	1499	1304	11.7	3.2	8.755	A
C - A1152 East	656	164	768	1274	0.515	660	637	2.1	1.1	5.901	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	627	157	537	1559	0.402	629	799	1.0	0.7	3.874	A
B - A12 South West	1226	307	104	1954	0.628	1232	1088	3.2	1.7	5.031	A
C - A1152 East	550	137	641	1346	0.408	551	525	1.1	0.7	4.538	A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	518	100.000
B - A12 South West		ONE HOUR	✓	631	100.000
C - A1152 East		ONE HOUR	✓	321	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	488	29
	B - A12 South West	400	23	208
	C - A1152 East	43	278	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	7
	B - A12 South West	8	26	6
	C - A1152 East	8	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.35	3.33	0.5	A	475	712
B - A12 South West	0.37	3.07	0.6	A	579	868
C - A1152 East	0.26	3.66	0.4	A	295	442

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	390	97	173	1703	0.229	388	333	0.0	0.3	2.735	A
B - A12 South West	475	119	32	1878	0.253	473	593	0.0	0.3	2.561	A
C - A1152 East	242	60	384	1439	0.168	241	178	0.0	0.2	3.003	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	465	116	207	1681	0.277	465	398	0.3	0.4	2.959	A

B - A12 South West	567	142	39	1873	0.303	567	709	0.3	0.4	2.754	A
C - A1152 East	289	72	459	1396	0.207	289	213	0.2	0.3	3.251	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	570	142	254	1651	0.345	569	487	0.4	0.5	3.325	A
B - A12 South West	694	174	47	1868	0.372	694	869	0.4	0.6	3.065	A
C - A1152 East	354	88	563	1336	0.265	353	261	0.3	0.4	3.660	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	570	142	254	1651	0.345	570	488	0.5	0.5	3.328	A
B - A12 South West	694	174	47	1868	0.372	694	870	0.6	0.6	3.068	A
C - A1152 East	354	88	563	1336	0.265	354	261	0.4	0.4	3.664	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	465	116	208	1681	0.277	466	399	0.5	0.4	2.963	A
B - A12 South West	567	142	39	1873	0.303	568	711	0.6	0.4	2.759	A
C - A1152 East	289	72	460	1395	0.207	289	213	0.4	0.3	3.258	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	390	97	174	1703	0.229	390	334	0.4	0.3	2.742	A
B - A12 South West	475	119	32	1878	0.253	475	595	0.4	0.3	2.567	A
C - A1152 East	242	60	385	1438	0.168	242	178	0.3	0.2	3.009	A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	15.23	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1018	100.000
B - A12 South West		ONE HOUR	✓	1462	100.000
C - A1152 East		ONE HOUR	✓	643	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	947	71
	B - A12 South West	804	45	613
	C - A1152 East	124	519	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	4
	B - A12 South West	10	13	6
	C - A1152 East	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	14.15	4.3	B	934	1401
B - A12 South West	0.89	17.99	7.7	C	1342	2013
C - A1152 East	0.67	10.39	2.0	B	590	885

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	766	192	493	1522	0.504	762	695	0.0	1.0	4.716	A
B - A12 South West	1101	275	93	1832	0.601	1095	1132	0.0	1.5	4.849	A
C - A1152 East	484	121	743	1253	0.386	481	512	0.0	0.6	4.652	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	915	229	590	1459	0.627	912	831	1.0	1.7	6.554	A

B - A12 South West	1315	329	111	1820	0.722	1310	1355	1.5	2.5	7.010	A
C - A1152 East	578	144	889	1169	0.494	576	613	0.6	1.0	6.062	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1121	280	717	1377	0.814	1111	1011	1.7	4.1	13.074	B
B - A12 South West	1610	403	136	1804	0.893	1592	1651	2.5	7.1	15.755	C
C - A1152 East	708	177	1083	1058	0.669	704	745	1.0	2.0	10.040	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1121	280	724	1372	0.817	1120	1020	4.1	4.3	14.146	B
B - A12 South West	1610	403	136	1803	0.893	1608	1663	7.1	7.7	17.994	C
C - A1152 East	708	177	1092	1053	0.672	708	752	2.0	2.0	10.393	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	915	229	601	1452	0.630	925	846	4.3	1.7	6.957	A
B - A12 South West	1315	329	112	1819	0.723	1334	1372	7.7	2.7	7.719	A
C - A1152 East	578	144	902	1162	0.497	582	624	2.0	1.0	6.250	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	766	192	498	1519	0.505	769	701	1.7	1.0	4.820	A
B - A12 South West	1101	275	93	1831	0.601	1106	1142	2.7	1.5	4.994	A
C - A1152 East	484	121	750	1249	0.387	485	517	1.0	0.6	4.723	A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	83.13	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1341	100.000
B - A12 South West		FLAT	✓	1576	100.000
C - A1152 East		FLAT	✓	728	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1182	157
	B - A12 South West	765	67	743
	C - A1152 East	168	559	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	4
	B - A12 South West	11	16	8
	C - A1152 East	5	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.03	198.24	74.1	F	1341	2011
B - A12 South West	0.89	18.82	8.1	C	1576	2364
C - A1152 East	0.79	18.06	3.6	C	728	1092

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1341	335	797	1317	1.018	1257	918	0.0	20.9	40.888	E
B - A12 South West	1576	394	168	1767	0.892	1548	1724	0.0	7.0	14.885	B
C - A1152 East	728	182	1175	949	0.767	716	878	0.0	3.1	14.743	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1341	335	810	1308	1.025	1290	934	20.9	33.5	85.839	F

B - A12 South West	1576	394	170	1766	0.893	1574	1763	7.0	7.6	18.274	C
C - A1152 East	728	182	1206	933	0.781	727	895	3.1	3.4	17.316	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1341	335	811	1308	1.025	1296	934	33.5	44.5	116.873	F
B - A12 South West	1576	394	170	1766	0.893	1575	1769	7.6	7.8	18.588	C
C - A1152 East	728	182	1212	930	0.783	728	896	3.4	3.5	17.719	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1341	335	811	1308	1.025	1299	935	44.5	54.8	145.201	F
B - A12 South West	1576	394	170	1766	0.893	1576	1772	7.8	7.9	18.712	C
C - A1152 East	728	182	1214	928	0.784	728	897	3.5	3.5	17.894	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1341	335	811	1308	1.025	1301	935	54.8	64.6	172.149	F
B - A12 South West	1576	394	170	1765	0.893	1576	1773	7.9	8.0	18.778	C
C - A1152 East	728	182	1216	927	0.785	728	897	3.5	3.6	17.991	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1341	335	811	1308	1.025	1302	935	64.6	74.1	198.236	F
B - A12 South West	1576	394	170	1765	0.893	1576	1774	8.0	8.1	18.820	C
C - A1152 East	728	182	1217	927	0.786	728	897	3.6	3.6	18.062	C

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	50.20	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1064	100.000
B - A12 South West		ONE HOUR	✓	1703	100.000
C - A1152 East		ONE HOUR	✓	697	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	935	127
	B - A12 South West	1002	96	605
	C - A1152 East	142	550	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	2
	B - A12 South West	7	8	6
	C - A1152 East	3	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.87	19.24	6.0	C	976	1464
B - A12 South West	1.03	83.61	46.5	F	1563	2345
C - A1152 East	0.77	15.60	3.2	C	640	960

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	801	200	528	1494	0.536	796	857	0.0	1.1	5.127	A
B - A12 South West	1282	321	112	1857	0.690	1274	1183	0.0	2.2	6.082	A
C - A1152 East	525	131	773	1197	0.439	522	552	0.0	0.8	5.310	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	957	239	631	1428	0.670	953	1024	1.1	2.0	7.520	A

B - A12 South West	1531	383	134	1843	0.831	1522	1416	2.2	4.6	10.890	B
C - A1152 East	627	157	925	1112	0.564	625	659	0.8	1.3	7.364	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1171	293	737	1361	0.861	1158	1202	2.0	5.5	16.687	C
B - A12 South West	1875	469	163	1823	1.029	1776	1717	4.6	29.4	44.048	E
C - A1152 East	768	192	1119	1003	0.765	761	775	1.3	3.1	14.422	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1171	293	750	1353	0.866	1170	1221	5.5	6.0	19.239	C
B - A12 South West	1875	469	164	1822	1.029	1807	1734	29.4	46.5	83.615	F
C - A1152 East	768	192	1131	996	0.770	767	788	3.1	3.2	15.595	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	957	239	703	1383	0.692	971	1128	6.0	2.3	9.041	A
B - A12 South West	1531	383	136	1841	0.832	1695	1449	46.5	5.6	39.456	E
C - A1152 East	627	157	950	1097	0.571	634	723	3.2	1.4	7.892	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	801	200	537	1488	0.538	806	871	2.3	1.2	5.305	A
B - A12 South West	1282	321	113	1857	0.691	1296	1197	5.6	2.3	6.563	A
C - A1152 East	525	131	782	1191	0.441	527	561	1.4	0.8	5.436	A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	31.98	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	942	100.000
B - A12 South West		ONE HOUR	✓	1713	100.000
C - A1152 East		ONE HOUR	✓	661	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	849	91
	B - A12 South West	962	90	661
	C - A1152 East	141	516	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	4	1
	B - A12 South West	3	2	1
	C - A1152 East	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	10.94	3.1	B	864	1296
B - A12 South West	0.99	52.41	27.1	F	1572	2358
C - A1152 East	0.66	9.48	1.9	A	607	910

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	709	177	565	1523	0.466	705	827	0.0	0.9	4.387	A
B - A12 South West	1290	322	111	1935	0.666	1282	1089	0.0	2.0	5.446	A
C - A1152 East	498	124	705	1293	0.385	496	566	0.0	0.6	4.503	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	847	212	676	1454	0.582	844	989	0.9	1.4	5.888	A

B - A12 South West	1540	385	133	1920	0.802	1532	1304	2.0	3.9	9.097	A
C - A1152 East	595	149	843	1214	0.490	593	677	0.6	0.9	5.784	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1037	259	804	1374	0.755	1031	1180	1.4	2.9	10.298	B
B - A12 South West	1886	471	162	1901	0.992	1822	1589	3.9	19.9	32.185	D
C - A1152 East	728	182	1027	1111	0.655	725	808	0.9	1.8	9.227	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1037	259	819	1364	0.760	1036	1201	2.9	3.1	10.937	B
B - A12 South West	1886	471	163	1900	0.993	1857	1599	19.9	27.1	52.410	F
C - A1152 East	728	182	1034	1107	0.658	728	822	1.8	1.9	9.484	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	847	212	719	1427	0.593	853	1046	3.1	1.5	6.343	A
B - A12 South West	1540	385	134	1920	0.802	1631	1321	27.1	4.3	16.102	C
C - A1152 East	595	149	856	1207	0.493	598	716	1.9	1.0	5.944	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	709	177	573	1518	0.467	711	838	1.5	0.9	4.476	A
B - A12 South West	1290	322	112	1935	0.667	1299	1098	4.3	2.0	5.740	A
C - A1152 East	498	124	711	1289	0.386	499	573	1.0	0.6	4.566	A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	529	100.000
B - A12 South West		ONE HOUR	✓	740	100.000
C - A1152 East		ONE HOUR	✓	325	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	499	29
	B - A12 South West	509	23	208
	C - A1152 East	46	279	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	7
	B - A12 South West	11	26	6
	C - A1152 East	7	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.35	3.36	0.5	A	485	728
B - A12 South West	0.44	3.52	0.8	A	679	1018
C - A1152 East	0.27	3.70	0.4	A	298	448

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	398	100	173	1706	0.233	397	416	0.0	0.3	2.747	A
B - A12 South West	557	139	34	1847	0.302	555	602	0.0	0.4	2.784	A
C - A1152 East	245	61	392	1436	0.170	244	178	0.0	0.2	3.018	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	475	119	207	1684	0.282	475	498	0.3	0.4	2.977	A

B - A12 South West	665	166	41	1842	0.361	665	720	0.4	0.6	3.055	A
C - A1152 East	292	73	469	1392	0.210	292	213	0.2	0.3	3.273	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	582	146	254	1654	0.352	582	610	0.4	0.5	3.355	A
B - A12 South West	815	204	50	1836	0.444	814	882	0.6	0.8	3.518	A
C - A1152 East	358	89	575	1331	0.269	358	261	0.3	0.4	3.695	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	582	146	254	1654	0.352	582	611	0.5	0.5	3.358	A
B - A12 South West	815	204	50	1836	0.444	815	883	0.8	0.8	3.524	A
C - A1152 East	358	89	575	1331	0.269	358	261	0.4	0.4	3.699	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	475	119	208	1684	0.282	476	499	0.5	0.4	2.981	A
B - A12 South West	665	166	41	1842	0.361	666	722	0.8	0.6	3.063	A
C - A1152 East	292	73	470	1391	0.210	293	213	0.4	0.3	3.277	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	398	100	174	1706	0.233	398	418	0.4	0.3	2.754	A
B - A12 South West	557	139	35	1846	0.302	558	604	0.6	0.4	2.793	A
C - A1152 East	245	61	394	1435	0.171	245	179	0.3	0.2	3.026	A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	53.77	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1049	100.000
B - A12 South West		ONE HOUR	✓	1656	100.000
C - A1152 East		ONE HOUR	✓	644	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	978	71
	B - A12 South West	1016	45	595
	C - A1152 East	131	513	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	4
	B - A12 South West	14	13	6
	C - A1152 East	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	14.32	4.4	B	963	1444
B - A12 South West	1.04	92.96	50.9	F	1520	2280
C - A1152 East	0.69	11.09	2.1	B	591	887

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	790	197	479	1530	0.516	786	857	0.0	1.1	4.809	A
B - A12 South West	1247	312	98	1788	0.698	1238	1150	0.0	2.3	6.452	A
C - A1152 East	485	121	766	1237	0.392	482	498	0.0	0.6	4.754	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	943	236	572	1470	0.642	940	1025	1.1	1.8	6.759	A

B - A12 South West	1489	372	117	1775	0.839	1479	1377	2.3	4.8	11.749	B
C - A1152 East	579	145	917	1151	0.503	578	595	0.6	1.0	6.265	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1155	289	664	1410	0.819	1145	1197	1.8	4.2	13.118	B
B - A12 South West	1824	456	143	1759	1.037	1717	1676	4.8	31.4	47.827	E
C - A1152 East	709	177	1114	1038	0.683	705	695	1.0	2.1	10.667	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1155	289	675	1403	0.823	1154	1215	4.2	4.4	14.318	B
B - A12 South West	1824	456	144	1758	1.037	1746	1688	31.4	50.9	92.964	F
C - A1152 East	709	177	1123	1033	0.687	709	706	2.1	2.1	11.093	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	943	236	645	1423	0.663	953	1142	4.4	2.0	7.813	A
B - A12 South West	1489	372	119	1774	0.839	1668	1398	50.9	6.1	50.897	F
C - A1152 East	579	145	933	1141	0.507	584	664	2.1	1.0	6.503	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	790	197	488	1524	0.518	793	873	2.0	1.1	4.952	A
B - A12 South West	1247	312	99	1787	0.698	1262	1162	6.1	2.4	7.045	A
C - A1152 East	485	121	774	1233	0.394	487	507	1.0	0.7	4.837	A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	134.32	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1358	100.000
B - A12 South West		FLAT	✓	1665	100.000
C - A1152 East		FLAT	✓	705	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1200	157
	B - A12 South West	841	67	757
	C - A1152 East	169	535	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	4
	B - A12 South West	17	16	8
	C - A1152 East	5	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	303.33	115.1	F	1358	2037
B - A12 South West	0.97	52.51	23.3	F	1665	2497
C - A1152 East	0.76	16.36	3.2	C	705	1057

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1358	339	797	1306	1.039	1257	979	0.0	25.3	46.944	E
B - A12 South West	1665	416	168	1722	0.967	1608	1701	0.0	14.1	24.926	C
C - A1152 East	705	176	1176	941	0.749	693	878	0.0	2.8	14.003	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1358	339	818	1293	1.050	1282	1003	25.3	44.1	107.476	F

B - A12 South West	1665	416	170	1720	0.968	1650	1734	14.1	17.8	40.467	E
C - A1152 East	705	176	1200	927	0.760	704	900	2.8	3.0	16.005	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1358	339	821	1291	1.052	1286	1006	44.1	62.2	157.175	F
B - A12 South West	1665	416	171	1720	0.968	1656	1737	17.8	19.9	45.536	E
C - A1152 East	705	176	1203	925	0.761	704	903	3.0	3.1	16.223	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1358	339	822	1290	1.053	1287	1008	62.2	79.9	206.066	F
B - A12 South West	1665	416	171	1720	0.968	1659	1739	19.9	21.4	48.667	E
C - A1152 East	705	176	1205	925	0.762	705	904	3.1	3.1	16.299	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1358	339	823	1290	1.053	1287	1008	79.9	97.6	254.742	F
B - A12 South West	1665	416	171	1720	0.968	1661	1739	21.4	22.4	50.863	F
C - A1152 East	705	176	1205	925	0.762	705	905	3.1	3.1	16.336	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1358	339	823	1289	1.053	1288	1009	97.6	115.1	303.333	F
B - A12 South West	1665	416	171	1720	0.968	1662	1739	22.4	23.3	52.505	F
C - A1152 East	705	176	1205	924	0.762	705	905	3.1	3.2	16.356	C

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	65.53	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1099	100.000
B - A12 South West		ONE HOUR	✓	1715	100.000
C - A1152 East		ONE HOUR	✓	658	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	973	124
	B - A12 South West	1003	96	616
	C - A1152 East	142	511	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	10	2
	B - A12 South West	10	8	5
	C - A1152 East	3	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	29.55	9.3	D	1009	1513
B - A12 South West	1.05	107.74	62.4	F	1573	2360
C - A1152 East	0.76	15.50	3.0	C	604	905

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	828	207	536	1449	0.571	822	857	0.0	1.3	5.701	A
B - A12 South West	1291	323	112	1829	0.706	1282	1182	0.0	2.3	6.473	A
C - A1152 East	495	124	801	1166	0.425	492	557	0.0	0.7	5.323	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	988	247	640	1385	0.714	984	1024	1.3	2.4	8.884	A

B - A12 South West	1542	385	134	1814	0.850	1530	1414	2.3	5.2	12.193	B
C - A1152 East	591	148	959	1076	0.550	589	665	0.7	1.2	7.378	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1210	303	737	1325	0.914	1188	1187	2.4	8.1	23.170	C
B - A12 South West	1888	472	163	1795	1.052	1761	1707	5.2	36.9	52.742	F
C - A1152 East	724	181	1152	964	0.751	718	772	1.2	2.8	14.236	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1210	303	747	1318	0.918	1205	1203	8.1	9.3	29.546	D
B - A12 South West	1888	472	164	1794	1.052	1786	1729	36.9	62.4	107.744	F
C - A1152 East	724	181	1170	954	0.759	724	783	2.8	3.0	15.504	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	988	247	736	1325	0.746	1013	1161	9.3	3.1	12.372	B
B - A12 South West	1542	385	136	1813	0.850	1761	1460	62.4	7.4	71.002	F
C - A1152 East	591	148	998	1053	0.561	598	751	3.0	1.3	8.027	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	828	207	548	1441	0.574	834	876	3.1	1.4	5.995	A
B - A12 South West	1291	323	113	1828	0.706	1311	1198	7.4	2.5	7.216	A
C - A1152 East	495	124	814	1159	0.427	497	569	1.3	0.8	5.462	A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	40.49	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1067	100.000
B - A12 South West		ONE HOUR	✓	1727	100.000
C - A1152 East		ONE HOUR	✓	571	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	981	84
	B - A12 South West	974	90	662
	C - A1152 East	141	425	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	1
	B - A12 South West	4	2	1
	C - A1152 East	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	21.93	6.8	C	979	1468
B - A12 South West	1.01	62.60	33.7	F	1584	2376
C - A1152 East	0.62	9.44	1.6	A	524	786

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	803	201	566	1482	0.542	799	836	0.0	1.2	5.232	A
B - A12 South West	1300	325	111	1924	0.676	1292	1120	0.0	2.0	5.620	A
C - A1152 East	430	107	803	1226	0.351	428	562	0.0	0.5	4.499	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	959	240	677	1415	0.678	956	1000	1.2	2.1	7.778	A

B - A12 South West	1552	388	133	1910	0.813	1544	1340	2.0	4.1	9.626	A
C - A1152 East	513	128	961	1135	0.452	512	672	0.5	0.8	5.774	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1175	294	800	1340	0.877	1158	1186	2.1	6.1	18.400	C
B - A12 South West	1901	475	162	1890	1.006	1824	1626	4.1	23.2	36.117	E
C - A1152 East	629	157	1163	1018	0.618	626	796	0.8	1.6	9.110	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1175	294	815	1331	0.883	1172	1207	6.1	6.8	21.927	C
B - A12 South West	1901	475	163	1889	1.006	1859	1642	23.2	33.7	62.597	F
C - A1152 East	629	157	1177	1010	0.623	629	811	1.6	1.6	9.437	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	959	240	731	1382	0.694	977	1071	6.8	2.3	9.253	A
B - A12 South West	1552	388	134	1909	0.813	1668	1369	33.7	4.7	21.241	C
C - A1152 East	513	128	987	1120	0.459	516	721	1.6	0.9	6.000	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	803	201	574	1477	0.544	808	847	2.3	1.2	5.412	A
B - A12 South West	1300	325	112	1924	0.676	1310	1132	4.7	2.1	5.961	A
C - A1152 East	430	107	813	1220	0.352	431	570	0.9	0.5	4.569	A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	519	100.000
B - A12 South West		ONE HOUR	✓	657	100.000
C - A1152 East		ONE HOUR	✓	340	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	488	30
	B - A12 South West	414	23	221
	C - A1152 East	44	297	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	6
	B - A12 South West	8	26	6
	C - A1152 East	8	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.35	3.36	0.5	A	476	714
B - A12 South West	0.39	3.14	0.6	A	603	905
C - A1152 East	0.28	3.74	0.4	A	312	469

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	391	98	183	1699	0.230	389	343	0.0	0.3	2.747	A
B - A12 South West	495	124	33	1880	0.263	493	606	0.0	0.4	2.593	A
C - A1152 East	256	64	384	1441	0.178	255	188	0.0	0.2	3.035	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	466	117	219	1675	0.278	466	411	0.3	0.4	2.976	A

B - A12 South West	591	148	39	1876	0.315	590	726	0.4	0.5	2.800	A
C - A1152 East	306	76	459	1397	0.219	306	226	0.2	0.3	3.297	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	571	143	268	1644	0.347	571	503	0.4	0.5	3.352	A
B - A12 South West	724	181	48	1870	0.387	723	889	0.5	0.6	3.137	A
C - A1152 East	375	94	562	1338	0.280	374	276	0.3	0.4	3.733	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	571	143	268	1644	0.348	571	503	0.5	0.5	3.356	A
B - A12 South West	724	181	48	1870	0.387	724	890	0.6	0.6	3.139	A
C - A1152 East	375	94	563	1338	0.280	375	276	0.4	0.4	3.737	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	466	117	219	1675	0.278	467	411	0.5	0.4	2.980	A
B - A12 South West	591	148	39	1876	0.315	591	727	0.6	0.5	2.803	A
C - A1152 East	306	76	460	1397	0.219	306	226	0.4	0.3	3.304	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	391	98	184	1698	0.230	391	344	0.4	0.3	2.753	A
B - A12 South West	495	124	33	1880	0.263	495	609	0.5	0.4	2.599	A
C - A1152 East	256	64	385	1440	0.178	257	189	0.3	0.2	3.041	A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	21.26	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	992	100.000
B - A12 South West		ONE HOUR	✓	1543	100.000
C - A1152 East		ONE HOUR	✓	788	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	919	73
	B - A12 South West	851	45	646
	C - A1152 East	126	662	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	4
	B - A12 South West	10	13	6
	C - A1152 East	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	13.82	4.1	B	910	1366
B - A12 South West	0.94	28.15	12.5	D	1416	2123
C - A1152 East	0.80	16.66	3.9	C	723	1085

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	747	187	518	1506	0.496	743	731	0.0	1.0	4.697	A
B - A12 South West	1161	290	94	1837	0.632	1155	1217	0.0	1.7	5.225	A
C - A1152 East	593	148	722	1277	0.465	590	539	0.0	0.9	5.215	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	892	223	619	1440	0.619	889	875	1.0	1.6	6.506	A

B - A12 South West	1387	347	113	1825	0.760	1381	1457	1.7	3.1	8.015	A
C - A1152 East	709	177	864	1195	0.593	706	645	0.9	1.4	7.335	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1092	273	747	1357	0.805	1083	1057	1.6	3.8	12.737	B
B - A12 South West	1699	425	137	1809	0.939	1667	1774	3.1	10.9	21.750	C
C - A1152 East	868	217	1052	1086	0.799	859	779	1.4	3.7	15.273	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1092	273	758	1350	0.809	1092	1072	3.8	4.1	13.820	B
B - A12 South West	1699	425	138	1808	0.939	1692	1789	10.9	12.5	28.154	D
C - A1152 East	868	217	1060	1081	0.803	867	790	3.7	3.9	16.656	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	892	223	638	1428	0.625	901	900	4.1	1.7	6.955	A
B - A12 South West	1387	347	115	1824	0.760	1424	1480	12.5	3.3	9.762	A
C - A1152 East	709	177	876	1188	0.597	718	663	3.9	1.5	7.814	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	747	187	523	1502	0.497	750	739	1.7	1.0	4.804	A
B - A12 South West	1161	290	95	1837	0.632	1168	1229	3.3	1.7	5.432	A
C - A1152 East	593	148	728	1273	0.466	596	545	1.5	0.9	5.335	A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	144.73	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1297	100.000
B - A12 South West		FLAT	✓	1749	100.000
C - A1152 East		FLAT	✓	949	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1143	153
	B - A12 South West	815	67	867
	C - A1152 East	170	778	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	4
	B - A12 South West	10	16	7
	C - A1152 East	5	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	296.45	107.5	F	1297	1945
B - A12 South West	0.98	69.89	32.8	F	1749	2624
C - A1152 East	0.97	80.39	20.2	F	949	1423

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1297	324	899	1253	1.035	1203	947	0.0	23.6	46.393	E
B - A12 South West	1749	437	164	1784	0.981	1683	1868	0.0	16.6	26.945	D
C - A1152 East	949	237	1125	996	0.953	907	977	0.0	10.3	32.493	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1297	324	923	1238	1.048	1227	973	23.6	41.1	105.390	F

B - A12 South West	1749	437	169	1781	0.982	1727	1913	16.6	22.2	46.987	E
C - A1152 East	949	237	1148	983	0.965	934	1002	10.3	14.0	55.500	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1297	324	927	1236	1.050	1230	977	41.1	58.0	153.724	F
B - A12 South West	1749	437	170	1780	0.983	1734	1921	22.2	25.9	55.420	F
C - A1152 East	949	237	1151	981	0.967	939	1006	14.0	16.3	65.380	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1297	324	929	1234	1.051	1231	979	58.0	74.5	201.343	F
B - A12 South West	1749	437	170	1780	0.983	1738	1924	25.9	28.7	61.404	F
C - A1152 East	949	237	1152	981	0.967	942	1007	16.3	18.0	71.895	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1297	324	930	1233	1.051	1231	981	74.5	91.0	248.883	F
B - A12 South West	1749	437	171	1780	0.983	1740	1925	28.7	30.9	66.071	F
C - A1152 East	949	237	1153	980	0.968	944	1009	18.0	19.2	76.676	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1297	324	931	1233	1.052	1231	982	91.0	107.5	296.454	F
B - A12 South West	1749	437	171	1779	0.983	1742	1926	30.9	32.8	69.887	F
C - A1152 East	949	237	1153	980	0.968	945	1009	19.2	20.2	80.385	F

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	55.90	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1012	100.000
B - A12 South West		ONE HOUR	✓	1724	100.000
C - A1152 East		ONE HOUR	✓	857	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	893	117
	B - A12 South West	1026	96	602
	C - A1152 East	135	717	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	8	2
	B - A12 South West	7	8	6
	C - A1152 East	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	15.12	4.5	C	929	1393
B - A12 South West	1.04	89.44	51.0	F	1582	2373
C - A1152 East	0.92	36.76	9.0	E	787	1180

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	762	190	525	1486	0.513	758	870	0.0	1.0	4.916	A
B - A12 South West	1298	324	106	1866	0.696	1289	1277	0.0	2.2	6.146	A
C - A1152 East	645	161	742	1223	0.528	641	541	0.0	1.1	6.140	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	910	227	628	1421	0.640	907	1040	1.0	1.7	6.954	A

B - A12 South West	1550	387	127	1852	0.837	1540	1528	2.2	4.8	11.166	B
C - A1152 East	771	193	888	1140	0.676	767	647	1.1	2.0	9.554	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1114	279	730	1356	0.822	1104	1214	1.7	4.2	13.760	B
B - A12 South West	1898	475	153	1835	1.034	1792	1845	4.8	31.4	45.990	E
C - A1152 East	944	236	1077	1033	0.914	921	758	2.0	7.7	27.928	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1114	279	742	1349	0.826	1113	1234	4.2	4.5	15.118	C
B - A12 South West	1898	475	156	1833	1.035	1820	1869	31.4	51.0	89.435	F
C - A1152 East	944	236	1086	1027	0.919	939	769	7.7	9.0	36.756	E

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	910	227	705	1373	0.663	920	1158	4.5	2.0	8.117	A
B - A12 South West	1550	387	132	1849	0.838	1730	1575	51.0	6.0	47.064	E
C - A1152 East	771	193	910	1128	0.683	798	715	9.0	2.2	11.755	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	762	190	535	1480	0.515	766	886	2.0	1.1	5.065	A
B - A12 South West	1298	324	108	1865	0.696	1313	1292	6.0	2.3	6.681	A
C - A1152 East	645	161	750	1218	0.530	650	550	2.2	1.1	6.378	A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	41.84	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	922	100.000
B - A12 South West		ONE HOUR	✓	1753	100.000
C - A1152 East		ONE HOUR	✓	818	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	825	94
	B - A12 South West	1005	90	658
	C - A1152 East	144	669	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	4	1
	B - A12 South West	3	2	1
	C - A1152 East	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.74	10.04	2.8	B	846	1269
B - A12 South West	1.02	71.00	39.7	F	1609	2413
C - A1152 East	0.80	15.57	3.8	C	751	1126

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	694	173	563	1524	0.455	691	861	0.0	0.8	4.304	A
B - A12 South West	1320	330	113	1935	0.682	1311	1187	0.0	2.1	5.704	A
C - A1152 East	616	154	687	1311	0.470	613	567	0.0	0.9	5.127	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	829	207	673	1455	0.569	827	1029	0.8	1.3	5.712	A

B - A12 South West	1576	394	136	1919	0.821	1567	1420	2.1	4.3	9.967	A
C - A1152 East	736	184	823	1234	0.596	733	677	0.9	1.4	7.150	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1015	254	792	1381	0.735	1009	1216	1.3	2.7	9.547	A
B - A12 South West	1930	483	165	1900	1.016	1843	1728	4.3	26.2	39.117	E
C - A1152 East	901	225	1001	1133	0.795	892	800	1.4	3.6	14.439	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1015	254	806	1372	0.740	1014	1236	2.7	2.8	10.040	B
B - A12 South West	1930	483	166	1899	1.017	1876	1741	26.2	39.7	71.002	F
C - A1152 East	901	225	1007	1130	0.797	900	814	3.6	3.8	15.566	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	829	207	736	1416	0.585	834	1116	2.8	1.4	6.245	A
B - A12 South West	1576	394	138	1918	0.822	1715	1444	39.7	5.0	27.205	D
C - A1152 East	736	184	837	1227	0.600	745	734	3.8	1.5	7.604	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	694	173	572	1518	0.457	696	874	1.4	0.8	4.391	A
B - A12 South West	1320	330	114	1934	0.682	1331	1198	5.0	2.2	6.081	A
C - A1152 East	616	154	693	1308	0.471	619	575	1.5	0.9	5.241	A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	526	100.000
B - A12 South West		ONE HOUR	✓	897	100.000
C - A1152 East		ONE HOUR	✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	495	31
	B - A12 South West	653	23	221
	C - A1152 East	49	297	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	6
	B - A12 South West	9	26	6
	C - A1152 East	7	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.35	3.39	0.5	A	483	724
B - A12 South West	0.53	4.12	1.1	A	823	1234
C - A1152 East	0.29	3.78	0.4	A	317	476

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	396	99	183	1697	0.233	395	526	0.0	0.3	2.763	A
B - A12 South West	675	169	36	1873	0.361	673	612	0.0	0.6	2.996	A
C - A1152 East	260	65	389	1439	0.181	260	189	0.0	0.2	3.052	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	473	118	219	1673	0.283	472	630	0.3	0.4	2.998	A

B - A12 South West	806	202	44	1868	0.432	805	733	0.6	0.8	3.387	A
C - A1152 East	311	78	466	1394	0.223	311	226	0.2	0.3	3.321	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	579	145	268	1642	0.353	578	771	0.4	0.5	3.384	A
B - A12 South West	987	247	53	1861	0.530	986	897	0.8	1.1	4.106	A
C - A1152 East	381	95	570	1334	0.285	380	277	0.3	0.4	3.772	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	579	145	269	1641	0.353	579	772	0.5	0.5	3.388	A
B - A12 South West	987	247	53	1861	0.531	987	898	1.1	1.1	4.119	A
C - A1152 East	381	95	571	1334	0.286	381	277	0.4	0.4	3.776	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	473	118	220	1673	0.283	473	631	0.5	0.4	3.002	A
B - A12 South West	806	202	44	1868	0.432	808	734	1.1	0.8	3.399	A
C - A1152 East	311	78	466	1394	0.223	311	227	0.4	0.3	3.326	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	396	99	184	1696	0.233	396	528	0.4	0.3	2.772	A
B - A12 South West	675	169	37	1873	0.361	676	615	0.8	0.6	3.009	A
C - A1152 East	260	65	391	1438	0.181	261	190	0.3	0.2	3.060	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	66.92	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1018	100.000
B - A12 South West		ONE HOUR	✓	1698	100.000
C - A1152 East		ONE HOUR	✓	752	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	942	76
	B - A12 South West	1009	45	644
	C - A1152 East	132	621	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	4
	B - A12 South West	14	13	6
	C - A1152 East	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	13.74	4.1	B	934	1401
B - A12 South West	1.06	118.50	68.4	F	1558	2338
C - A1152 East	0.78	15.42	3.4	C	690	1036

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	766	192	515	1507	0.508	762	853	0.0	1.0	4.805	A
B - A12 South West	1279	320	99	1792	0.714	1269	1203	0.0	2.4	6.767	A
C - A1152 East	566	142	739	1257	0.451	563	538	0.0	0.8	5.166	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	915	229	614	1443	0.634	912	1018	1.0	1.7	6.746	A

B - A12 South West	1527	382	118	1779	0.858	1514	1440	2.4	5.5	13.022	B
C - A1152 East	676	169	884	1173	0.576	674	642	0.8	1.3	7.181	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1120	280	703	1386	0.809	1111	1174	1.7	3.9	12.723	B
B - A12 South West	1870	467	144	1763	1.061	1733	1751	5.5	39.8	56.797	F
C - A1152 East	828	207	1075	1064	0.778	821	740	1.3	3.3	14.327	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1120	280	712	1380	0.812	1120	1188	3.9	4.1	13.737	B
B - A12 South West	1870	467	145	1762	1.061	1755	1765	39.8	68.4	118.498	F
C - A1152 East	828	207	1083	1060	0.782	828	749	3.3	3.4	15.418	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	915	229	712	1390	0.663	923	1162	4.1	2.0	8.020	A
B - A12 South West	1527	382	120	1778	0.859	1754	1466	68.4	11.5	87.338	F
C - A1152 East	676	169	901	1164	0.581	684	734	3.4	1.4	7.633	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	766	192	533	1495	0.512	770	881	2.0	1.1	4.987	A
B - A12 South West	1279	320	100	1791	0.714	1314	1216	11.5	2.6	8.100	A
C - A1152 East	566	142	747	1252	0.452	569	556	1.4	0.8	5.286	A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	213.04	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1321	100.000
B - A12 South West		FLAT	✓	1799	100.000
C - A1152 East		FLAT	✓	910	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1164	155
	B - A12 South West	882	67	850
	C - A1152 East	171	738	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	4
	B - A12 South West	16	16	7
	C - A1152 East	5	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	291.19	107.5	F	1321	1981
B - A12 South West	1.04	233.83	118.5	F	1799	2698
C - A1152 East	0.94	58.64	14.1	F	910	1366

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1321	330	858	1274	1.036	1224	990	0.0	24.2	46.492	E
B - A12 South West	1799	450	167	1738	1.035	1681	1852	0.0	29.5	40.795	E
C - A1152 East	910	228	1142	980	0.929	877	939	0.0	8.4	28.840	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1321	330	878	1261	1.047	1250	1014	24.2	41.9	105.348	F

B - A12 South West	1799	450	171	1735	1.037	1721	1896	29.5	48.9	90.371	F
C - A1152 East	910	228	1167	967	0.942	901	961	8.4	10.9	45.640	E

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1321	330	881	1259	1.049	1253	1018	41.9	58.7	152.883	F
B - A12 South West	1799	450	172	1734	1.037	1727	1903	48.9	66.9	127.710	F
C - A1152 East	910	228	1170	965	0.943	905	964	10.9	12.2	51.473	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1321	330	882	1259	1.049	1255	1019	58.7	75.1	199.305	F
B - A12 South West	1799	450	172	1734	1.037	1729	1906	66.9	84.4	163.623	F
C - A1152 East	910	228	1171	964	0.944	907	966	12.2	13.1	54.819	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1321	330	883	1258	1.050	1256	1020	75.1	91.4	245.342	F
B - A12 South West	1799	450	173	1734	1.038	1730	1907	84.4	101.5	198.906	F
C - A1152 East	910	228	1172	964	0.945	908	966	13.1	13.7	57.041	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1321	330	883	1258	1.050	1256	1021	91.4	107.5	291.186	F
B - A12 South West	1799	450	173	1734	1.038	1731	1908	101.5	118.5	233.835	F
C - A1152 East	910	228	1173	964	0.945	909	967	13.7	14.1	58.636	F

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	56.56	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1128	100.000
B - A12 South West		ONE HOUR	✓	1675	100.000
C - A1152 East		ONE HOUR	✓	745	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	1003	122
	B - A12 South West	1047	96	532
	C - A1152 East	138	602	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	10	2
	B - A12 South West	11	8	6
	C - A1152 East	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.91	27.02	8.7	D	1035	1552
B - A12 South West	1.03	88.58	48.8	F	1537	2306
C - A1152 East	0.88	28.70	6.2	D	684	1026

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	849	212	473	1484	0.572	844	887	0.0	1.3	5.574	A
B - A12 South West	1261	315	108	1817	0.694	1252	1273	0.0	2.2	6.279	A
C - A1152 East	561	140	824	1157	0.485	557	493	0.0	0.9	5.966	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1014	253	565	1427	0.710	1010	1060	1.3	2.4	8.532	A

B - A12 South West	1506	376	130	1803	0.835	1496	1523	2.2	4.7	11.354	B
C - A1152 East	670	167	986	1064	0.630	667	589	0.9	1.7	9.007	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1242	310	658	1369	0.907	1220	1240	2.4	7.7	21.622	C
B - A12 South West	1844	461	156	1786	1.033	1742	1837	4.7	30.3	45.996	E
C - A1152 East	820	205	1188	947	0.866	805	691	1.7	5.4	23.307	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1242	310	669	1363	0.911	1237	1260	7.7	8.7	27.016	D
B - A12 South West	1844	461	159	1784	1.034	1770	1863	30.3	48.8	88.581	F
C - A1152 East	820	205	1205	937	0.875	817	702	5.4	6.2	28.702	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1014	253	633	1385	0.732	1037	1178	8.7	2.8	11.014	B
B - A12 South West	1506	376	133	1801	0.836	1678	1575	48.8	5.9	45.657	E
C - A1152 East	670	167	1021	1043	0.642	687	650	6.2	1.8	10.562	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	849	212	482	1479	0.574	855	903	2.8	1.4	5.820	A
B - A12 South West	1261	315	110	1816	0.694	1275	1290	5.9	2.3	6.826	A
C - A1152 East	561	140	835	1150	0.488	564	501	1.8	1.0	6.178	A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	47.92	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1023	100.000
B - A12 South West		ONE HOUR	✓	1755	100.000
C - A1152 East		ONE HOUR	✓	703	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	923	99
	B - A12 South West	1016	90	649
	C - A1152 East	147	551	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	1
	B - A12 South West	5	2	1
	C - A1152 East	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	16.33	4.9	C	939	1409
B - A12 South West	1.03	80.80	46.2	F	1611	2416
C - A1152 East	0.74	13.18	2.8	B	645	968

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	771	193	557	1485	0.519	766	871	0.0	1.1	4.978	A
B - A12 South West	1322	330	115	1918	0.689	1313	1171	0.0	2.2	5.870	A
C - A1152 East	529	132	760	1251	0.423	526	563	0.0	0.7	4.951	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	920	230	665	1420	0.648	917	1041	1.1	1.8	7.122	A

B - A12 South West	1578	395	138	1903	0.829	1568	1401	2.2	4.6	10.474	B
C - A1152 East	632	158	909	1164	0.543	630	673	0.7	1.2	6.723	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1127	282	777	1351	0.834	1116	1224	1.8	4.6	14.638	B
B - A12 South West	1933	483	168	1883	1.027	1834	1702	4.6	29.3	42.729	E
C - A1152 East	774	194	1102	1052	0.736	768	791	1.2	2.7	12.439	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1127	282	791	1343	0.839	1126	1243	4.6	4.9	16.330	C
B - A12 South West	1933	483	169	1882	1.027	1865	1717	29.3	46.2	80.796	F
C - A1152 East	774	194	1112	1046	0.740	774	804	2.7	2.8	13.185	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	920	230	738	1375	0.669	931	1143	4.9	2.1	8.305	A
B - A12 South West	1578	395	139	1902	0.830	1741	1429	46.2	5.5	36.316	E
C - A1152 East	632	158	931	1151	0.549	638	738	2.8	1.2	7.093	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	771	193	566	1480	0.521	774	885	2.1	1.1	5.130	A
B - A12 South West	1322	330	116	1917	0.689	1334	1183	5.5	2.3	6.307	A
C - A1152 East	529	132	768	1246	0.425	531	572	1.2	0.7	5.054	A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	537	100.000
B - A12 South West		ONE HOUR	✓	692	100.000
C - A1152 East		ONE HOUR	✓	363	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	505	32
	B - A12 South West	431	23	239
	C - A1152 East	45	318	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	6
	B - A12 South West	8	26	6
	C - A1152 East	8	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	3.45	0.6	A	493	739
B - A12 South West	0.41	3.24	0.7	A	635	953
C - A1152 East	0.30	3.88	0.4	A	333	500

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	404	101	197	1693	0.239	403	357	0.0	0.3	2.789	A
B - A12 South West	521	130	33	1883	0.277	520	635	0.0	0.4	2.640	A
C - A1152 East	273	68	396	1435	0.190	272	203	0.0	0.2	3.093	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	483	121	235	1668	0.290	482	427	0.3	0.4	3.037	A

B - A12 South West	623	156	40	1878	0.331	622	760	0.4	0.5	2.866	A
C - A1152 East	326	82	474	1390	0.235	326	243	0.2	0.3	3.384	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	591	148	288	1634	0.362	591	523	0.4	0.6	3.449	A
B - A12 South West	762	191	49	1872	0.407	762	931	0.5	0.7	3.241	A
C - A1152 East	400	100	581	1329	0.301	399	298	0.3	0.4	3.871	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	591	148	288	1634	0.362	591	523	0.6	0.6	3.453	A
B - A12 South West	762	191	49	1872	0.407	762	932	0.7	0.7	3.244	A
C - A1152 East	400	100	581	1328	0.301	400	298	0.4	0.4	3.876	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	483	121	236	1667	0.290	483	428	0.6	0.4	3.043	A
B - A12 South West	623	156	40	1878	0.331	623	762	0.7	0.5	2.872	A
C - A1152 East	326	82	475	1389	0.235	327	244	0.4	0.3	3.388	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	404	101	197	1692	0.239	405	358	0.4	0.3	2.796	A
B - A12 South West	521	130	34	1882	0.277	522	638	0.5	0.4	2.648	A
C - A1152 East	273	68	398	1434	0.191	274	204	0.3	0.2	3.105	A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	28.06	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1025	100.000
B - A12 South West		ONE HOUR	✓	1603	100.000
C - A1152 East		ONE HOUR	✓	742	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	949	76
	B - A12 South West	885	45	673
	C - A1152 East	136	606	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	4
	B - A12 South West	8	13	6
	C - A1152 East	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	16.02	4.8	C	940	1411
B - A12 South West	0.97	41.49	19.4	E	1471	2206
C - A1152 East	0.77	14.71	3.2	B	680	1021

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	772	193	537	1510	0.511	767	764	0.0	1.0	4.823	A
B - A12 South West	1207	302	102	1847	0.653	1199	1197	0.0	1.9	5.499	A
C - A1152 East	558	140	744	1256	0.444	555	561	0.0	0.8	5.112	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	921	230	642	1441	0.639	918	914	1.0	1.7	6.854	A

B - A12 South West	1441	360	122	1834	0.786	1434	1433	1.9	3.5	8.866	A
C - A1152 East	667	167	890	1173	0.568	665	671	0.8	1.3	7.046	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1128	282	769	1358	0.831	1117	1097	1.7	4.5	14.334	B
B - A12 South West	1765	441	148	1816	0.972	1717	1743	3.5	15.4	28.029	D
C - A1152 East	816	204	1083	1065	0.767	809	804	1.3	3.1	13.710	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1128	282	783	1349	0.836	1127	1115	4.5	4.8	16.024	C
B - A12 South West	1765	441	150	1816	0.972	1749	1759	15.4	19.4	41.492	E
C - A1152 East	816	204	1092	1059	0.771	816	818	3.1	3.2	14.707	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	921	230	673	1421	0.648	933	954	4.8	1.9	7.550	A
B - A12 South West	1441	360	124	1833	0.786	1503	1456	19.4	3.9	12.834	B
C - A1152 East	667	167	906	1165	0.572	674	700	3.2	1.4	7.448	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	772	193	544	1505	0.513	775	773	1.9	1.1	4.952	A
B - A12 South West	1207	302	103	1846	0.654	1215	1209	3.9	1.9	5.768	A
C - A1152 East	558	140	751	1252	0.446	560	568	1.4	0.8	5.220	A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	244.24	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1336	100.000
B - A12 South West		FLAT	✓	1823	100.000
C - A1152 East		FLAT	✓	895	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1170	165
	B - A12 South West	839	67	917
	C - A1152 East	187	707	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	4
	B - A12 South West	8	16	7
	C - A1152 East	5	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.09	481.60	175.9	F	1336	2004
B - A12 South West	1.02	176.53	90.3	F	1823	2734
C - A1152 East	0.91	37.50	9.0	E	895	1342

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1336	334	929	1242	1.076	1205	973	0.0	32.8	59.184	F
B - A12 South West	1823	456	183	1786	1.021	1719	1804	0.0	25.9	36.395	E
C - A1152 East	895	224	1119	996	0.898	868	1015	0.0	6.7	24.386	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1336	334	953	1226	1.089	1222	998	32.8	61.4	148.313	F

B - A12 South West	1823	456	188	1782	1.023	1763	1838	25.9	41.0	76.533	F
C - A1152 East	895	224	1135	987	0.906	890	1039	6.7	7.9	34.094	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1336	334	956	1224	1.092	1222	1002	61.4	89.9	230.456	F
B - A12 South West	1823	456	188	1782	1.023	1770	1840	41.0	54.2	103.853	F
C - A1152 East	895	224	1136	987	0.906	893	1042	7.9	8.4	36.001	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1336	334	958	1223	1.093	1222	1004	89.9	118.5	313.590	F
B - A12 South West	1823	456	189	1782	1.023	1773	1841	54.2	66.7	129.035	F
C - A1152 East	895	224	1136	987	0.906	893	1044	8.4	8.7	36.801	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1336	334	959	1222	1.093	1221	1005	118.5	147.2	397.392	F
B - A12 South West	1823	456	189	1782	1.023	1775	1841	66.7	78.7	153.124	F
C - A1152 East	895	224	1136	987	0.906	894	1045	8.7	8.9	37.233	E

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1336	334	960	1222	1.094	1221	1005	147.2	175.9	481.599	F
B - A12 South West	1823	456	189	1782	1.023	1776	1841	78.7	90.3	176.531	F
C - A1152 East	895	224	1135	987	0.906	894	1046	8.9	9.0	37.499	E

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	63.12	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1085	100.000
B - A12 South West		ONE HOUR	✓	1739	100.000
C - A1152 East		ONE HOUR	✓	835	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	960	123
	B - A12 South West	1073	96	571
	C - A1152 East	159	671	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	2
	B - A12 South West	5	8	6
	C - A1152 East	3	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	17.78	5.6	C	996	1494
B - A12 South West	1.05	102.38	59.9	F	1596	2394
C - A1152 East	0.93	40.12	9.6	E	766	1149

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	817	204	502	1521	0.537	812	922	0.0	1.1	5.047	A
B - A12 South West	1309	327	124	1865	0.702	1300	1292	0.0	2.3	6.271	A
C - A1152 East	628	157	792	1197	0.525	624	522	0.0	1.1	6.238	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	976	244	599	1458	0.669	972	1102	1.1	2.0	7.356	A

B - A12 South West	1563	391	149	1849	0.846	1552	1546	2.3	5.1	11.716	B
C - A1152 East	750	188	948	1110	0.676	747	624	1.1	2.0	9.809	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1195	299	692	1399	0.854	1182	1278	2.0	5.2	15.739	C
B - A12 South West	1915	479	178	1829	1.047	1793	1864	5.1	35.6	50.498	F
C - A1152 East	919	230	1147	999	0.920	895	727	2.0	8.0	29.644	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1195	299	702	1392	0.858	1193	1297	5.2	5.6	17.784	C
B - A12 South West	1915	479	182	1827	1.048	1818	1890	35.6	59.9	102.384	F
C - A1152 East	919	230	1159	992	0.926	913	737	8.0	9.6	40.121	E

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	976	244	685	1403	0.695	989	1246	5.6	2.3	8.949	A
B - A12 South West	1563	391	155	1845	0.848	1775	1599	59.9	6.9	64.027	F
C - A1152 East	750	188	975	1095	0.685	780	699	9.6	2.3	12.417	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	817	204	513	1515	0.539	822	941	2.3	1.2	5.232	A
B - A12 South West	1309	327	126	1864	0.702	1327	1309	6.9	2.4	6.924	A
C - A1152 East	628	157	802	1191	0.527	633	532	2.3	1.1	6.498	A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	42.71	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	981	100.000
B - A12 South West		ONE HOUR	✓	1761	100.000
C - A1152 East		ONE HOUR	✓	807	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	878	101
	B - A12 South West	1038	90	633
	C - A1152 East	153	648	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	2	1
	B - A12 South West	2	2	1
	C - A1152 East	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.77	10.89	3.2	B	900	1350
B - A12 South West	1.02	72.61	41.0	F	1616	2424
C - A1152 East	0.80	16.45	3.9	C	740	1110

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	738	185	545	1557	0.474	735	893	0.0	0.9	4.361	A
B - A12 South West	1326	331	120	1942	0.683	1317	1211	0.0	2.1	5.691	A
C - A1152 East	607	152	727	1293	0.470	604	553	0.0	0.9	5.196	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	882	220	651	1490	0.592	879	1067	0.9	1.4	5.879	A

B - A12 South West	1583	396	144	1926	0.822	1574	1449	2.1	4.4	9.984	A
C - A1152 East	725	181	870	1213	0.598	723	661	0.9	1.5	7.304	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1080	270	765	1417	0.762	1073	1259	1.4	3.1	10.268	B
B - A12 South West	1939	485	175	1905	1.018	1849	1762	4.4	26.8	39.646	E
C - A1152 East	888	222	1058	1108	0.801	879	780	1.5	3.7	15.139	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1080	270	778	1409	0.766	1079	1280	3.1	3.2	10.886	B
B - A12 South West	1939	485	176	1904	1.019	1882	1776	26.8	41.0	72.605	F
C - A1152 East	888	222	1065	1105	0.804	888	793	3.7	3.9	16.452	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	882	220	714	1450	0.608	888	1159	3.2	1.6	6.480	A
B - A12 South West	1583	396	146	1924	0.823	1727	1474	41.0	5.1	28.413	D
C - A1152 East	725	181	885	1205	0.602	735	716	3.9	1.5	7.808	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	738	185	553	1552	0.476	741	906	1.6	0.9	4.456	A
B - A12 South West	1326	331	121	1941	0.683	1337	1222	5.1	2.2	6.074	A
C - A1152 East	607	152	733	1290	0.471	610	561	1.5	0.9	5.315	A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	538	100.000
B - A12 South West		ONE HOUR	✓	694	100.000
C - A1152 East		ONE HOUR	✓	363	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	506	32
	B - A12 South West	432	23	239
	C - A1152 East	45	318	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	6
	B - A12 South West	8	26	6
	C - A1152 East	8	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	3.46	0.6	A	494	741
B - A12 South West	0.41	3.25	0.7	A	636	955
C - A1152 East	0.30	3.88	0.4	A	333	500

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	405	101	197	1693	0.239	404	358	0.0	0.3	2.791	A
B - A12 South West	522	131	33	1883	0.277	521	636	0.0	0.4	2.640	A
C - A1152 East	273	68	397	1434	0.191	272	203	0.0	0.2	3.095	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	484	121	235	1668	0.290	484	428	0.3	0.4	3.039	A

B - A12 South West	624	156	40	1878	0.332	623	761	0.4	0.5	2.868	A
C - A1152 East	326	82	475	1389	0.235	326	243	0.2	0.3	3.386	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	593	148	288	1634	0.363	592	524	0.4	0.6	3.454	A
B - A12 South West	764	191	49	1872	0.408	763	932	0.5	0.7	3.244	A
C - A1152 East	400	100	582	1328	0.301	399	298	0.3	0.4	3.875	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	593	148	288	1634	0.363	593	524	0.6	0.6	3.457	A
B - A12 South West	764	191	49	1872	0.408	764	933	0.7	0.7	3.246	A
C - A1152 East	400	100	583	1328	0.301	400	298	0.4	0.4	3.879	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	484	121	236	1668	0.290	485	429	0.6	0.4	3.046	A
B - A12 South West	624	156	40	1878	0.332	624	763	0.7	0.5	2.871	A
C - A1152 East	326	82	476	1389	0.235	327	244	0.4	0.3	3.390	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	405	101	197	1692	0.239	406	359	0.4	0.3	2.800	A
B - A12 South West	522	131	34	1883	0.277	523	639	0.5	0.4	2.647	A
C - A1152 East	273	68	399	1433	0.191	274	204	0.3	0.2	3.106	A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	30.74	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1026	100.000
B - A12 South West		ONE HOUR	✓	1609	100.000
C - A1152 East		ONE HOUR	✓	760	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	949	77
	B - A12 South West	891	45	673
	C - A1152 East	155	605	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	4
	B - A12 South West	8	13	6
	C - A1152 East	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	15.86	4.8	C	942	1413
B - A12 South West	0.98	46.72	22.2	E	1476	2215
C - A1152 East	0.79	15.91	3.6	C	697	1046

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	773	193	537	1511	0.511	769	782	0.0	1.0	4.819	A
B - A12 South West	1211	303	116	1841	0.658	1204	1197	0.0	1.9	5.586	A
C - A1152 East	572	143	744	1258	0.455	569	561	0.0	0.8	5.201	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	923	231	643	1443	0.639	920	936	1.0	1.7	6.842	A

B - A12 South West	1446	362	139	1826	0.792	1439	1433	1.9	3.6	9.145	A
C - A1152 East	683	171	891	1175	0.581	681	671	0.8	1.4	7.258	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1130	282	767	1362	0.829	1119	1120	1.7	4.5	14.199	B
B - A12 South West	1772	443	169	1806	0.981	1718	1743	3.6	17.0	30.239	D
C - A1152 East	836	209	1083	1066	0.785	828	803	1.4	3.4	14.677	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1130	282	781	1353	0.835	1129	1140	4.5	4.8	15.859	C
B - A12 South West	1772	443	170	1805	0.981	1751	1758	17.0	22.2	46.717	E
C - A1152 East	836	209	1093	1060	0.789	836	817	3.4	3.6	15.914	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	923	231	678	1420	0.650	934	982	4.8	1.9	7.579	A
B - A12 South West	1446	362	141	1825	0.793	1519	1457	22.2	4.0	14.368	B
C - A1152 East	683	171	906	1166	0.586	692	706	3.6	1.4	7.723	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	773	193	544	1507	0.513	776	792	1.9	1.1	4.949	A
B - A12 South West	1211	303	117	1840	0.658	1220	1209	4.0	2.0	5.877	A
C - A1152 East	572	143	752	1253	0.456	574	569	1.4	0.8	5.321	A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	245.86	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1343	100.000
B - A12 South West		FLAT	✓	1828	100.000
C - A1152 East		FLAT	✓	885	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1174	168
	B - A12 South West	844	67	917
	C - A1152 East	187	697	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	4
	B - A12 South West	9	16	7
	C - A1152 East	5	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.09	468.93	172.5	F	1343	2014
B - A12 South West	1.03	189.47	97.4	F	1828	2742
C - A1152 East	0.90	34.81	8.3	D	885	1327

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1343	336	927	1250	1.074	1213	977	0.0	32.4	58.324	F
B - A12 South West	1828	457	184	1784	1.025	1721	1800	0.0	26.9	37.356	E
C - A1152 East	885	221	1125	995	0.889	860	1015	0.0	6.3	23.412	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1343	336	950	1235	1.087	1230	1002	32.4	60.5	145.455	F

B - A12 South West	1828	457	188	1781	1.026	1764	1834	26.9	43.0	79.646	F
C - A1152 East	885	221	1141	986	0.898	881	1039	6.3	7.4	32.061	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1343	336	954	1233	1.089	1231	1005	60.5	88.4	225.311	F
B - A12 South West	1828	457	189	1781	1.026	1770	1837	43.0	57.5	109.234	F
C - A1152 East	885	221	1142	985	0.898	883	1042	7.4	7.8	33.632	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1343	336	955	1232	1.090	1231	1007	88.4	116.4	306.007	F
B - A12 South West	1828	457	189	1781	1.027	1773	1837	57.5	71.2	136.837	F
C - A1152 East	885	221	1142	985	0.898	884	1044	7.8	8.0	34.269	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1343	336	956	1231	1.090	1230	1008	116.4	144.4	387.292	F
B - A12 South West	1828	457	189	1781	1.027	1775	1837	71.2	84.4	163.454	F
C - A1152 East	885	221	1142	986	0.898	884	1045	8.0	8.2	34.605	D

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1343	336	957	1231	1.091	1230	1009	144.4	172.5	468.926	F
B - A12 South West	1828	457	189	1781	1.027	1776	1837	84.4	97.4	189.468	F
C - A1152 East	885	221	1142	986	0.898	885	1045	8.2	8.3	34.811	D

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	64.37	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1088	100.000
B - A12 South West		ONE HOUR	✓	1743	100.000
C - A1152 East		ONE HOUR	✓	833	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	962	124
	B - A12 South West	1075	96	572
	C - A1152 East	159	669	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	2
	B - A12 South West	5	8	6
	C - A1152 East	3	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	18.19	5.8	C	999	1498
B - A12 South West	1.05	104.79	61.6	F	1600	2399
C - A1152 East	0.93	40.08	9.5	E	764	1147

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	819	205	503	1519	0.539	815	924	0.0	1.2	5.076	A
B - A12 South West	1312	328	124	1866	0.703	1303	1292	0.0	2.3	6.299	A
C - A1152 East	627	157	794	1196	0.525	623	524	0.0	1.1	6.238	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	978	245	601	1456	0.672	975	1104	1.2	2.0	7.427	A

B - A12 South West	1567	392	149	1849	0.847	1556	1546	2.3	5.1	11.827	B
C - A1152 East	749	187	950	1108	0.676	745	626	1.1	2.0	9.809	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1198	300	693	1397	0.858	1185	1279	2.0	5.4	16.033	C
B - A12 South West	1919	480	178	1830	1.049	1794	1864	5.1	36.4	51.339	F
C - A1152 East	917	229	1149	997	0.920	893	729	2.0	8.0	29.615	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1198	300	703	1391	0.862	1196	1298	5.4	5.8	18.189	C
B - A12 South West	1919	480	182	1827	1.050	1818	1890	36.4	61.6	104.786	F
C - A1152 East	917	229	1160	991	0.926	911	739	8.0	9.5	40.077	E

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	978	245	689	1400	0.699	992	1251	5.8	2.4	9.106	A
B - A12 South West	1567	392	155	1845	0.849	1785	1600	61.6	7.2	67.453	F
C - A1152 East	749	187	977	1093	0.685	778	704	9.5	2.3	12.423	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	819	205	514	1512	0.542	824	943	2.4	1.2	5.269	A
B - A12 South West	1312	328	126	1864	0.704	1331	1309	7.2	2.4	6.983	A
C - A1152 East	627	157	803	1190	0.527	632	535	2.3	1.1	6.500	A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	43.38	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	976	100.000
B - A12 South West		ONE HOUR	✓	1764	100.000
C - A1152 East		ONE HOUR	✓	813	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	873	101
	B - A12 South West	1043	90	631
	C - A1152 East	155	653	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	2	1
	B - A12 South West	2	2	1
	C - A1152 East	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.76	10.64	3.1	B	895	1343
B - A12 South West	1.02	73.95	42.0	F	1619	2428
C - A1152 East	0.81	16.69	4.0	C	746	1119

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	735	184	543	1558	0.471	731	898	0.0	0.9	4.333	A
B - A12 South West	1328	332	121	1943	0.684	1320	1210	0.0	2.1	5.702	A
C - A1152 East	612	153	723	1296	0.472	609	552	0.0	0.9	5.212	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	877	219	649	1491	0.588	875	1073	0.9	1.4	5.822	A

B - A12 South West	1586	396	145	1927	0.823	1577	1448	2.1	4.4	10.036	B
C - A1152 East	731	183	865	1216	0.601	729	659	0.9	1.5	7.344	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1074	269	762	1420	0.757	1068	1265	1.4	3.0	10.059	B
B - A12 South West	1942	486	177	1905	1.019	1851	1761	4.4	27.3	40.123	E
C - A1152 East	895	224	1052	1112	0.805	886	778	1.5	3.8	15.329	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1074	269	775	1411	0.761	1074	1287	3.0	3.1	10.637	B
B - A12 South West	1942	486	178	1904	1.020	1884	1775	27.3	42.0	73.947	F
C - A1152 East	895	224	1059	1108	0.808	894	791	3.8	4.0	16.694	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	877	219	713	1451	0.605	883	1168	3.1	1.6	6.413	A
B - A12 South West	1586	396	148	1925	0.824	1733	1473	42.0	5.1	29.562	D
C - A1152 East	731	183	880	1208	0.605	741	716	4.0	1.6	7.861	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	735	184	551	1553	0.473	737	911	1.6	0.9	4.425	A
B - A12 South West	1328	332	123	1942	0.684	1340	1221	5.1	2.2	6.090	A
C - A1152 East	612	153	729	1292	0.474	615	560	1.6	0.9	5.333	A

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: 2019.08.13_J28_Model_CV_Adjusted v12_SensTest.j9
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Report generation date: 13/03/2020 15:06:04

- »2019 Base Year, 6-7 AM
- »2019 Base Year, 7-8 AM
- »2019 Base Year, 8-9 AM
- »2019 Base Year, 3-4 PM
- »2019 Base Year, 5-6 PM
- »2023 Reference Case, 6-7 AM
- »2023 Reference Case, 7-8 AM
- »2023 Reference Case, 8-9 AM
- »2023 Reference Case, 3-4 PM
- »2023 Reference Case, 5-6 PM
- »2023 Early Years, 6-7 AM
- »2023 Early Years, 7-8 AM
- »2023 Early Years, 8-9 AM
- »2023 Early Years, 3-4 PM
- »2023 Early Years, 5-6 PM
- »2028 Reference Case, 6-7 AM
- »2028 Reference Case, 7-8 AM
- »2028 Reference Case, 8-9 AM
- »2028 Reference Case, 3-4 PM
- »2028 Reference Case, 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case, 6-7 AM
- »2034 Reference Case, 7-8 AM
- »2034 Reference Case, 8-9 AM
- »2034 Reference Case, 3-4 PM
- »2034 Reference Case, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2019 Base Year																									
A - A12 North	D1	0.5	3.22	0.32	A	D2	2.9	10.18	0.75	B	D3	21.5	64.07	0.97	F	D4	3.5	11.97	0.78	B	D5	1.9	7.36	0.65	A
B - A12 South West		0.5	2.96	0.34	A		4.9	11.90	0.83	B		5.9	14.01	0.86	B		15.4	33.52	0.96	D		11.7	25.08	0.93	D
C - A1152 East		0.3	3.52	0.24	A		2.5	11.60	0.72	B		6.0	26.53	0.86	D		3.4	15.33	0.78	C		2.1	9.53	0.68	A
2023 Reference Case																									
A - A12 North	D6	0.5	3.30	0.34	A	D7	3.9	12.98	0.80	B	D8	53.8	147.45	1.01	F	D9	4.7	15.70	0.83	C	D10	2.8	10.04	0.74	B
B - A12 South West		0.6	3.05	0.37	A		7.0	16.49	0.88	C		7.5	17.56	0.88	C		20.4	42.91	0.98	E		16.7	34.80	0.96	D
C - A1152 East		0.3	3.62	0.26	A		2.0	10.45	0.68	B		3.8	19.07	0.80	C		3.3	15.73	0.78	C		1.9	9.38	0.66	A
2023 Early Years																									
A - A12 North	D11	0.6	3.39	0.36	A	D12	4.9	15.76	0.84	C	D13	120.2	313.55	1.06	F	D14	10.9	33.62	0.93	D	D15	6.8	21.74	0.88	C
B - A12 South West		0.8	3.57	0.45	A		45.6	84.78	1.03	F		15.8	36.58	0.95	E		34.5	66.94	1.01	F		18.0	37.48	0.97	E
C - A1152 East		0.4	3.74	0.28	A		2.1	11.08	0.68	B		3.1	16.07	0.76	C		3.0	15.59	0.75	C		1.7	9.90	0.63	A
2028 Reference Case																									
A - A12 North	D16	0.5	3.31	0.34	A	D17	3.8	12.94	0.80	B	D18	80.5	224.75	1.03	F	D19	4.1	13.59	0.81	B	D20	2.6	9.52	0.73	A
B - A12 South West		0.6	3.11	0.38	A		10.0	22.93	0.92	C		13.6	30.70	0.94	D		19.5	41.21	0.97	E		19.8	40.39	0.97	E
C - A1152 East		0.4	3.67	0.27	A		3.6	15.72	0.79	C		21.9	86.80	0.97	F		6.8	28.70	0.89	D		3.7	15.26	0.79	C
2028 Peak Construction																									
A - A12 North	D21	0.5	3.34	0.34	A	D22	4.0	13.31	0.81	B	D23	80.1	217.20	1.03	F	D24	9.6	29.35	0.92	D	D25	4.2	14.21	0.82	B
B - A12 South West		1.1	4.06	0.52	A		47.6	87.88	1.03	F		26.2	58.19	0.97	F		28.5	57.78	1.00	F		18.8	38.92	0.97	E
C - A1152 East		0.4	3.70	0.27	A		3.6	16.14	0.79	C		16.2	67.48	0.95	F		5.7	26.82	0.86	D		2.6	12.42	0.73	B
2034 Reference Case																									
A - A12 North	D26	0.5	3.38	0.35	A	D27	3.8	12.94	0.80	B	D28	116.6	313.24	1.05	F	D29	5.7	18.17	0.86	C	D30	2.5	8.98	0.72	A
B - A12 South West		0.7	3.18	0.40	A		12.1	27.46	0.94	D		12.6	28.43	0.93	D		26.6	53.43	0.99	F		13.3	28.25	0.94	D
C - A1152 East		0.4	3.76	0.28	A		3.6	15.94	0.79	C		12.0	50.34	0.93	F		7.3	31.66	0.90	D		3.7	15.47	0.80	C
2034 Operational Led																									
A - A12 North	D31	0.5	3.38	0.35	A	D32	3.8	12.82	0.80	B	D33	126.2	339.76	1.06	F	D34	5.6	17.88	0.86	C	D35	2.6	9.06	0.72	A
B - A12 South West		0.7	3.19	0.40	A		12.5	28.38	0.94	D		21.4	46.87	0.96	E		27.1	54.37	0.99	F		13.9	29.49	0.95	D
C - A1152 East		0.4	3.76	0.28	A		3.8	16.58	0.80	C		16.5	67.21	0.95	F		7.5	32.16	0.90	D		3.7	15.37	0.79	C

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / A1152 Woods Lane
Location	52° 6'21.15"N, 1°18'34.71"E
Site number	28
Date	01/04/2019
Version	
Status	Skeleton Model
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D3	2019 Base Year	8-9 AM	FLAT	07:45	09:15	90	15	✓
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D8	2023 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D13	2023 Early Years	8-9 AM	FLAT	07:45	09:15	90	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D18	2028 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D23	2028 Peak Construction	8-9 AM	FLAT	07:45	09:15	90	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D28	2034 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15		15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15		15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15		15	✓
D33	2034 Operational Led	8-9 AM	FLAT	07:45	09:15	90	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15		15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15		15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2019 Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 North	
B	A12 South West	
C	A1152 East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 North	3.70	8.20	71.5	22.2	64.9	24.0	
B - A12 South West	7.70	7.80	0.9	20.6	64.9	9.0	
C - A1152 East	3.10	8.40	25.9	31.8	64.9	38.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - A12 North	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-370
B - A12 South West	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-470
C - A1152 East	Direct	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	-150

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 North	0.638	1944
B - A12 South West	0.686	2060
C - A1152 East	0.559	1741

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2019 Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	483	100.000
B - A12 South West		ONE HOUR	✓	574	100.000
C - A1152 East		ONE HOUR	✓	294	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	456	27
	B - A12 South West	355	23	196
	C - A1152 East	37	257	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
A - A12 North		0	8	7

From	B - A12 South West	10	26	7
	C - A1152 East	11	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.32	3.22	0.5	A	443	665
B - A12 South West	0.34	2.96	0.5	A	527	790
C - A1152 East	0.24	3.52	0.3	A	270	405

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	364	91	164	1699	0.214	363	294	0.0	0.3	2.690	A
B - A12 South West	432	108	28	1855	0.233	431	552	0.0	0.3	2.525	A
C - A1152 East	221	55	360	1444	0.153	221	167	0.0	0.2	2.942	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	434	109	197	1678	0.259	434	352	0.3	0.3	2.892	A
B - A12 South West	516	129	33	1851	0.279	516	661	0.3	0.4	2.695	A
C - A1152 East	264	66	430	1403	0.188	264	200	0.2	0.2	3.160	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	532	133	241	1650	0.322	531	431	0.3	0.5	3.216	A
B - A12 South West	632	158	41	1846	0.342	631	810	0.4	0.5	2.961	A
C - A1152 East	324	81	527	1347	0.240	323	245	0.2	0.3	3.515	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	532	133	241	1650	0.322	532	432	0.5	0.5	3.219	A
B - A12 South West	632	158	41	1846	0.342	632	810	0.5	0.5	2.964	A
C - A1152 East	324	81	527	1347	0.240	324	246	0.3	0.3	3.516	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	434	109	197	1678	0.259	435	353	0.5	0.4	2.895	A
B - A12 South West	516	129	33	1851	0.279	517	662	0.5	0.4	2.699	A
C - A1152 East	264	66	431	1403	0.188	265	201	0.3	0.2	3.163	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	364	91	165	1699	0.214	364	295	0.4	0.3	2.698	A
B - A12 South West	432	108	28	1855	0.233	432	555	0.4	0.3	2.532	A
C - A1152 East	221	55	361	1443	0.153	222	168	0.2	0.2	2.947	A

2019 Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	11.30	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2019 Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	954	100.000
B - A12 South West		ONE HOUR	✓	1375	100.000
C - A1152 East		ONE HOUR	✓	723	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 South West	C - A1152 East
A - A12 North	0	888	66
B - A12 South West	745	45	585
C - A1152 East	118	605	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 South West	C - A1152 East
A - A12 North	0	5	5
B - A12 South West	10	13	6
C - A1152 East	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.75	10.18	2.9	B	875	1313
B - A12 South West	0.83	11.90	4.9	B	1262	1893
C - A1152 East	0.72	11.60	2.5	B	663	995

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	718	180	472	1547	0.464	715	646	0.0	0.9	4.308	A
B - A12 South West	1035	259	88	1841	0.562	1030	1152	0.0	1.3	4.412	A
C - A1152 East	544	136	699	1293	0.421	541	488	0.0	0.7	4.770	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	858	214	565	1487	0.577	856	774	0.9	1.3	5.688	A

B - A12 South West	1236	309	106	1830	0.676	1233	1379	1.3	2.0	6.002	A
C - A1152 East	650	162	837	1214	0.535	648	584	0.7	1.1	6.340	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1050	263	689	1406	0.747	1044	944	1.3	2.8	9.795	A
B - A12 South West	1514	378	129	1815	0.834	1503	1683	2.0	4.7	11.200	B
C - A1152 East	796	199	1021	1109	0.718	791	712	1.1	2.4	11.144	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1050	263	693	1403	0.749	1050	950	2.8	2.9	10.177	B
B - A12 South West	1514	378	130	1814	0.835	1513	1693	4.7	4.9	11.899	B
C - A1152 East	796	199	1027	1105	0.720	796	716	2.4	2.5	11.598	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	858	214	571	1482	0.579	864	783	2.9	1.4	5.875	A
B - A12 South West	1236	309	107	1829	0.676	1247	1393	4.9	2.1	6.299	A
C - A1152 East	650	162	845	1210	0.537	655	590	2.5	1.2	6.554	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	718	180	476	1545	0.465	720	652	1.4	0.9	4.377	A
B - A12 South West	1035	259	89	1841	0.562	1038	1161	2.1	1.3	4.505	A
C - A1152 East	544	136	704	1290	0.422	546	492	1.2	0.7	4.850	A

2019 Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	33.98	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2019 Base Year	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1262	100.000
B - A12 South West		FLAT	✓	1529	100.000
C - A1152 East		FLAT	✓	837	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1113	148
	B - A12 South West	701	67	761
	C - A1152 East	159	677	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	5
	B - A12 South West	10	16	7
	C - A1152 East	6	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.97	64.07	21.5	F	1262	1893
B - A12 South West	0.86	14.01	5.9	B	1529	2293
C - A1152 East	0.86	26.53	6.0	D	837	1256

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	315	817	1313	0.961	1213	848	0.0	12.2	28.529	D
B - A12 South West	1529	382	157	1787	0.855	1507	1798	0.0	5.4	12.065	B
C - A1152 East	837	209	1137	993	0.843	818	894	0.0	4.7	18.939	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	315	828	1306	0.967	1247	860	12.2	15.9	47.423	E

B - A12 South West	1529	382	160	1785	0.856	1528	1842	5.4	5.7	13.831	B
C - A1152 East	837	209	1168	976	0.857	834	908	4.7	5.4	24.490	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	315	829	1305	0.967	1253	861	15.9	18.0	54.338	F
B - A12 South West	1529	382	161	1785	0.856	1529	1848	5.7	5.8	13.939	B
C - A1152 East	837	209	1173	973	0.860	836	909	5.4	5.7	25.596	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	315	829	1305	0.967	1256	861	18.0	19.5	58.663	F
B - A12 South West	1529	382	161	1785	0.857	1529	1851	5.8	5.8	13.978	B
C - A1152 East	837	209	1176	972	0.861	836	909	5.7	5.8	26.078	D

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	315	829	1305	0.967	1258	861	19.5	20.6	61.737	F
B - A12 South West	1529	382	161	1785	0.857	1529	1853	5.8	5.8	13.999	B
C - A1152 East	837	209	1177	971	0.862	837	909	5.8	5.9	26.353	D

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1262	315	829	1305	0.967	1259	861	20.6	21.5	64.066	F
B - A12 South West	1529	382	161	1785	0.857	1529	1854	5.8	5.9	14.011	B
C - A1152 East	837	209	1178	971	0.862	837	910	5.9	6.0	26.528	D

2019 Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	23.13	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2019 Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	972	100.000
B - A12 South West		ONE HOUR	✓	1597	100.000
C - A1152 East		ONE HOUR	✓	741	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	863	107
	B - A12 South West	943	96	558
	C - A1152 East	129	607	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	3
	B - A12 South West	6	8	6
	C - A1152 East	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.78	11.97	3.5	B	892	1338
B - A12 South West	0.96	33.52	15.4	D	1465	2198
C - A1152 East	0.78	15.33	3.4	C	680	1020

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	732	183	493	1515	0.483	728	804	0.0	0.9	4.553	A
B - A12 South West	1202	301	102	1872	0.642	1195	1173	0.0	1.8	5.265	A
C - A1152 East	558	139	720	1239	0.450	555	502	0.0	0.8	5.237	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	874	218	590	1453	0.601	872	962	0.9	1.5	6.165	A

B - A12 South West	1436	359	122	1859	0.772	1430	1404	1.8	3.3	8.277	A
C - A1152 East	666	167	862	1159	0.575	664	600	0.8	1.3	7.245	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1070	268	710	1377	0.777	1063	1158	1.5	3.3	11.219	B
B - A12 South West	1758	440	148	1841	0.955	1720	1709	3.3	12.9	24.335	C
C - A1152 East	816	204	1049	1053	0.775	808	723	1.3	3.2	14.288	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1070	268	721	1369	0.782	1070	1176	3.3	3.5	11.967	B
B - A12 South West	1758	440	150	1840	0.956	1748	1723	12.9	15.4	33.519	D
C - A1152 East	816	204	1057	1049	0.778	815	734	3.2	3.4	15.334	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	874	218	612	1439	0.607	881	995	3.5	1.6	6.536	A
B - A12 South West	1436	359	124	1857	0.773	1483	1424	15.4	3.6	10.753	B
C - A1152 East	666	167	873	1152	0.578	674	620	3.4	1.4	7.650	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	732	183	499	1512	0.484	734	813	1.6	0.9	4.646	A
B - A12 South West	1202	301	103	1871	0.642	1209	1183	3.6	1.8	5.491	A
C - A1152 East	558	139	726	1235	0.452	560	507	1.4	0.8	5.350	A

2019 Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	16.88	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2019 Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	833	100.000
B - A12 South West		ONE HOUR	✓	1629	100.000
C - A1152 East		ONE HOUR	✓	730	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	757	74
	B - A12 South West	924	90	615
	C - A1152 East	131	594	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	3	1
	B - A12 South West	2	2	1
	C - A1152 East	1	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.65	7.36	1.9	A	764	1147
B - A12 South West	0.93	25.08	11.7	D	1495	2242
C - A1152 East	0.68	9.53	2.1	A	670	1005

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	627	157	532	1562	0.401	624	792	0.0	0.7	3.827	A
B - A12 South West	1226	307	103	1954	0.628	1220	1080	0.0	1.7	4.858	A
C - A1152 East	550	137	636	1348	0.408	547	520	0.0	0.7	4.477	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	749	187	636	1497	0.500	748	947	0.7	1.0	4.799	A

B - A12 South West	1464	366	124	1940	0.755	1459	1293	1.7	3.0	7.400	A
C - A1152 East	656	164	762	1278	0.514	655	622	0.7	1.0	5.766	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	917	229	769	1413	0.649	914	1146	1.0	1.8	7.171	A
B - A12 South West	1794	448	151	1922	0.933	1764	1579	3.0	10.4	19.863	C
C - A1152 East	804	201	930	1183	0.679	800	753	1.0	2.1	9.290	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	917	229	779	1406	0.652	917	1161	1.8	1.9	7.358	A
B - A12 South West	1794	448	152	1921	0.934	1788	1586	10.4	11.7	25.076	D
C - A1152 East	804	201	934	1181	0.681	804	762	2.1	2.1	9.532	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	749	187	653	1486	0.504	752	970	1.9	1.0	4.930	A
B - A12 South West	1464	366	125	1940	0.755	1499	1304	11.7	3.2	8.755	A
C - A1152 East	656	164	768	1274	0.515	660	637	2.1	1.1	5.901	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	627	157	537	1559	0.402	629	799	1.0	0.7	3.874	A
B - A12 South West	1226	307	104	1954	0.628	1232	1088	3.2	1.7	5.031	A
C - A1152 East	550	137	641	1346	0.408	551	525	1.1	0.7	4.538	A

2023 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	511	100.000
B - A12 South West		ONE HOUR	✓	623	100.000
C - A1152 East		ONE HOUR	✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	483	28
	B - A12 South West	396	23	203
	C - A1152 East	43	272	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	7
	B - A12 South West	8	26	7
	C - A1152 East	8	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.34	3.30	0.5	A	469	704
B - A12 South West	0.37	3.05	0.6	A	571	857
C - A1152 East	0.26	3.62	0.3	A	289	433

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	385	96	170	1705	0.226	384	330	0.0	0.3	2.722	A
B - A12 South West	469	117	32	1876	0.250	467	584	0.0	0.3	2.554	A
C - A1152 East	237	59	380	1442	0.164	236	174	0.0	0.2	2.985	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	460	115	203	1683	0.273	459	394	0.3	0.4	2.941	A

B - A12 South West	560	140	38	1871	0.299	559	698	0.3	0.4	2.744	A
C - A1152 East	283	71	454	1398	0.202	283	208	0.2	0.3	3.225	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	563	141	249	1654	0.340	562	483	0.4	0.5	3.296	A
B - A12 South West	686	171	47	1865	0.368	685	855	0.4	0.6	3.048	A
C - A1152 East	346	87	556	1340	0.258	346	255	0.3	0.3	3.622	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	563	141	249	1654	0.340	563	483	0.5	0.5	3.299	A
B - A12 South West	686	171	47	1865	0.368	686	856	0.6	0.6	3.050	A
C - A1152 East	346	87	557	1339	0.259	346	255	0.3	0.3	3.623	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	460	115	204	1683	0.273	460	395	0.5	0.4	2.946	A
B - A12 South West	560	140	38	1871	0.299	560	700	0.6	0.4	2.746	A
C - A1152 East	283	71	455	1398	0.202	283	209	0.3	0.3	3.231	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	385	96	171	1705	0.226	385	331	0.4	0.3	2.730	A
B - A12 South West	469	117	32	1876	0.250	469	586	0.4	0.3	2.559	A
C - A1152 East	237	59	381	1441	0.164	237	175	0.3	0.2	2.993	A

2023 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	14.13	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1003	100.000
B - A12 South West		ONE HOUR	✓	1443	100.000
C - A1152 East		ONE HOUR	✓	652	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	934	69
	B - A12 South West	795	45	604
	C - A1152 East	123	529	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	4
	B - A12 South West	11	13	6
	C - A1152 East	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	12.98	3.9	B	920	1380
B - A12 South West	0.88	16.49	7.0	C	1324	1986
C - A1152 East	0.68	10.45	2.0	B	598	898

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	755	189	486	1526	0.495	751	687	0.0	1.0	4.620	A
B - A12 South West	1087	272	92	1830	0.594	1081	1129	0.0	1.4	4.770	A
C - A1152 East	491	123	733	1258	0.390	488	504	0.0	0.6	4.660	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	901	225	581	1465	0.615	899	823	1.0	1.6	6.338	A

B - A12 South West	1297	324	110	1818	0.714	1293	1352	1.4	2.4	6.811	A
C - A1152 East	586	147	877	1176	0.499	585	603	0.6	1.0	6.077	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1104	276	707	1384	0.798	1095	1001	1.6	3.7	12.148	B
B - A12 South West	1589	397	135	1802	0.882	1573	1648	2.4	6.6	14.716	B
C - A1152 East	718	180	1069	1066	0.674	714	733	1.0	2.0	10.106	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1104	276	713	1379	0.800	1103	1010	3.7	3.9	12.977	B
B - A12 South West	1589	397	136	1802	0.882	1587	1659	6.6	7.0	16.495	C
C - A1152 East	718	180	1077	1062	0.676	718	740	2.0	2.0	10.455	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	901	225	591	1458	0.618	910	836	3.9	1.6	6.672	A
B - A12 South West	1297	324	111	1817	0.714	1315	1368	7.0	2.6	7.406	A
C - A1152 East	586	147	889	1169	0.501	590	613	2.0	1.0	6.259	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	755	189	490	1523	0.496	758	694	1.6	1.0	4.717	A
B - A12 South West	1087	272	93	1829	0.594	1091	1139	2.6	1.5	4.904	A
C - A1152 East	491	123	739	1255	0.391	493	508	1.0	0.6	4.732	A

2023 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	64.19	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1324	100.000
B - A12 South West		FLAT	✓	1563	100.000
C - A1152 East		FLAT	✓	739	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1168	155
	B - A12 South West	758	67	738
	C - A1152 East	167	571	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	4
	B - A12 South West	11	16	8
	C - A1152 East	5	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.01	147.45	53.8	F	1324	1986
B - A12 South West	0.88	17.56	7.5	C	1563	2344
C - A1152 East	0.80	19.07	3.8	C	739	1109

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1324	331	792	1320	1.003	1251	910	0.0	18.2	37.111	E
B - A12 South West	1563	391	166	1768	0.884	1536	1731	0.0	6.6	14.210	B
C - A1152 East	739	185	1171	951	0.777	726	872	0.0	3.2	15.223	C

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1324	331	805	1312	1.009	1286	925	18.2	27.6	73.559	F

B - A12 South West	1563	391	169	1767	0.885	1561	1772	6.6	7.1	17.136	C
C - A1152 East	739	185	1203	934	0.791	738	888	3.2	3.6	18.113	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1324	331	805	1312	1.010	1294	926	27.6	35.2	95.685	F
B - A12 South West	1563	391	169	1766	0.885	1562	1779	7.1	7.3	17.381	C
C - A1152 East	739	185	1209	931	0.794	739	890	3.6	3.7	18.609	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1324	331	805	1311	1.010	1297	926	35.2	41.9	114.532	F
B - A12 South West	1563	391	169	1766	0.885	1562	1782	7.3	7.4	17.474	C
C - A1152 East	739	185	1212	929	0.796	739	890	3.7	3.8	18.837	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1324	331	805	1311	1.010	1299	926	41.9	48.1	131.584	F
B - A12 South West	1563	391	169	1766	0.885	1563	1784	7.4	7.4	17.523	C
C - A1152 East	739	185	1214	928	0.797	739	891	3.8	3.8	18.976	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1324	331	805	1311	1.010	1301	926	48.1	53.8	147.450	F
B - A12 South West	1563	391	169	1766	0.885	1563	1786	7.4	7.5	17.555	C
C - A1152 East	739	185	1216	927	0.797	739	891	3.8	3.8	19.072	C

2023 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	28.83	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1029	100.000
B - A12 South West		ONE HOUR	✓	1619	100.000
C - A1152 East		ONE HOUR	✓	716	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	908	119
	B - A12 South West	945	96	578
	C - A1152 East	135	576	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	2
	B - A12 South West	7	8	6
	C - A1152 East	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.83	15.70	4.7	C	944	1416
B - A12 South West	0.98	42.91	20.4	E	1485	2228
C - A1152 East	0.78	15.73	3.3	C	657	985

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	775	194	508	1507	0.514	770	809	0.0	1.0	4.861	A
B - A12 South West	1219	305	106	1861	0.655	1211	1182	0.0	1.9	5.481	A
C - A1152 East	539	135	753	1212	0.445	536	526	0.0	0.8	5.297	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	925	231	608	1443	0.641	922	968	1.0	1.7	6.872	A

B - A12 South West	1455	364	127	1847	0.788	1448	1415	1.9	3.6	8.884	A
C - A1152 East	644	161	901	1129	0.570	642	629	0.8	1.3	7.349	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1133	283	727	1367	0.829	1122	1160	1.7	4.4	14.124	B
B - A12 South West	1782	446	155	1828	0.975	1732	1721	3.6	16.0	28.582	D
C - A1152 East	788	197	1095	1021	0.772	781	754	1.3	3.2	14.563	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1133	283	740	1358	0.834	1132	1180	4.4	4.7	15.704	C
B - A12 South West	1782	446	156	1827	0.975	1765	1736	16.0	20.4	42.911	E
C - A1152 East	788	197	1105	1015	0.777	788	767	3.2	3.3	15.728	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	925	231	638	1424	0.650	936	1012	4.7	1.9	7.552	A
B - A12 South West	1455	364	129	1845	0.788	1521	1440	20.4	3.9	13.165	B
C - A1152 East	644	161	918	1120	0.575	651	656	3.3	1.4	7.809	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	775	194	514	1503	0.515	778	819	1.9	1.1	4.987	A
B - A12 South West	1219	305	107	1860	0.655	1226	1194	3.9	1.9	5.752	A
C - A1152 East	539	135	760	1208	0.446	541	532	1.4	0.8	5.415	A

2023 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	22.49	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	929	100.000
B - A12 South West		ONE HOUR	✓	1659	100.000
C - A1152 East		ONE HOUR	✓	663	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	837	90
	B - A12 South West	939	90	630
	C - A1152 East	139	520	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	4	1
	B - A12 South West	3	2	1
	C - A1152 East	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.74	10.04	2.8	B	853	1279
B - A12 South West	0.96	34.80	16.7	D	1523	2284
C - A1152 East	0.66	9.38	1.9	A	609	913

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	700	175	543	1537	0.455	696	808	0.0	0.8	4.268	A
B - A12 South West	1249	312	109	1936	0.645	1242	1084	0.0	1.8	5.135	A
C - A1152 East	499	125	696	1297	0.385	497	543	0.0	0.6	4.486	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	836	209	649	1470	0.568	834	967	0.8	1.3	5.636	A

B - A12 South West	1492	373	131	1922	0.776	1485	1298	1.8	3.3	8.137	A
C - A1152 East	596	149	834	1220	0.489	595	649	0.6	0.9	5.750	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1023	256	780	1389	0.737	1018	1165	1.3	2.7	9.562	A
B - A12 South West	1827	457	160	1902	0.960	1785	1583	3.3	13.8	24.774	C
C - A1152 East	730	183	1016	1117	0.654	727	782	0.9	1.8	9.140	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1023	256	793	1380	0.741	1023	1182	2.7	2.8	10.045	B
B - A12 South West	1827	457	160	1902	0.961	1815	1592	13.8	16.7	34.800	D
C - A1152 East	730	183	1022	1114	0.656	730	794	1.8	1.9	9.381	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	836	209	674	1455	0.574	841	1001	2.8	1.4	5.924	A
B - A12 South West	1492	373	132	1921	0.777	1544	1312	16.7	3.6	10.780	B
C - A1152 East	596	149	844	1214	0.491	600	672	1.9	1.0	5.895	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	700	175	549	1533	0.456	702	817	1.4	0.8	4.341	A
B - A12 South West	1249	312	110	1936	0.645	1256	1093	3.6	1.8	5.355	A
C - A1152 East	499	125	702	1294	0.386	501	549	1.0	0.6	4.546	A

2023 Early Years, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	535	100.000
B - A12 South West		ONE HOUR	✓	750	100.000
C - A1152 East		ONE HOUR	✓	332	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	506	30
	B - A12 South West	516	23	211
	C - A1152 East	46	285	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	7
	B - A12 South West	11	26	7
	C - A1152 East	7	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.36	3.39	0.6	A	491	737
B - A12 South West	0.45	3.57	0.8	A	688	1032
C - A1152 East	0.28	3.74	0.4	A	304	456

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	403	101	175	1704	0.236	402	422	0.0	0.3	2.761	A
B - A12 South West	564	141	35	1844	0.306	563	611	0.0	0.4	2.806	A
C - A1152 East	250	62	397	1434	0.174	249	180	0.0	0.2	3.037	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	481	120	210	1682	0.286	481	505	0.3	0.4	2.998	A

B - A12 South West	674	168	42	1840	0.366	673	731	0.4	0.6	3.085	A
C - A1152 East	298	75	475	1389	0.215	298	216	0.2	0.3	3.299	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	589	147	257	1651	0.357	589	618	0.4	0.6	3.387	A
B - A12 South West	825	206	51	1833	0.450	825	895	0.6	0.8	3.565	A
C - A1152 East	365	91	581	1327	0.275	365	264	0.3	0.4	3.736	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	589	147	257	1651	0.357	589	619	0.6	0.6	3.390	A
B - A12 South West	825	206	51	1833	0.450	825	896	0.8	0.8	3.571	A
C - A1152 East	365	91	582	1327	0.275	365	265	0.4	0.4	3.740	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	481	120	210	1681	0.286	482	506	0.6	0.4	3.001	A
B - A12 South West	674	168	42	1839	0.366	675	733	0.8	0.6	3.095	A
C - A1152 East	298	75	476	1388	0.215	298	216	0.4	0.3	3.303	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	403	101	176	1704	0.237	403	424	0.4	0.3	2.770	A
B - A12 South West	564	141	35	1844	0.306	565	613	0.6	0.4	2.817	A
C - A1152 East	250	62	398	1433	0.174	250	181	0.3	0.2	3.043	A

2023 Early Years, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	49.89	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1065	100.000
B - A12 South West		ONE HOUR	✓	1648	100.000
C - A1152 East		ONE HOUR	✓	635	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	993	71
	B - A12 South West	1002	45	601
	C - A1152 East	124	511	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	4
	B - A12 South West	14	13	6
	C - A1152 East	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.84	15.76	4.9	C	977	1466
B - A12 South West	1.03	84.78	45.6	F	1512	2269
C - A1152 East	0.68	11.08	2.1	B	583	874

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	802	200	483	1527	0.525	797	842	0.0	1.1	4.902	A
B - A12 South West	1241	310	93	1791	0.693	1232	1160	0.0	2.2	6.342	A
C - A1152 East	478	120	777	1231	0.389	476	503	0.0	0.6	4.754	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	957	239	577	1466	0.653	954	1006	1.1	1.8	6.987	A

B - A12 South West	1482	370	111	1780	0.833	1472	1389	2.2	4.6	11.351	B
C - A1152 East	571	143	930	1143	0.500	570	601	0.6	1.0	6.261	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1172	293	673	1404	0.835	1161	1181	1.8	4.6	14.197	B
B - A12 South West	1815	454	136	1764	1.029	1718	1689	4.6	28.9	44.694	E
C - A1152 East	699	175	1130	1029	0.680	695	704	1.0	2.0	10.644	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1172	293	685	1397	0.839	1171	1200	4.6	4.9	15.762	C
B - A12 South West	1815	454	137	1764	1.029	1748	1703	28.9	45.6	84.784	F
C - A1152 East	699	175	1140	1023	0.683	699	716	2.0	2.1	11.083	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	957	239	643	1424	0.672	968	1111	4.9	2.1	8.095	A
B - A12 South West	1482	370	112	1779	0.833	1641	1411	45.6	5.7	41.179	E
C - A1152 East	571	143	948	1133	0.504	575	663	2.1	1.0	6.509	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	802	200	492	1522	0.527	805	857	2.1	1.1	5.055	A
B - A12 South West	1241	310	94	1791	0.693	1254	1172	5.7	2.3	6.872	A
C - A1152 East	478	120	786	1226	0.390	480	511	1.0	0.6	4.834	A

2023 Early Years, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	132.54	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1373	100.000
B - A12 South West		FLAT	✓	1625	100.000
C - A1152 East		FLAT	✓	694	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1214	158
	B - A12 South West	821	67	737
	C - A1152 East	166	527	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	4
	B - A12 South West	18	16	8
	C - A1152 East	5	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.06	313.55	120.2	F	1373	2060
B - A12 South West	0.95	36.58	15.8	E	1625	2437
C - A1152 East	0.76	16.07	3.1	C	694	1041

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1373	343	782	1316	1.044	1268	962	0.0	26.4	48.038	E
B - A12 South West	1625	406	165	1718	0.946	1579	1705	0.0	11.4	21.541	C
C - A1152 East	694	174	1187	934	0.743	683	863	0.0	2.7	13.796	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1373	343	801	1304	1.053	1294	983	26.4	46.1	110.746	F

B - A12 South West	1625	406	167	1716	0.947	1617	1738	11.4	13.5	31.775	D
C - A1152 East	694	174	1212	921	0.754	693	883	2.7	2.9	15.715	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1373	343	803	1302	1.054	1297	986	46.1	65.0	162.361	F
B - A12 South West	1625	406	168	1716	0.947	1621	1742	13.5	14.5	34.097	D
C - A1152 East	694	174	1215	919	0.755	694	885	2.9	3.0	15.929	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1373	343	804	1302	1.055	1299	986	65.0	83.6	213.032	F
B - A12 South West	1625	406	168	1716	0.947	1622	1743	14.5	15.1	35.306	E
C - A1152 East	694	174	1217	918	0.756	694	886	3.0	3.0	16.005	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1373	343	804	1302	1.055	1300	987	83.6	102.0	263.373	F
B - A12 South West	1625	406	168	1716	0.947	1623	1744	15.1	15.5	36.064	E
C - A1152 East	694	174	1217	918	0.756	694	886	3.0	3.0	16.044	C

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1373	343	804	1301	1.055	1300	987	102.0	120.2	313.547	F
B - A12 South West	1625	406	168	1716	0.947	1624	1744	15.5	15.8	36.584	E
C - A1152 East	694	174	1218	918	0.756	694	886	3.0	3.1	16.067	C

2023 Early Years, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	46.37	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1129	100.000
B - A12 South West		ONE HOUR	✓	1646	100.000
C - A1152 East		ONE HOUR	✓	640	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	1004	123
	B - A12 South West	978	96	571
	C - A1152 East	132	503	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	10	2
	B - A12 South West	11	8	6
	C - A1152 East	4	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.93	33.62	10.9	D	1036	1554
B - A12 South West	1.01	66.94	34.5	F	1510	2265
C - A1152 East	0.75	15.59	3.0	C	587	881

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	850	212	503	1468	0.579	845	832	0.0	1.4	5.728	A
B - A12 South West	1239	310	104	1826	0.678	1231	1199	0.0	2.1	5.964	A
C - A1152 East	482	120	824	1151	0.418	479	523	0.0	0.7	5.330	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1015	254	601	1407	0.721	1010	994	1.4	2.5	8.974	A

B - A12 South West	1479	370	124	1813	0.816	1471	1435	2.1	4.2	10.272	B
C - A1152 East	575	144	986	1059	0.543	573	625	0.7	1.2	7.391	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1243	311	709	1340	0.928	1216	1177	2.5	9.1	25.070	D
B - A12 South West	1812	453	151	1795	1.009	1735	1732	4.2	23.5	38.177	E
C - A1152 East	705	176	1185	944	0.746	698	740	1.2	2.8	14.263	B

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1243	311	722	1332	0.933	1236	1198	9.1	10.9	33.624	D
B - A12 South West	1812	453	153	1794	1.010	1768	1756	23.5	34.5	66.940	F
C - A1152 East	705	176	1205	933	0.755	704	754	2.8	3.0	15.590	C

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1015	254	653	1375	0.738	1047	1072	10.9	2.9	11.944	B
B - A12 South West	1479	370	126	1812	0.817	1598	1482	34.5	4.8	24.533	C
C - A1152 East	575	144	1026	1036	0.555	582	673	3.0	1.3	8.046	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	850	212	511	1463	0.581	856	844	2.9	1.4	5.989	A
B - A12 South West	1239	310	105	1826	0.679	1250	1215	4.8	2.2	6.361	A
C - A1152 East	482	120	836	1145	0.421	484	531	1.3	0.7	5.462	A

2023 Early Years, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	27.54	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1082	100.000
B - A12 South West		ONE HOUR	✓	1660	100.000
C - A1152 East		ONE HOUR	✓	568	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 South West	C - A1152 East
A - A12 North	2	1012	68
B - A12 South West	949	90	621
C - A1152 East	137	426	5

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 South West	C - A1152 East
A - A12 North	0	7	1
B - A12 South West	4	2	1
C - A1152 East	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.88	21.74	6.8	C	993	1490
B - A12 South West	0.97	37.48	18.0	E	1523	2285
C - A1152 East	0.63	9.90	1.7	A	521	782

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	815	204	536	1499	0.544	810	815	0.0	1.2	5.190	A
B - A12 South West	1250	312	108	1926	0.649	1243	1144	0.0	1.8	5.216	A
C - A1152 East	428	107	827	1212	0.353	426	520	0.0	0.5	4.567	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	973	243	641	1435	0.678	970	974	1.2	2.1	7.670	A

B - A12 South West	1493	373	129	1911	0.781	1486	1370	1.8	3.4	8.338	A
C - A1152 East	511	128	989	1118	0.457	510	622	0.5	0.8	5.908	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1192	298	769	1358	0.878	1175	1172	2.1	6.2	18.307	C
B - A12 South West	1828	457	158	1892	0.966	1783	1663	3.4	14.7	26.022	D
C - A1152 East	626	156	1198	997	0.628	622	747	0.8	1.6	9.527	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1192	298	783	1349	0.883	1189	1190	6.2	6.8	21.741	C
B - A12 South West	1828	457	159	1892	0.966	1814	1679	14.7	18.0	37.481	E
C - A1152 East	626	156	1213	989	0.633	626	759	1.6	1.7	9.900	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	973	243	668	1419	0.686	991	1012	6.8	2.2	8.760	A
B - A12 South West	1493	373	131	1911	0.781	1550	1397	18.0	3.7	11.451	B
C - A1152 East	511	128	1013	1104	0.463	514	647	1.7	0.9	6.133	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	815	204	542	1495	0.545	819	824	2.2	1.2	5.356	A
B - A12 South West	1250	312	109	1925	0.649	1257	1156	3.7	1.9	5.450	A
C - A1152 East	428	107	836	1207	0.355	429	526	0.9	0.6	4.638	A

2028 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	508	100.000
B - A12 South West		ONE HOUR	✓	645	100.000
C - A1152 East		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	479	29
	B - A12 South West	408	23	214
	C - A1152 East	43	285	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	7
	B - A12 South West	8	26	7
	C - A1152 East	8	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.34	3.31	0.5	A	466	700
B - A12 South West	0.38	3.11	0.6	A	592	887
C - A1152 East	0.27	3.67	0.4	A	301	452

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	383	96	178	1701	0.225	381	339	0.0	0.3	2.725	A
B - A12 South West	485	121	32	1878	0.258	484	591	0.0	0.3	2.580	A
C - A1152 East	247	62	377	1445	0.171	247	182	0.0	0.2	3.003	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	457	114	213	1679	0.272	457	405	0.3	0.4	2.946	A

B - A12 South West	580	145	39	1874	0.309	579	707	0.3	0.4	2.781	A
C - A1152 East	295	74	451	1402	0.211	295	218	0.2	0.3	3.251	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	560	140	260	1648	0.340	559	496	0.4	0.5	3.305	A
B - A12 South West	710	177	47	1868	0.380	709	866	0.4	0.6	3.106	A
C - A1152 East	362	90	552	1344	0.269	361	267	0.3	0.4	3.661	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	560	140	261	1648	0.340	560	497	0.5	0.5	3.308	A
B - A12 South West	710	177	47	1868	0.380	710	867	0.6	0.6	3.108	A
C - A1152 East	362	90	553	1344	0.269	362	268	0.4	0.4	3.665	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	457	114	213	1678	0.272	457	406	0.5	0.4	2.949	A
B - A12 South West	580	145	39	1873	0.309	580	709	0.6	0.4	2.784	A
C - A1152 East	295	74	452	1402	0.211	296	219	0.4	0.3	3.258	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	383	96	178	1701	0.225	383	340	0.4	0.3	2.734	A
B - A12 South West	485	121	33	1878	0.258	486	593	0.4	0.3	2.588	A
C - A1152 East	247	62	378	1444	0.171	248	183	0.3	0.2	3.011	A

2028 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	18.29	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	986	100.000
B - A12 South West		ONE HOUR	✓	1511	100.000
C - A1152 East		ONE HOUR	✓	778	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	915	71
	B - A12 South West	836	45	630
	C - A1152 East	125	653	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	4
	B - A12 South West	10	13	6
	C - A1152 East	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	12.94	3.8	B	905	1357
B - A12 South West	0.92	22.93	10.0	C	1387	2080
C - A1152 East	0.79	15.72	3.6	C	714	1071

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	742	186	505	1514	0.490	738	720	0.0	1.0	4.621	A
B - A12 South West	1138	284	93	1838	0.619	1131	1208	0.0	1.6	5.053	A
C - A1152 East	586	146	719	1278	0.458	583	525	0.0	0.8	5.149	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	886	222	604	1450	0.611	884	861	1.0	1.5	6.336	A

B - A12 South West	1359	340	112	1825	0.744	1354	1446	1.6	2.8	7.551	A
C - A1152 East	700	175	861	1197	0.585	697	628	0.8	1.4	7.181	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1085	271	732	1367	0.794	1077	1043	1.5	3.6	12.071	B
B - A12 South West	1664	416	136	1810	0.919	1639	1761	2.8	9.0	18.848	C
C - A1152 East	857	214	1049	1088	0.788	849	760	1.4	3.4	14.555	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1085	271	741	1361	0.797	1085	1056	3.6	3.8	12.945	B
B - A12 South West	1664	416	137	1809	0.920	1660	1775	9.0	10.0	22.931	C
C - A1152 East	857	214	1056	1084	0.791	856	770	3.4	3.6	15.721	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	886	222	619	1440	0.615	895	881	3.8	1.6	6.703	A
B - A12 South West	1359	340	114	1824	0.745	1386	1466	10.0	3.0	8.711	A
C - A1152 East	700	175	872	1190	0.588	708	642	3.6	1.5	7.599	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	742	186	510	1510	0.491	745	727	1.6	1.0	4.719	A
B - A12 South West	1138	284	94	1837	0.619	1143	1219	3.0	1.7	5.230	A
C - A1152 East	586	146	725	1275	0.460	588	530	1.5	0.9	5.261	A

2028 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	107.11	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1282	100.000
B - A12 South West		FLAT	✓	1663	100.000
C - A1152 East		FLAT	✓	950	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1131	150
	B - A12 South West	747	67	849
	C - A1152 East	167	782	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	5
	B - A12 South West	11	16	7
	C - A1152 East	5	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.03	224.75	80.5	F	1282	1923
B - A12 South West	0.94	30.70	13.6	D	1663	2494
C - A1152 East	0.97	86.80	21.9	F	950	1425

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1282	321	894	1256	1.021	1199	889	0.0	20.8	42.484	E
B - A12 South West	1663	416	162	1779	0.935	1622	1871	0.0	10.3	19.475	C
C - A1152 East	950	238	1124	996	0.954	909	969	0.0	10.4	32.624	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1282	321	913	1244	1.031	1228	909	20.8	34.4	91.303	F

B - A12 South West	1663	416	166	1776	0.936	1656	1919	10.3	11.9	27.506	D
C - A1152 East	950	238	1151	981	0.968	934	990	10.4	14.4	56.604	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1282	321	915	1243	1.032	1233	912	34.4	46.6	127.127	F
B - A12 South West	1663	416	167	1775	0.937	1660	1928	11.9	12.7	29.097	D
C - A1152 East	950	238	1156	978	0.971	939	993	14.4	17.0	67.815	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1282	321	916	1242	1.032	1236	913	46.6	58.2	160.642	F
B - A12 South West	1663	416	168	1775	0.937	1661	1932	12.7	13.1	29.891	D
C - A1152 East	950	238	1158	977	0.972	942	993	17.0	19.0	75.695	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1282	321	916	1242	1.032	1237	913	58.2	69.5	193.037	F
B - A12 South West	1663	416	168	1775	0.937	1662	1935	13.1	13.4	30.375	D
C - A1152 East	950	238	1159	977	0.973	944	994	19.0	20.6	81.816	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1282	321	916	1242	1.032	1238	914	69.5	80.5	224.755	F
B - A12 South West	1663	416	168	1774	0.937	1662	1937	13.4	13.6	30.701	D
C - A1152 East	950	238	1160	976	0.973	945	994	20.6	21.9	86.800	F

2028 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	30.10	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1013	100.000
B - A12 South West		ONE HOUR	✓	1617	100.000
C - A1152 East		ONE HOUR	✓	828	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	889	122
	B - A12 South West	982	96	538
	C - A1152 East	138	685	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	8	2
	B - A12 South West	7	8	6
	C - A1152 East	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	13.59	4.1	B	929	1394
B - A12 South West	0.97	41.21	19.5	E	1483	2225
C - A1152 East	0.89	28.70	6.8	D	760	1139

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	763	191	478	1516	0.503	759	840	0.0	1.0	4.728	A
B - A12 South West	1217	304	108	1865	0.653	1210	1250	0.0	1.8	5.437	A
C - A1152 East	623	156	739	1225	0.509	619	498	0.0	1.0	5.904	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	911	228	572	1457	0.625	908	1004	1.0	1.6	6.530	A

B - A12 South West	1453	363	130	1850	0.785	1447	1496	1.8	3.5	8.774	A
C - A1152 East	744	186	885	1142	0.652	741	595	1.0	1.8	8.903	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1115	279	685	1385	0.805	1106	1204	1.6	3.9	12.523	B
B - A12 South West	1780	445	157	1832	0.971	1732	1814	3.5	15.4	27.783	D
C - A1152 East	911	228	1076	1033	0.882	894	715	1.8	6.1	23.499	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1115	279	698	1377	0.810	1114	1225	3.9	4.1	13.590	B
B - A12 South West	1780	445	159	1831	0.972	1764	1835	15.4	19.5	41.211	E
C - A1152 East	911	228	1085	1028	0.887	909	727	6.1	6.8	28.697	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	911	228	599	1440	0.633	920	1050	4.1	1.8	7.044	A
B - A12 South West	1453	363	134	1848	0.787	1516	1529	19.5	3.9	12.723	B
C - A1152 East	744	186	899	1134	0.656	764	620	6.8	2.0	10.204	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	763	191	484	1512	0.504	766	850	1.8	1.0	4.840	A
B - A12 South West	1217	304	110	1864	0.653	1225	1263	3.9	1.9	5.702	A
C - A1152 East	623	156	746	1221	0.510	627	504	2.0	1.1	6.097	A

2028 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	26.05	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	914	100.000
B - A12 South West		ONE HOUR	✓	1679	100.000
C - A1152 East		ONE HOUR	✓	817	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	818	95
	B - A12 South West	963	90	627
	C - A1152 East	141	671	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	4	1
	B - A12 South West	3	2	1
	C - A1152 East	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.73	9.52	2.6	A	839	1259
B - A12 South West	0.97	40.39	19.8	E	1541	2311
C - A1152 East	0.79	15.26	3.7	C	750	1125

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	688	172	540	1538	0.448	685	827	0.0	0.8	4.205	A
B - A12 South West	1264	316	111	1936	0.653	1257	1183	0.0	1.9	5.243	A
C - A1152 East	615	154	682	1314	0.468	612	544	0.0	0.9	5.099	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	822	206	646	1472	0.558	820	990	0.8	1.2	5.507	A

B - A12 South West	1510	377	133	1921	0.786	1503	1416	1.9	3.5	8.467	A
C - A1152 East	735	184	816	1238	0.593	733	650	0.9	1.4	7.088	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1007	252	774	1392	0.723	1002	1188	1.2	2.5	9.098	A
B - A12 South West	1849	462	161	1902	0.972	1800	1725	3.5	15.7	27.238	D
C - A1152 East	900	225	994	1137	0.792	891	781	1.4	3.5	14.204	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1007	252	788	1384	0.728	1006	1208	2.5	2.6	9.525	A
B - A12 South West	1849	462	163	1901	0.973	1833	1737	15.7	19.8	40.390	E
C - A1152 East	900	225	1000	1134	0.794	899	794	3.5	3.7	15.263	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	822	206	676	1453	0.566	827	1032	2.6	1.3	5.796	A
B - A12 South West	1510	377	135	1920	0.786	1573	1435	19.8	3.9	12.162	B
C - A1152 East	735	184	826	1233	0.596	743	677	3.7	1.5	7.486	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	688	172	547	1534	0.449	690	837	1.3	0.8	4.278	A
B - A12 South West	1264	316	112	1935	0.653	1272	1193	3.9	1.9	5.487	A
C - A1152 East	615	154	687	1311	0.469	618	550	1.5	0.9	5.210	A

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	515	100.000
B - A12 South West		ONE HOUR	✓	883	100.000
C - A1152 East		ONE HOUR	✓	334	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	486	30
	B - A12 South West	646	23	214
	C - A1152 East	48	285	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	7
	B - A12 South West	9	26	7
	C - A1152 East	7	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.34	3.34	0.5	A	473	709
B - A12 South West	0.52	4.06	1.1	A	811	1216
C - A1152 East	0.27	3.70	0.4	A	306	459

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	388	97	178	1699	0.228	387	521	0.0	0.3	2.740	A
B - A12 South West	665	166	36	1871	0.355	663	596	0.0	0.5	2.975	A
C - A1152 East	251	63	382	1443	0.174	250	183	0.0	0.2	3.018	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	463	116	213	1677	0.276	463	624	0.3	0.4	2.966	A

B - A12 South West	794	199	43	1866	0.426	793	713	0.5	0.7	3.354	A
C - A1152 East	300	75	457	1399	0.214	300	219	0.2	0.3	3.273	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	567	142	261	1646	0.345	567	763	0.4	0.5	3.334	A
B - A12 South West	972	243	53	1859	0.523	971	873	0.7	1.1	4.045	A
C - A1152 East	367	92	559	1340	0.274	367	268	0.3	0.4	3.696	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	567	142	261	1645	0.345	567	764	0.5	0.5	3.338	A
B - A12 South West	972	243	53	1859	0.523	972	874	1.1	1.1	4.058	A
C - A1152 East	367	92	560	1340	0.274	367	268	0.4	0.4	3.701	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	463	116	213	1676	0.276	464	625	0.5	0.4	2.969	A
B - A12 South West	794	199	43	1866	0.426	795	715	1.1	0.7	3.368	A
C - A1152 East	300	75	458	1399	0.214	300	219	0.4	0.3	3.280	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	388	97	179	1699	0.228	388	523	0.4	0.3	2.749	A
B - A12 South West	665	166	36	1871	0.355	666	598	0.7	0.6	2.991	A
C - A1152 East	251	63	383	1442	0.174	251	184	0.3	0.2	3.026	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	50.94	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1009	100.000
B - A12 South West		ONE HOUR	✓	1652	100.000
C - A1152 East		ONE HOUR	✓	762	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	936	73
	B - A12 South West	991	45	616
	C - A1152 East	131	631	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	4
	B - A12 South West	14	13	6
	C - A1152 East	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.81	13.31	4.0	B	926	1389
B - A12 South West	1.03	87.88	47.6	F	1516	2274
C - A1152 East	0.79	16.14	3.6	C	699	1049

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	759	190	494	1510	0.503	755	838	0.0	1.0	4.745	A
B - A12 South West	1244	311	98	1791	0.694	1235	1207	0.0	2.2	6.373	A
C - A1152 East	574	143	734	1258	0.456	571	515	0.0	0.8	5.212	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	907	227	591	1449	0.626	904	1002	1.0	1.6	6.582	A

B - A12 South West	1485	371	117	1779	0.835	1475	1445	2.2	4.7	11.485	B
C - A1152 East	685	171	879	1174	0.584	683	616	0.8	1.4	7.296	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1111	278	688	1386	0.801	1102	1173	1.6	3.8	12.320	B
B - A12 South West	1819	455	143	1763	1.032	1719	1758	4.7	29.8	45.965	E
C - A1152 East	839	210	1069	1064	0.788	831	721	1.4	3.5	14.905	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1111	278	700	1379	0.806	1110	1192	3.8	4.0	13.309	B
B - A12 South West	1819	455	144	1762	1.032	1748	1772	29.8	47.6	87.878	F
C - A1152 East	839	210	1077	1060	0.792	839	732	3.5	3.6	16.143	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	907	227	661	1403	0.646	915	1110	4.0	1.9	7.504	A
B - A12 South West	1485	371	119	1778	0.835	1652	1469	47.6	5.8	44.751	E
C - A1152 East	685	171	894	1165	0.588	694	683	3.6	1.5	7.770	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	759	190	503	1504	0.505	763	853	1.9	1.0	4.877	A
B - A12 South West	1244	311	99	1791	0.695	1258	1219	5.8	2.3	6.924	A
C - A1152 East	574	143	742	1254	0.458	576	524	1.5	0.9	5.333	A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	112.57	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1319	100.000
B - A12 South West		FLAT	✓	1687	100.000
C - A1152 East		FLAT	✓	909	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 South West	C - A1152 East
A - A12 North	1	1165	153
B - A12 South West	836	67	784
C - A1152 East	170	738	1

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 South West	C - A1152 East
A - A12 North	0	7	5
B - A12 South West	16	16	7
C - A1152 East	5	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.03	217.20	80.1	F	1319	1978
B - A12 South West	0.97	58.19	26.2	F	1687	2531
C - A1152 East	0.95	67.48	16.2	F	909	1364

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1319	330	822	1296	1.017	1236	971	0.0	20.6	41.046	E
B - A12 South West	1687	422	166	1737	0.971	1628	1865	0.0	14.9	25.580	D
C - A1152 East	909	227	1158	972	0.935	873	901	0.0	8.9	30.068	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1319	330	844	1283	1.028	1265	997	20.6	34.0	87.800	F

B - A12 South West	1687	422	170	1734	0.973	1670	1912	14.9	19.1	42.639	E
C - A1152 East	909	227	1185	957	0.950	897	924	8.9	11.8	49.211	E

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1319	330	847	1280	1.030	1270	1001	34.0	46.1	122.208	F
B - A12 South West	1687	422	171	1734	0.973	1677	1921	19.1	21.8	48.850	E
C - A1152 East	909	227	1189	954	0.953	902	928	11.8	13.5	56.813	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1319	330	849	1279	1.031	1273	1003	46.1	57.7	154.637	F
B - A12 South West	1687	422	172	1733	0.973	1680	1924	21.8	23.6	52.915	F
C - A1152 East	909	227	1192	953	0.954	904	929	13.5	14.7	61.564	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1319	330	849	1279	1.031	1274	1004	57.7	69.0	186.175	F
B - A12 South West	1687	422	172	1733	0.973	1682	1926	23.6	25.0	55.884	F
C - A1152 East	909	227	1193	952	0.955	906	930	14.7	15.5	64.933	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1319	330	850	1278	1.032	1274	1005	69.0	80.1	217.196	F
B - A12 South West	1687	422	172	1733	0.973	1683	1928	25.0	26.2	58.188	F
C - A1152 East	909	227	1193	952	0.955	906	931	15.5	16.2	67.479	F

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	42.07	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1136	100.000
B - A12 South West		ONE HOUR	✓	1616	100.000
C - A1152 East		ONE HOUR	✓	734	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	1007	127
	B - A12 South West	995	96	524
	C - A1152 East	140	589	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	10	2
	B - A12 South West	11	8	6
	C - A1152 East	4	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.92	29.35	9.6	D	1042	1563
B - A12 South West	1.00	57.78	28.5	F	1483	2224
C - A1152 East	0.86	26.82	5.7	D	673	1010

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	855	214	468	1488	0.575	850	851	0.0	1.3	5.595	A
B - A12 South West	1216	304	110	1816	0.670	1208	1265	0.0	2.0	5.848	A
C - A1152 East	552	138	826	1156	0.478	549	491	0.0	0.9	5.898	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1021	255	559	1431	0.713	1017	1017	1.3	2.4	8.595	A

B - A12 South West	1452	363	132	1802	0.806	1445	1514	2.0	3.9	9.852	A
C - A1152 East	660	165	989	1062	0.621	657	587	0.9	1.6	8.821	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1250	313	663	1366	0.915	1227	1209	2.4	8.2	22.802	C
B - A12 South West	1779	445	159	1784	0.997	1713	1827	3.9	20.4	34.710	D
C - A1152 East	808	202	1192	945	0.855	794	699	1.6	5.0	22.115	C

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1250	313	676	1358	0.921	1245	1232	8.2	9.6	29.351	D
B - A12 South West	1779	445	162	1783	0.998	1746	1853	20.4	28.5	57.779	F
C - A1152 East	808	202	1210	935	0.864	805	712	5.0	5.7	26.824	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1021	255	599	1406	0.726	1048	1085	9.6	2.8	10.766	B
B - A12 South West	1452	363	135	1800	0.807	1549	1563	28.5	4.5	19.150	C
C - A1152 East	660	165	1023	1043	0.633	675	625	5.7	1.8	10.197	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	855	214	475	1484	0.576	861	863	2.8	1.4	5.825	A
B - A12 South West	1216	304	111	1815	0.670	1226	1281	4.5	2.1	6.202	A
C - A1152 East	552	138	837	1150	0.481	556	498	1.8	0.9	6.096	A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	25.94	D

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1004	100.000
B - A12 South West		ONE HOUR	✓	1659	100.000
C - A1152 East		ONE HOUR	✓	696	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	905	97
	B - A12 South West	959	90	610
	C - A1152 East	143	548	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	1
	B - A12 South West	5	2	1
	C - A1152 East	1	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.82	14.21	4.2	B	922	1382
B - A12 South West	0.97	38.92	18.8	E	1522	2283
C - A1152 East	0.73	12.42	2.6	B	639	958

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	756	189	527	1503	0.503	752	827	0.0	1.0	4.770	A
B - A12 South West	1249	312	112	1920	0.650	1241	1156	0.0	1.8	5.253	A
C - A1152 East	524	131	747	1258	0.417	521	533	0.0	0.7	4.869	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	903	226	631	1440	0.627	900	989	1.0	1.6	6.633	A

B - A12 South West	1491	373	135	1905	0.783	1485	1383	1.8	3.5	8.434	A
C - A1152 East	626	156	894	1173	0.534	624	637	0.7	1.1	6.545	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1106	276	756	1364	0.811	1096	1188	1.6	4.0	13.007	B
B - A12 South West	1826	457	164	1885	0.969	1780	1684	3.5	15.1	26.666	D
C - A1152 East	767	192	1087	1061	0.723	761	765	1.1	2.5	11.814	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1106	276	769	1356	0.815	1105	1207	4.0	4.2	14.209	B
B - A12 South West	1826	457	165	1884	0.969	1811	1697	15.1	18.8	38.919	E
C - A1152 East	767	192	1096	1055	0.727	766	778	2.5	2.6	12.424	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	903	226	659	1423	0.634	913	1029	4.2	1.8	7.177	A
B - A12 South West	1491	373	136	1904	0.783	1551	1404	18.8	3.8	11.821	B
C - A1152 East	626	156	908	1164	0.538	632	663	2.6	1.2	6.827	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	756	189	534	1499	0.504	759	836	1.8	1.0	4.882	A
B - A12 South West	1249	312	113	1919	0.651	1256	1166	3.8	1.9	5.491	A
C - A1152 East	524	131	754	1254	0.418	526	539	1.2	0.7	4.957	A

2034 Reference Case, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	522	100.000
B - A12 South West		ONE HOUR	✓	671	100.000
C - A1152 East		ONE HOUR	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 South West	C - A1152 East
A - A12 North	0	492	30
B - A12 South West	421	23	227
C - A1152 East	44	301	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 South West	C - A1152 East
A - A12 North	0	7	7
B - A12 South West	8	26	7
C - A1152 East	8	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.35	3.38	0.5	A	479	719
B - A12 South West	0.40	3.18	0.7	A	615	923
C - A1152 East	0.28	3.76	0.4	A	316	474

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	393	98	188	1697	0.232	392	349	0.0	0.3	2.755	A
B - A12 South West	505	126	33	1879	0.269	503	612	0.0	0.4	2.614	A
C - A1152 East	259	65	386	1440	0.180	258	193	0.0	0.2	3.045	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	469	117	225	1673	0.281	469	417	0.3	0.4	2.989	A

B - A12 South West	603	151	39	1875	0.322	603	733	0.4	0.5	2.829	A
C - A1152 East	310	77	463	1396	0.222	309	231	0.2	0.3	3.312	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	575	144	275	1641	0.350	574	511	0.4	0.5	3.374	A
B - A12 South West	738	185	48	1869	0.395	738	897	0.5	0.6	3.181	A
C - A1152 East	379	95	566	1337	0.284	379	283	0.3	0.4	3.756	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	575	144	275	1641	0.350	575	512	0.5	0.5	3.377	A
B - A12 South West	738	185	48	1869	0.395	738	898	0.6	0.7	3.184	A
C - A1152 East	379	95	567	1336	0.284	379	283	0.4	0.4	3.760	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	469	117	225	1673	0.281	470	418	0.5	0.4	2.995	A
B - A12 South West	603	151	39	1875	0.322	604	734	0.7	0.5	2.835	A
C - A1152 East	310	77	463	1396	0.222	310	231	0.4	0.3	3.316	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	393	98	188	1697	0.232	394	350	0.4	0.3	2.764	A
B - A12 South West	505	126	33	1879	0.269	505	615	0.5	0.4	2.622	A
C - A1152 East	259	65	388	1439	0.180	260	194	0.3	0.2	3.054	A

2034 Reference Case, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	20.51	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	997	100.000
B - A12 South West		ONE HOUR	✓	1541	100.000
C - A1152 East		ONE HOUR	✓	772	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 South West	C - A1152 East
A - A12 North	0	925	72
B - A12 South West	862	45	635
C - A1152 East	142	630	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 South West	C - A1152 East
A - A12 North	0	5	4
B - A12 South West	8	13	6
C - A1152 East	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	12.94	3.8	B	915	1372
B - A12 South West	0.94	27.46	12.1	D	1414	2121
C - A1152 East	0.79	15.94	3.6	C	709	1063

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	750	188	509	1528	0.491	747	751	0.0	1.0	4.585	A
B - A12 South West	1160	290	107	1844	0.629	1154	1198	0.0	1.7	5.169	A
C - A1152 East	581	145	726	1266	0.459	578	529	0.0	0.8	5.206	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	896	224	609	1463	0.613	894	899	1.0	1.6	6.297	A

B - A12 South West	1386	346	128	1830	0.757	1380	1434	1.7	3.0	7.912	A
C - A1152 East	694	174	869	1185	0.586	692	633	0.8	1.4	7.265	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1097	274	735	1380	0.795	1089	1087	1.6	3.6	12.020	B
B - A12 South West	1697	424	155	1812	0.937	1666	1746	3.0	10.6	21.364	C
C - A1152 East	850	213	1059	1078	0.789	842	765	1.4	3.5	14.746	B

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1097	274	746	1373	0.799	1097	1102	3.6	3.8	12.935	B
B - A12 South West	1697	424	157	1811	0.937	1691	1760	10.6	12.1	27.461	D
C - A1152 East	850	213	1067	1074	0.792	850	776	3.5	3.6	15.943	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	896	224	627	1451	0.617	905	924	3.8	1.6	6.692	A
B - A12 South West	1386	346	130	1828	0.758	1421	1454	12.1	3.2	9.560	A
C - A1152 East	694	174	881	1179	0.589	703	651	3.6	1.5	7.698	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	750	188	514	1524	0.492	753	760	1.6	1.0	4.682	A
B - A12 South West	1160	290	108	1843	0.630	1166	1209	3.2	1.7	5.369	A
C - A1152 East	581	145	733	1263	0.460	584	535	1.5	0.9	5.320	A

2034 Reference Case, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	129.30	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1334	100.000
B - A12 South West		FLAT	✓	1660	100.000
C - A1152 East		FLAT	✓	898	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1173	160
	B - A12 South West	768	67	825
	C - A1152 East	181	716	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	4
	B - A12 South West	9	16	7
	C - A1152 East	5	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.05	313.24	116.6	F	1334	2001
B - A12 South West	0.93	28.43	12.6	D	1660	2490
C - A1152 East	0.93	50.34	12.0	F	898	1347

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1334	334	872	1279	1.043	1231	926	0.0	25.8	48.480	E
B - A12 South West	1660	415	177	1786	0.930	1621	1839	0.0	9.8	18.731	C
C - A1152 East	898	225	1149	980	0.917	867	954	0.0	7.7	27.116	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1334	334	890	1267	1.053	1257	946	25.8	45.0	111.470	F

B - A12 South West	1660	415	182	1783	0.931	1654	1882	9.8	11.2	25.919	D
C - A1152 East	898	225	1173	966	0.929	890	974	7.7	9.6	41.240	E

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1334	334	892	1266	1.054	1261	948	45.0	63.3	163.024	F
B - A12 South West	1660	415	183	1782	0.931	1657	1888	11.2	11.9	27.216	D
C - A1152 East	898	225	1177	965	0.931	894	976	9.6	10.6	45.562	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1334	334	892	1265	1.054	1262	949	63.3	81.3	213.455	F
B - A12 South West	1660	415	183	1782	0.932	1658	1891	11.9	12.2	27.829	D
C - A1152 East	898	225	1178	964	0.932	896	977	10.6	11.3	47.869	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1334	334	893	1265	1.054	1263	949	81.3	99.0	263.459	F
B - A12 South West	1660	415	183	1782	0.932	1659	1892	12.2	12.5	28.193	D
C - A1152 East	898	225	1179	963	0.932	896	977	11.3	11.7	49.332	E

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1334	334	893	1265	1.055	1264	949	99.0	116.6	313.237	F
B - A12 South West	1660	415	183	1782	0.932	1659	1893	12.5	12.6	28.429	D
C - A1152 East	898	225	1179	963	0.932	897	977	11.7	12.0	50.341	F

2034 Reference Case, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	37.69	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1084	100.000
B - A12 South West		ONE HOUR	✓	1645	100.000
C - A1152 East		ONE HOUR	✓	809	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	955	127
	B - A12 South West	992	96	556
	C - A1152 East	157	647	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	2
	B - A12 South West	6	8	6
	C - A1152 East	3	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	18.17	5.7	C	995	1492
B - A12 South West	0.99	53.43	26.6	F	1509	2264
C - A1152 East	0.90	31.66	7.3	D	742	1113

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	816	204	492	1528	0.534	812	861	0.0	1.1	4.993	A
B - A12 South West	1238	310	122	1862	0.665	1230	1271	0.0	1.9	5.630	A
C - A1152 East	609	152	789	1199	0.508	605	515	0.0	1.0	6.018	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	974	244	588	1466	0.665	971	1030	1.1	1.9	7.226	A

B - A12 South West	1478	370	147	1846	0.801	1471	1521	1.9	3.8	9.407	A
C - A1152 East	727	182	944	1113	0.654	724	615	1.0	1.8	9.186	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1193	298	699	1395	0.856	1180	1226	1.9	5.3	15.876	C
B - A12 South West	1811	453	177	1826	0.992	1749	1840	3.8	19.4	32.776	D
C - A1152 East	891	223	1144	1001	0.890	872	735	1.8	6.4	25.144	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1193	298	712	1386	0.861	1192	1249	5.3	5.7	18.171	C
B - A12 South West	1811	453	180	1824	0.993	1782	1864	19.4	26.6	53.434	F
C - A1152 East	891	223	1156	994	0.896	887	747	6.4	7.3	31.661	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	974	244	626	1441	0.676	989	1093	5.7	2.1	8.197	A
B - A12 South West	1478	370	151	1843	0.802	1567	1562	26.6	4.3	16.896	C
C - A1152 East	727	182	965	1101	0.661	748	650	7.3	2.0	10.806	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	816	204	498	1524	0.536	820	873	2.1	1.2	5.144	A
B - A12 South West	1238	310	124	1861	0.665	1247	1286	4.3	2.0	5.951	A
C - A1152 East	609	152	797	1194	0.510	613	521	2.0	1.1	6.230	A

2034 Reference Case, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	19.82	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	938	100.000
B - A12 South West		ONE HOUR	✓	1635	100.000
C - A1152 East		ONE HOUR	✓	813	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	840	96
	B - A12 South West	965	90	580
	C - A1152 East	148	661	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	2	1
	B - A12 South West	2	2	1
	C - A1152 East	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.72	8.98	2.5	A	861	1292
B - A12 South West	0.94	28.25	13.3	D	1501	2251
C - A1152 East	0.80	15.47	3.7	C	746	1119

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	707	177	505	1582	0.447	703	835	0.0	0.8	4.084	A
B - A12 South West	1231	308	116	1945	0.633	1224	1192	0.0	1.7	4.950	A
C - A1152 East	612	153	699	1309	0.468	609	510	0.0	0.9	5.118	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	844	211	604	1519	0.555	842	999	0.8	1.2	5.303	A

B - A12 South West	1470	368	139	1929	0.762	1464	1427	1.7	3.1	7.653	A
C - A1152 East	731	183	836	1232	0.594	729	610	0.9	1.4	7.124	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1033	258	729	1440	0.718	1028	1206	1.2	2.5	8.646	A
B - A12 South West	1800	450	169	1909	0.943	1767	1739	3.1	11.5	21.537	C
C - A1152 East	895	224	1020	1129	0.793	887	737	1.4	3.6	14.387	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1033	258	740	1433	0.721	1033	1223	2.5	2.5	8.983	A
B - A12 South West	1800	450	170	1908	0.944	1793	1751	11.5	13.3	28.248	D
C - A1152 East	895	224	1026	1126	0.795	895	747	3.6	3.7	15.472	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	844	211	623	1507	0.560	849	1027	2.5	1.3	5.508	A
B - A12 South West	1470	368	141	1928	0.763	1510	1444	13.3	3.3	9.376	A
C - A1152 East	731	183	845	1227	0.596	740	627	3.7	1.5	7.522	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	707	177	511	1578	0.448	708	844	1.3	0.8	4.148	A
B - A12 South West	1231	308	117	1944	0.633	1237	1202	3.3	1.8	5.138	A
C - A1152 East	612	153	704	1306	0.469	615	515	1.5	0.9	5.229	A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	3.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	524	100.000
B - A12 South West		ONE HOUR	✓	672	100.000
C - A1152 East		ONE HOUR	✓	343	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	494	30
	B - A12 South West	422	23	227
	C - A1152 East	44	299	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	7	7
	B - A12 South West	8	26	7
	C - A1152 East	8	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.35	3.38	0.5	A	481	722
B - A12 South West	0.40	3.19	0.7	A	616	925
C - A1152 East	0.28	3.76	0.4	A	314	471

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	395	99	188	1698	0.232	393	350	0.0	0.3	2.758	A
B - A12 South West	506	126	33	1880	0.269	504	612	0.0	0.4	2.615	A
C - A1152 East	258	64	388	1439	0.179	257	193	0.0	0.2	3.044	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	471	118	224	1674	0.282	471	418	0.3	0.4	2.993	A

B - A12 South West	604	151	39	1875	0.322	603	733	0.4	0.5	2.830	A
C - A1152 East	308	77	464	1395	0.221	308	231	0.2	0.3	3.309	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	577	144	275	1641	0.352	577	512	0.4	0.5	3.380	A
B - A12 South West	740	185	48	1869	0.396	739	897	0.5	0.7	3.183	A
C - A1152 East	377	94	569	1335	0.282	377	283	0.3	0.4	3.753	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	577	144	275	1641	0.352	577	513	0.5	0.5	3.383	A
B - A12 South West	740	185	48	1869	0.396	740	898	0.7	0.7	3.186	A
C - A1152 East	377	94	569	1335	0.282	377	283	0.4	0.4	3.757	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	471	118	225	1673	0.282	472	419	0.5	0.4	2.999	A
B - A12 South West	604	151	39	1875	0.322	605	734	0.7	0.5	2.836	A
C - A1152 East	308	77	465	1395	0.221	308	231	0.4	0.3	3.316	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	395	99	188	1697	0.233	395	351	0.4	0.3	2.767	A
B - A12 South West	506	126	33	1880	0.269	506	615	0.5	0.4	2.623	A
C - A1152 East	258	64	390	1438	0.179	258	194	0.3	0.2	3.052	A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	21.04	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	998	100.000
B - A12 South West		ONE HOUR	✓	1541	100.000
C - A1152 East		ONE HOUR	✓	781	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - A12 South West	C - A1152 East
A - A12 North	0	925	73
B - A12 South West	863	45	633
C - A1152 East	151	630	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A12 North	B - A12 South West	C - A1152 East
A - A12 North	0	5	4
B - A12 South West	9	13	6
C - A1152 East	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.80	12.82	3.8	B	916	1373
B - A12 South West	0.94	28.38	12.5	D	1414	2121
C - A1152 East	0.80	16.58	3.8	C	717	1075

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	751	188	508	1531	0.491	747	759	0.0	1.0	4.574	A
B - A12 South West	1160	290	113	1840	0.631	1154	1198	0.0	1.7	5.195	A
C - A1152 East	588	147	726	1268	0.464	585	529	0.0	0.9	5.246	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	897	224	607	1466	0.612	895	908	1.0	1.5	6.275	A

B - A12 South West	1386	346	136	1825	0.759	1380	1434	1.7	3.0	7.984	A
C - A1152 East	702	176	870	1187	0.592	700	632	0.9	1.4	7.366	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1099	275	733	1384	0.794	1090	1097	1.5	3.6	11.919	B
B - A12 South West	1697	424	165	1806	0.939	1665	1746	3.0	10.9	21.853	C
C - A1152 East	860	215	1059	1079	0.797	851	764	1.4	3.6	15.242	C

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1099	275	744	1377	0.798	1098	1113	3.6	3.8	12.815	B
B - A12 South West	1697	424	166	1805	0.940	1690	1760	10.9	12.5	28.384	D
C - A1152 East	860	215	1067	1075	0.800	859	775	3.6	3.8	16.577	C

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	897	224	626	1454	0.617	906	934	3.8	1.6	6.666	A
B - A12 South West	1386	346	138	1824	0.760	1423	1455	12.5	3.3	9.739	A
C - A1152 East	702	176	881	1180	0.595	712	651	3.8	1.5	7.832	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	751	188	513	1527	0.492	754	767	1.6	1.0	4.671	A
B - A12 South West	1160	290	114	1839	0.631	1167	1209	3.3	1.7	5.399	A
C - A1152 East	588	147	733	1264	0.465	591	534	1.5	0.9	5.365	A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	147.76	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	FLAT	07:45	09:15	90	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		FLAT	✓	1333	100.000
B - A12 South West		FLAT	✓	1718	100.000
C - A1152 East		FLAT	✓	925	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	1	1173	159
	B - A12 South West	799	67	852
	C - A1152 East	184	740	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	5	4
	B - A12 South West	9	16	7
	C - A1152 East	5	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	1.06	339.76	126.2	F	1333	2000
B - A12 South West	0.96	46.87	21.4	E	1718	2577
C - A1152 East	0.95	67.21	16.5	F	925	1388

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1333	333	891	1274	1.047	1227	952	0.0	26.4	49.539	E
B - A12 South West	1718	429	179	1787	0.961	1664	1855	0.0	13.5	23.340	C
C - A1152 East	925	231	1146	983	0.941	888	972	0.0	9.3	30.765	D

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1333	333	913	1259	1.059	1251	976	26.4	47.1	115.917	F

B - A12 South West	1718	429	184	1784	0.963	1705	1898	13.5	16.7	37.052	E
C - A1152 East	925	231	1168	971	0.953	913	995	9.3	12.2	50.288	F

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1333	333	916	1257	1.060	1253	979	47.1	67.1	172.209	F
B - A12 South West	1718	429	185	1783	0.963	1710	1904	16.7	18.6	41.297	E
C - A1152 East	925	231	1170	969	0.954	918	998	12.2	13.9	57.570	F

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1333	333	917	1257	1.061	1254	981	67.1	86.8	228.069	F
B - A12 South West	1718	429	185	1783	0.963	1713	1907	18.6	19.8	43.843	E
C - A1152 East	925	231	1171	969	0.955	921	1000	13.9	15.0	61.961	F

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1333	333	918	1256	1.061	1254	982	86.8	106.5	283.901	F
B - A12 South West	1718	429	185	1783	0.964	1714	1908	19.8	20.7	45.586	E
C - A1152 East	925	231	1172	969	0.955	922	1000	15.0	15.8	64.981	F

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1333	333	918	1256	1.062	1255	982	106.5	126.2	339.757	F
B - A12 South West	1718	429	186	1783	0.964	1715	1909	20.7	21.4	46.869	E
C - A1152 East	925	231	1172	969	0.955	923	1001	15.8	16.5	67.211	F

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	38.15	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	1082	100.000
B - A12 South West		ONE HOUR	✓	1645	100.000
C - A1152 East		ONE HOUR	✓	812	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	952	128
	B - A12 South West	995	96	553
	C - A1152 East	161	646	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	6	2
	B - A12 South West	6	8	6
	C - A1152 East	3	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.86	17.88	5.6	C	993	1489
B - A12 South West	0.99	54.37	27.1	F	1509	2264
C - A1152 East	0.90	32.16	7.5	D	745	1117

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	815	204	489	1528	0.533	810	866	0.0	1.1	4.981	A
B - A12 South West	1238	310	125	1861	0.665	1230	1268	0.0	2.0	5.644	A
C - A1152 East	611	153	786	1200	0.509	607	513	0.0	1.0	6.032	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	973	243	585	1467	0.663	969	1036	1.1	1.9	7.194	A

B - A12 South West	1478	370	150	1844	0.802	1471	1518	2.0	3.8	9.451	A
C - A1152 East	730	182	941	1114	0.655	727	613	1.0	1.8	9.225	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1191	298	695	1396	0.854	1178	1233	1.9	5.2	15.673	C
B - A12 South West	1811	453	181	1824	0.993	1748	1836	3.8	19.6	33.141	D
C - A1152 East	894	223	1141	1002	0.892	875	732	1.8	6.5	25.430	D

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1191	298	708	1387	0.859	1190	1256	5.2	5.6	17.877	C
B - A12 South West	1811	453	184	1822	0.994	1781	1859	19.6	27.1	54.368	F
C - A1152 East	894	223	1153	995	0.898	890	745	6.5	7.5	32.164	D

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	973	243	624	1441	0.675	987	1101	5.6	2.1	8.149	A
B - A12 South West	1478	370	155	1841	0.803	1569	1558	27.1	4.4	17.287	C
C - A1152 East	730	182	962	1102	0.662	752	649	7.5	2.0	10.887	B

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	815	204	496	1524	0.534	818	878	2.1	1.2	5.129	A
B - A12 South West	1238	310	127	1860	0.666	1247	1283	4.4	2.0	5.969	A
C - A1152 East	611	153	795	1195	0.511	615	520	2.0	1.1	6.244	A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	A - A12 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J28	A12 / A1152 Woods Lane	Standard Roundabout		A, C, B	20.43	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	940	100.000
B - A12 South West		ONE HOUR	✓	1642	100.000
C - A1152 East		ONE HOUR	✓	811	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	2	842	96
	B - A12 South West	969	90	583
	C - A1152 East	149	657	5

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - A12 South West	C - A1152 East
From	A - A12 North	0	2	1
	B - A12 South West	2	2	1
	C - A1152 East	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 North	0.72	9.06	2.6	A	863	1294
B - A12 South West	0.95	29.49	13.9	D	1507	2260
C - A1152 East	0.79	15.37	3.7	C	744	1117

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	708	177	507	1581	0.448	705	839	0.0	0.8	4.094	A
B - A12 South West	1236	309	117	1946	0.635	1230	1190	0.0	1.7	4.980	A
C - A1152 East	611	153	700	1308	0.467	607	512	0.0	0.9	5.111	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	845	211	607	1518	0.557	844	1003	0.8	1.2	5.325	A

B - A12 South West	1476	369	140	1930	0.765	1471	1425	1.7	3.1	7.735	A
C - A1152 East	729	182	838	1231	0.592	727	613	0.9	1.4	7.107	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1035	259	732	1439	0.720	1030	1211	1.2	2.5	8.712	A
B - A12 South West	1808	452	170	1910	0.947	1773	1737	3.1	11.9	22.162	C
C - A1152 East	893	223	1022	1129	0.792	885	740	1.4	3.5	14.303	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	1035	259	743	1432	0.723	1035	1229	2.5	2.6	9.064	A
B - A12 South West	1808	452	172	1909	0.947	1800	1749	11.9	13.9	29.485	D
C - A1152 East	893	223	1028	1125	0.794	893	751	3.5	3.7	15.368	C

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	845	211	627	1505	0.562	850	1034	2.6	1.3	5.539	A
B - A12 South West	1476	369	142	1929	0.765	1518	1443	13.9	3.4	9.614	A
C - A1152 East	729	182	846	1227	0.595	738	631	3.7	1.5	7.499	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 North	708	177	513	1578	0.449	710	848	1.3	0.8	4.158	A
B - A12 South West	1236	309	118	1945	0.636	1243	1201	3.4	1.8	5.172	A
C - A1152 East	611	153	705	1305	0.468	613	518	1.5	0.9	5.218	A

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: 2019.04.22 J34c_Model_CV_Adjusted_v11.j9
 Path: \\ser01cam1uk.uk.wspgroup.com/projects\50400326 - Sizewell C transport planning\ID Design and Analysis\Development\2019 STAND ALONE MODELLING\4 Models\For Issue\Scoped In\v11\J34c\Model
 Report generation date: 13/03/2020 15:11:48

- »Base Year, 6-7 AM
- »Base Year, 7-8 AM
- »Base Year, 8-9 AM
- »Base Year, 3-4 PM
- »Base Year, 5-6 PM
- »2023 Reference Case , 6-7 AM
- »2023 Reference Case , 7-8 AM
- »2023 Reference Case , 8-9 AM
- »2023 Reference Case , 3-4 PM
- »2023 Reference Case , 5-6 PM
- »2023 Early Years , 6-7 AM
- »2023 Early Years , 7-8 AM
- »2023 Early Years , 8-9 AM
- »2023 Early Years , 3-4 PM
- »2023 Early Years , 5-6 PM
- »2028 Reference Case , 6-7 AM
- »2028 Reference Case , 7-8 AM
- »2028 Reference Case , 8-9 AM
- »2028 Reference Case , 3-4 PM
- »2028 Reference Case , 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case , 6-7 AM
- »2034 Reference Case , 7-8 AM
- »2034 Reference Case , 8-9 AM
- »2034 Reference Case , 3-4 PM
- »2034 Reference Case , 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
Base Year																									
Stream B-CD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	
Stream B-AD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	
Stream A-BCD	0.2	7.23	0.17	A	1.0	11.26	0.49	B	3.8	23.25	0.77	C	0.7	8.93	0.37	A	0.8	8.45	0.38	A					
Stream D-ABC	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
Stream C-ABD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	6.21	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
2023 Reference Case																									
Stream B-CD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
Stream B-AD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
Stream A-BCD	0.2	7.41	0.18	A	1.2	12.35	0.53	B	5.8	33.47	0.85	D	0.9	9.44	0.42	A	0.8	8.80	0.41	A					
Stream D-ABC	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
Stream C-ABD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	6.32	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
2023 Early Years																									
Stream B-CD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
Stream B-AD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
Stream A-BCD	0.2	7.43	0.18	A	1.3	12.60	0.54	B	5.4	31.34	0.83	D	0.9	9.53	0.42	A	1.0	9.24	0.44	A					
Stream D-ABC	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
Stream C-ABD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	6.27	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
2028 Reference Case																									
Stream B-CD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
Stream B-AD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
Stream A-BCD	0.2	7.34	0.17	A	1.1	11.79	0.51	B	4.0	23.86	0.78	C	0.7	8.93	0.39	A	0.8	8.25	0.38	A					
Stream D-ABC	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
Stream C-ABD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	6.12	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
2028 Peak Construction																									
Stream B-CD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					
Stream B-AD	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A	0.0	0.00	0.00	A					

Stream A-BCD	D21	0.2	7.39	0.18	A	D22	1.4	13.00	0.56	B	D23	5.8	33.38	0.84	D	D24	1.5	12.52	0.57	B	D25	1.2	10.21	0.50	B
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	6.16	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
2034 Reference Case																									
Stream B-CD	D26	0.0	0.00	0.00	A	D27	0.0	0.00	0.00	A	D28	0.0	0.00	0.00	A	D29	0.0	0.00	0.00	A	D30	0.0	0.00	0.00	A
Stream B-AD		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream A-BCD		0.2	7.42	0.19	A		1.2	12.30	0.53	B		6.3	35.23	0.85	E		0.9	9.60	0.44	A		1.0	8.99	0.43	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	5.95	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
2034 Operational Led																									
Stream B-CD	D31	0.0	0.00	0.00	A	D32	0.0	0.00	0.00	A	D33	0.0	0.00	0.00	A	D34	0.0	0.00	0.00	A	D35	0.0	0.00	0.00	A
Stream B-AD		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream A-BCD		0.2	7.42	0.19	A		1.2	12.28	0.53	B		6.7	37.26	0.86	E		0.9	9.62	0.44	A		1.0	8.91	0.43	A
Stream D-ABC		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-ABD		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	5.94	0.00	A		0.0	0.00	0.00	A		0.0	0.00	0.00	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 Southbound on slip / B1078 / Station Road
Location	52° 9'34.11"N, 1°22'50.74"E
Site number	34c
Date	02/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORPIINSR01910
Description	Give way width of the minor arm is 10m, due to the junctions 9 restriction.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
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A1	✓	100.000	100.000
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Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		3.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B1078 North West		Major
B	Station Road North		Minor
C	B1078 South East		Major
D	A12 On Slip SB		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - B1078 North West	7.35			71.0	✓	0.00
C - B1078 South East	7.35			12.9	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Station Road North	One lane plus flare		10.00	5.10	4.10	4.10	4.10	✓	1.00	41	12
D - A12 On Slip SB	One lane	2.20								0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	615	-	-	-	-	-	-	0.224	0.320	0.224	-	-	-
B-A	535	0.092	0.232	0.232	-	-	-	0.146	0.331	-	0.232	0.232	0.116
B-C	680	0.098	0.248	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	535	0.092	0.232	0.232	-	-	-	0.146	0.331	0.146	-	-	-
B-D, offside lane	535	0.092	0.232	0.232	-	-	-	0.146	0.331	0.146	-	-	-
C-B	581	0.212	0.212	0.303	-	-	-	-	-	-	-	-	-
D-A	574	-	-	-	-	-	-	0.209	-	0.083	-	-	-
D-B, nearside lane	440	0.120	0.120	0.272	-	-	-	0.190	0.190	0.075	-	-	-
D-B, offside lane	440	0.120	0.120	0.272	-	-	-	0.190	0.190	0.075	-	-	-
D-C	440	-	0.120	0.272	0.095	0.190	0.190	0.190	0.190	0.075	-	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	118	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	59	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	33	85
	B - Station Road North	0	0	0	0
	C - B1078 South East	32	0	0	27
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	0	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.17	7.23	0.2	A	82	123
A-B					0	0
A-C					26	39
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					25	37
C-A					29	44

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	579	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	508	0.000	0	0.0	0.0	0.000	A
A-BCD	67	17	594	0.112	66	0.0	0.1	6.814	A
A-B	0	0			0				
A-C	22	6			22				
D-ABC	0	0	442	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	550	0.000	0	0.0	0.0	0.000	A
C-D	20	5			20				
C-A	24	6			24				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	574	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	503	0.000	0	0.0	0.0	0.000	A
A-BCD	80	20	595	0.135	80	0.1	0.2	6.988	A
A-B	0	0			0				
A-C	26	6			26				
D-ABC	0	0	437	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	545	0.000	0	0.0	0.0	0.000	A
C-D	24	6			24				
C-A	29	7			29				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	569	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	496	0.000	0	0.0	0.0	0.000	A
A-BCD	100	25	597	0.167	99	0.2	0.2	7.229	A
A-B	0	0			0				
A-C	30	8			30				
D-ABC	0	0	431	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	538	0.000	0	0.0	0.0	0.000	A
C-D	30	7			30				
C-A	35	9			35				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	569	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	496	0.000	0	0.0	0.0	0.000	A
A-BCD	100	25	597	0.167	100	0.2	0.2	7.233	A
A-B	0	0			0				
A-C	30	8			30				

D-ABC	0	0	431	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	538	0.000	0	0.0	0.0	0.000	A
C-D	30	7			30				
C-A	35	9			35				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	574	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	503	0.000	0	0.0	0.0	0.000	A
A-BCD	80	20	596	0.135	81	0.2	0.2	6.997	A
A-B	0	0			0				
A-C	26	6			26				
D-ABC	0	0	437	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	545	0.000	0	0.0	0.0	0.000	A
C-D	24	6			24				
C-A	29	7			29				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	579	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	508	0.000	0	0.0	0.0	0.000	A
A-BCD	67	17	594	0.112	67	0.2	0.1	6.830	A
A-B	0	0			0				
A-C	22	6			22				
D-ABC	0	0	442	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	550	0.000	0	0.0	0.0	0.000	A
C-D	20	5			20				
C-A	24	6			24				

Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		6.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	315	100.000
B - Station Road North		ONE HOUR	✓	2	100.000
C - B1078 South East		ONE HOUR	✓	129	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	1	77	237
	B - Station Road North	2	0	0	0
	C - B1078 South East	78	0	0	51
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	3
	B - Station Road North	0	0	0	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.49	11.26	1.0	B	247	371
A-B					0.54	0.81
A-C					41	62
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					47	70
C-A					72	107

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	547	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	467	0.000	0	0.0	0.0	0.000	A
A-BCD	197	49	615	0.321	195	0.0	0.5	8.551	A
A-B	0.51	0.13			0.51				
A-C	39	10			39				
D-ABC	0	0	402	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	505	0.000	0	0.0	0.0	0.000	A
C-D	38	10			38				
C-A	59	15			59				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	535	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	453	0.000	0	0.0	0.0	0.000	A
A-BCD	241	60	618	0.389	240	0.5	0.7	9.502	A
A-B	0.55	0.14			0.55				
A-C	42	11			42				
D-ABC	0	0	388	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	492	0.000	0	0.0	0.0	0.000	A
C-D	46	11			46				
C-A	70	18			70				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	520	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	434	0.000	0	0.0	0.0	0.000	A
A-BCD	303	76	623	0.486	302	0.7	1.0	11.167	B
A-B	0.56	0.14			0.56				
A-C	43	11			43				
D-ABC	0	0	370	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	473	0.000	0	0.0	0.0	0.000	A
C-D	56	14			56				
C-A	86	21			86				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	520	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	434	0.000	0	0.0	0.0	0.000	A
A-BCD	303	76	623	0.486	303	1.0	1.0	11.262	B
A-B	0.56	0.14			0.56				
A-C	43	11			43				
D-ABC	0	0	370	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	473	0.000	0	0.0	0.0	0.000	A
C-D	56	14			56				
C-A	86	21			86				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	535	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	452	0.000	0	0.0	0.0	0.000	A
A-BCD	241	60	618	0.389	242	1.0	0.7	9.613	A
A-B	0.54	0.14			0.54				
A-C	42	10			42				
D-ABC	0	0	388	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	491	0.000	0	0.0	0.0	0.000	A
C-D	46	11			46				
C-A	70	18			70				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	546	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	466	0.000	0	0.0	0.0	0.000	A
A-BCD	198	49	615	0.321	198	0.7	0.5	8.667	A
A-B	0.51	0.13			0.51				
A-C	39	10			39				
D-ABC	0	0	401	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	505	0.000	0	0.0	0.0	0.000	A
C-D	38	10			38				
C-A	59	15			59				

Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		14.63	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	516	100.000
B - Station Road North		ONE HOUR	✓	1	100.000
C - B1078 South East		ONE HOUR	✓	204	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	187	329
	B - Station Road North	1	0	0	0
	C - B1078 South East	138	1	0	65
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	3	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.77	23.25	3.8	C	413	620
A-B					0	0
A-C					60	90
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	6.21	0.0	A	1	2
C-D					60	89
C-A					126	189

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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B-CD	0	0	507	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	422	0.000	0	0.0	0.0	0.000	A
A-BCD	317	79	647	0.489	312	0.0	1.1	10.643	B
A-B	0	0			0				
A-C	72	18			72				
D-ABC	0	0	363	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.26	583	0.002	1	0.0	0.0	6.182	A
C-D	49	12			49				
C-A	104	26			104				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	487	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	398	0.000	0	0.0	0.0	0.000	A
A-BCD	398	100	661	0.602	395	1.1	1.7	13.541	B
A-B	0	0			0				
A-C	66	16			66				
D-ABC	0	0	341	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.33	585	0.002	1	0.0	0.0	6.165	A
C-D	58	15			58				
C-A	124	31			124				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	459	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	367	0.000	0	0.0	0.0	0.000	A
A-BCD	523	131	679	0.769	515	1.7	3.6	21.513	C
A-B	0	0			0				
A-C	46	11			46				
D-ABC	0	0	311	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.44	589	0.003	2	0.0	0.0	6.125	A
C-D	71	18			71				
C-A	151	38			151				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	458	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	365	0.000	0	0.0	0.0	0.000	A
A-BCD	525	131	681	0.770	524	3.6	3.8	23.254	C
A-B	0	0			0				
A-C	43	11			43				
D-ABC	0	0	309	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.45	587	0.003	2	0.0	0.0	6.150	A
C-D	71	18			71				
C-A	151	38			151				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	485	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	396	0.000	0	0.0	0.0	0.000	A
A-BCD	401	100	664	0.604	408	3.8	1.9	14.612	B
A-B	0	0			0				
A-C	63	16			63				
D-ABC	0	0	339	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.33	582	0.002	1	0.0	0.0	6.208	A
C-D	58	15			58				
C-A	124	31			124				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	506	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	420	0.000	0	0.0	0.0	0.000	A
A-BCD	318	80	649	0.490	321	1.9	1.1	11.108	B
A-B	0	0			0				
A-C	70	18			70				
D-ABC	0	0	362	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.26	581	0.002	1	0.0	0.0	6.212	A
C-D	49	12			49				
C-A	104	26			104				

Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		4.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	294	100.000
B - Station Road North		ONE HOUR	✓	4	100.000
C - B1078 South East		ONE HOUR	✓	140	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	123	171
	B - Station Road North	2	0	0	2
	C - B1078 South East	97	0	0	43
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	3	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	2	0	0	14
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.37	8.93	0.7	A	192	289
A-B					0	0
A-C					77	116
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					39	59
C-A					89	134

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	545	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	468	0.000	0	0.0	0.0	0.000	A
A-BCD	151	38	623	0.243	150	0.0	0.4	7.584	A
A-B	0	0			0				
A-C	70	18			70				
D-ABC	0	0	407	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	500	0.000	0	0.0	0.0	0.000	A
C-D	32	8			32				
C-A	73	18			73				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	533	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	455	0.000	0	0.0	0.0	0.000	A
A-BCD	187	47	631	0.296	186	0.4	0.5	8.087	A
A-B	0	0			0				
A-C	78	19			78				
D-ABC	0	0	395	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	488	0.000	0	0.0	0.0	0.000	A
C-D	39	10			39				
C-A	87	22			87				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	518	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	436	0.000	0	0.0	0.0	0.000	A
A-BCD	239	60	643	0.372	238	0.5	0.7	8.905	A
A-B	0	0			0				
A-C	85	21			85				
D-ABC	0	0	379	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	472	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	107	27			107				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	518	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	436	0.000	0	0.0	0.0	0.000	A
A-BCD	239	60	643	0.372	239	0.7	0.7	8.935	A
A-B	0	0			0				
A-C	85	21			85				
D-ABC	0	0	379	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	472	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	107	27			107				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	533	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	454	0.000	0	0.0	0.0	0.000	A
A-BCD	187	47	632	0.296	188	0.7	0.5	8.127	A
A-B	0	0			0				
A-C	77	19			77				
D-ABC	0	0	395	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	488	0.000	0	0.0	0.0	0.000	A
C-D	39	10			39				
C-A	87	22			87				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	544	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	467	0.000	0	0.0	0.0	0.000	A
A-BCD	151	38	624	0.243	152	0.5	0.4	7.645	A
A-B	0	0			0				
A-C	70	17			70				
D-ABC	0	0	407	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	500	0.000	0	0.0	0.0	0.000	A
C-D	32	8			32				
C-A	73	18			73				

Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		3.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	341	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	145	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	166	175
	B - Station Road North	0	0	0	0
	C - B1078 South East	115	0	0	30
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	2
	B - Station Road North	0	0	0	0
	C - B1078 South East	2	0	0	7
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.38	8.45	0.8	A	209	314
A-B					0	0
A-C					104	155
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					28	41
C-A					106	158

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	537	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	460	0.000	0	0.0	0.0	0.000	A
A-BCD	162	41	661	0.246	161	0.0	0.4	7.184	A
A-B	0	0			0				
A-C	94	24			94				
D-ABC	0	0	403	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	503	0.000	0	0.0	0.0	0.000	A
C-D	23	6			23				
C-A	87	22			87				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	524	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	445	0.000	0	0.0	0.0	0.000	A
A-BCD	203	51	673	0.301	202	0.4	0.5	7.643	A
A-B	0	0			0				
A-C	104	26			104				
D-ABC	0	0	389	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	490	0.000	0	0.0	0.0	0.000	A
C-D	27	7			27				
C-A	103	26			103				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	507	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	424	0.000	0	0.0	0.0	0.000	A
A-BCD	263	66	690	0.381	262	0.5	0.7	8.411	A
A-B	0	0			0				
A-C	113	28			113				
D-ABC	0	0	371	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	472	0.000	0	0.0	0.0	0.000	A
C-D	33	8			33				
C-A	127	32			127				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	507	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	424	0.000	0	0.0	0.0	0.000	A
A-BCD	263	66	690	0.381	263	0.7	0.8	8.447	A
A-B	0	0			0				
A-C	112	28			112				
D-ABC	0	0	371	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	472	0.000	0	0.0	0.0	0.000	A
C-D	33	8			33				
C-A	127	32			127				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	524	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	444	0.000	0	0.0	0.0	0.000	A
A-BCD	203	51	673	0.301	204	0.8	0.5	7.688	A
A-B	0	0			0				
A-C	104	26			104				
D-ABC	0	0	389	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	489	0.000	0	0.0	0.0	0.000	A
C-D	27	7			27				
C-A	103	26			103				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	537	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	459	0.000	0	0.0	0.0	0.000	A
A-BCD	163	41	661	0.246	163	0.5	0.4	7.246	A
A-B	0	0			0				
A-C	94	23			94				
D-ABC	0	0	402	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	502	0.000	0	0.0	0.0	0.000	A
C-D	23	6			23				
C-A	87	22			87				

2023 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		3.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	126	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	61	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	34	92
	B - Station Road North	0	0	0	0
	C - B1078 South East	33	0	0	28
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	0	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.18	7.41	0.2	A	89	134
A-B					0	0
A-C					26	40
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					25	38
C-A					30	45

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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B-CD	0	0	577	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	507	0.000	0	0.0	0.0	0.000	A
A-BCD	73	18	591	0.123	72	0.0	0.1	6.931	A
A-B	0	0			0				
A-C	22	6			22				
D-ABC	0	0	441	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	549	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	25	6			25				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	573	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	501	0.000	0	0.0	0.0	0.000	A
A-BCD	87	22	592	0.148	87	0.1	0.2	7.127	A
A-B	0	0			0				
A-C	26	7			26				
D-ABC	0	0	435	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	543	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	30	7			30				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	567	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	493	0.000	0	0.0	0.0	0.000	A
A-BCD	108	27	594	0.182	108	0.2	0.2	7.405	A
A-B	0	0			0				
A-C	31	8			31				
D-ABC	0	0	428	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	536	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	36	9			36				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	567	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	493	0.000	0	0.0	0.0	0.000	A
A-BCD	108	27	594	0.182	108	0.2	0.2	7.412	A
A-B	0	0			0				
A-C	31	8			31				
D-ABC	0	0	428	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	536	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	36	9			36				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	573	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	501	0.000	0	0.0	0.0	0.000	A
A-BCD	87	22	592	0.148	88	0.2	0.2	7.136	A
A-B	0	0			0				
A-C	26	7			26				
D-ABC	0	0	435	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	543	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	30	7			30				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	577	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	507	0.000	0	0.0	0.0	0.000	A
A-BCD	73	18	591	0.123	73	0.2	0.1	6.952	A
A-B	0	0			0				
A-C	22	6			22				
D-ABC	0	0	440	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	548	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	25	6			25				

2023 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		7.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	342	100.000
B - Station Road North		ONE HOUR	✓	2	100.000
C - B1078 South East		ONE HOUR	✓	134	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	1	81	261
	B - Station Road North	2	0	0	0
	C - B1078 South East	82	0	0	52
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	2
	B - Station Road North	0	0	0	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.53	12.35	1.2	B	273	410
A-B					0.56	0.83
A-C					40	60
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					48	72
C-A					75	113

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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B-CD	0	0	543	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	461	0.000	0	0.0	0.0	0.000	A
A-BCD	218	54	618	0.352	216	0.0	0.6	8.896	A
A-B	0.54	0.14			0.54				
A-C	39	10			39				
D-ABC	0	0	397	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	500	0.000	0	0.0	0.0	0.000	A
C-D	39	10			39				
C-A	62	15			62				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	531	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	447	0.000	0	0.0	0.0	0.000	A
A-BCD	266	66	622	0.427	265	0.6	0.8	10.066	B
A-B	0.57	0.14			0.57				
A-C	41	10			41				
D-ABC	0	0	382	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	485	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	74	18			74				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	514	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	427	0.000	0	0.0	0.0	0.000	A
A-BCD	335	84	627	0.535	334	0.8	1.2	12.210	B
A-B	0.56	0.14			0.56				
A-C	41	10			41				
D-ABC	0	0	362	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	465	0.000	0	0.0	0.0	0.000	A
C-D	57	14			57				
C-A	90	23			90				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	514	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	426	0.000	0	0.0	0.0	0.000	A
A-BCD	336	84	628	0.535	336	1.2	1.2	12.353	B
A-B	0.56	0.14			0.56				
A-C	41	10			41				
D-ABC	0	0	362	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	465	0.000	0	0.0	0.0	0.000	A
C-D	57	14			57				
C-A	90	23			90				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	530	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	446	0.000	0	0.0	0.0	0.000	A
A-BCD	266	67	622	0.428	268	1.2	0.8	10.221	B
A-B	0.56	0.14			0.56				
A-C	41	10			41				
D-ABC	0	0	382	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	484	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	74	18			74				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	542	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	461	0.000	0	0.0	0.0	0.000	A
A-BCD	218	55	619	0.353	219	0.8	0.6	9.046	A
A-B	0.54	0.13			0.54				
A-C	39	10			39				
D-ABC	0	0	396	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	499	0.000	0	0.0	0.0	0.000	A
C-D	39	10			39				
C-A	62	15			62				

2023 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		22.06	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	556	100.000
B - Station Road North		ONE HOUR	✓	1	100.000
C - B1078 South East		ONE HOUR	✓	206	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	197	359
	B - Station Road North	1	0	0	0
	C - B1078 South East	140	1	0	66
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.85	33.47	5.8	D	459	689
A-B					0	0
A-C					51	77
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	6.32	0.0	A	2	2
C-D					60	90
C-A					128	192

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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B-CD	0	0	501	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	414	0.000	0	0.0	0.0	0.000	A
A-BCD	350	87	654	0.535	344	0.0	1.3	11.499	B
A-B	0	0			0				
A-C	69	17			69				
D-ABC	0	0	357	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.29	577	0.002	1	0.0	0.0	6.254	A
C-D	49	12			49				
C-A	105	26			105				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	480	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	390	0.000	0	0.0	0.0	0.000	A
A-BCD	441	110	669	0.659	437	1.3	2.2	15.511	C
A-B	0	0			0				
A-C	59	15			59				
D-ABC	0	0	333	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.37	577	0.003	1	0.0	0.0	6.251	A
C-D	59	15			59				
C-A	125	31			125				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	449	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	356	0.000	0	0.0	0.0	0.000	A
A-BCD	581	145	689	0.844	568	2.2	5.3	28.611	D
A-B	0	0			0				
A-C	31	8			31				
D-ABC	0	0	300	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.50	579	0.003	2	0.0	0.0	6.228	A
C-D	72	18			72				
C-A	153	38			153				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	447	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	353	0.000	0	0.0	0.0	0.000	A
A-BCD	585	146	692	0.846	583	5.3	5.8	33.473	D
A-B	0	0			0				
A-C	27	7			27				
D-ABC	0	0	297	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.50	576	0.004	2	0.0	0.0	6.270	A
C-D	72	18			72				
C-A	153	38			153				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	476	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	385	0.000	0	0.0	0.0	0.000	A
A-BCD	446	111	673	0.662	459	5.8	2.5	18.006	C
A-B	0	0			0				
A-C	54	14			54				
D-ABC	0	0	329	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.37	572	0.003	1	0.0	0.0	6.317	A
C-D	59	15			59				
C-A	125	31			125				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	499	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	412	0.000	0	0.0	0.0	0.000	A
A-BCD	352	88	656	0.536	356	2.5	1.4	12.222	B
A-B	0	0			0				
A-C	67	17			67				
D-ABC	0	0	354	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.29	574	0.002	1	0.0	0.0	6.289	A
C-D	49	12			49				
C-A	105	26			105				

2023 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		4.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	332	100.000
B - Station Road North		ONE HOUR	✓	4	100.000
C - B1078 South East		ONE HOUR	✓	146	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	141	192
	B - Station Road North	2	0	0	2
	C - B1078 South East	101	0	0	45
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	3	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	2	0	0	13
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.42	9.44	0.9	A	222	332
A-B					0	0
A-C					84	125
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					41	61
C-A					93	139

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	539	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	461	0.000	0	0.0	0.0	0.000	A
A-BCD	173	43	636	0.272	171	0.0	0.4	7.732	A
A-B	0	0			0				
A-C	77	19			77				
D-ABC	0	0	402	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	494	0.000	0	0.0	0.0	0.000	A
C-D	34	8			34				
C-A	76	19			76				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	526	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	446	0.000	0	0.0	0.0	0.000	A
A-BCD	215	54	645	0.333	214	0.4	0.6	8.349	A
A-B	0	0			0				
A-C	84	21			84				
D-ABC	0	0	388	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	481	0.000	0	0.0	0.0	0.000	A
C-D	40	10			40				
C-A	91	23			91				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	509	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	426	0.000	0	0.0	0.0	0.000	A
A-BCD	276	69	659	0.420	275	0.6	0.8	9.390	A
A-B	0	0			0				
A-C	90	22			90				
D-ABC	0	0	370	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	463	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	111	28			111				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	509	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	426	0.000	0	0.0	0.0	0.000	A
A-BCD	277	69	659	0.420	277	0.8	0.9	9.437	A
A-B	0	0			0				
A-C	89	22			89				
D-ABC	0	0	370	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	463	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	111	28			111				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	526	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	446	0.000	0	0.0	0.0	0.000	A
A-BCD	215	54	646	0.333	216	0.9	0.6	8.403	A
A-B	0	0			0				
A-C	84	21			84				
D-ABC	0	0	388	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	480	0.000	0	0.0	0.0	0.000	A
C-D	40	10			40				
C-A	91	23			91				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	538	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	460	0.000	0	0.0	0.0	0.000	A
A-BCD	173	43	636	0.273	174	0.6	0.4	7.809	A
A-B	0	0			0				
A-C	77	19			77				
D-ABC	0	0	401	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	494	0.000	0	0.0	0.0	0.000	A
C-D	34	8			34				
C-A	76	19			76				

2023 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		4.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	358	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	150	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	171	187
	B - Station Road North	0	0	0	0
	C - B1078 South East	119	0	0	31
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	2
	B - Station Road North	0	0	0	0
	C - B1078 South East	2	0	0	6
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.41	8.80	0.8	A	226	339
A-B					0	0
A-C					103	155
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					28	43
C-A					109	163

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	534	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	456	0.000	0	0.0	0.0	0.000	A
A-BCD	175	44	664	0.263	173	0.0	0.4	7.317	A
A-B	0	0			0				
A-C	95	24			95				
D-ABC	0	0	399	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	500	0.000	0	0.0	0.0	0.000	A
C-D	23	6			23				
C-A	89	22			89				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	521	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	441	0.000	0	0.0	0.0	0.000	A
A-BCD	218	55	677	0.323	218	0.4	0.6	7.846	A
A-B	0	0			0				
A-C	104	26			104				
D-ABC	0	0	386	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	486	0.000	0	0.0	0.0	0.000	A
C-D	28	7			28				
C-A	107	27			107				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	503	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	419	0.000	0	0.0	0.0	0.000	A
A-BCD	284	71	694	0.409	283	0.6	0.8	8.751	A
A-B	0	0			0				
A-C	111	28			111				
D-ABC	0	0	367	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	467	0.000	0	0.0	0.0	0.000	A
C-D	34	9			34				
C-A	131	33			131				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	502	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	419	0.000	0	0.0	0.0	0.000	A
A-BCD	284	71	694	0.409	284	0.8	0.8	8.797	A
A-B	0	0			0				
A-C	111	28			111				
D-ABC	0	0	366	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	467	0.000	0	0.0	0.0	0.000	A
C-D	34	9			34				
C-A	131	33			131				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	521	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	440	0.000	0	0.0	0.0	0.000	A
A-BCD	219	55	677	0.323	220	0.8	0.6	7.901	A
A-B	0	0			0				
A-C	104	26			104				
D-ABC	0	0	385	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	486	0.000	0	0.0	0.0	0.000	A
C-D	28	7			28				
C-A	107	27			107				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	534	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	456	0.000	0	0.0	0.0	0.000	A
A-BCD	175	44	665	0.264	176	0.6	0.4	7.387	A
A-B	0	0			0				
A-C	94	24			94				
D-ABC	0	0	399	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	500	0.000	0	0.0	0.0	0.000	A
C-D	23	6			23				
C-A	89	22			89				

2023 Early Years , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		3.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	127	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	61	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	34	93
	B - Station Road North	0	0	0	0
	C - B1078 South East	33	0	0	28
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	0	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.18	7.43	0.2	A	90	136
A-B					0	0
A-C					26	39
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					25	38
C-A					30	45

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	577	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	507	0.000	0	0.0	0.0	0.000	A
A-BCD	73	18	591	0.124	73	0.0	0.1	6.938	A
A-B	0	0			0				
A-C	22	6			22				
D-ABC	0	0	440	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	548	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	25	6			25				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	573	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	501	0.000	0	0.0	0.0	0.000	A
A-BCD	88	22	593	0.149	88	0.1	0.2	7.136	A
A-B	0	0			0				
A-C	26	6			26				
D-ABC	0	0	435	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	543	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	30	7			30				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	567	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	493	0.000	0	0.0	0.0	0.000	A
A-BCD	110	27	595	0.184	109	0.2	0.2	7.418	A
A-B	0	0			0				
A-C	31	8			31				
D-ABC	0	0	428	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	535	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	36	9			36				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	567	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	493	0.000	0	0.0	0.0	0.000	A
A-BCD	110	27	595	0.184	110	0.2	0.2	7.425	A
A-B	0	0			0				
A-C	31	8			31				
D-ABC	0	0	428	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	535	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	36	9			36				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	573	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	501	0.000	0	0.0	0.0	0.000	A
A-BCD	88	22	593	0.149	89	0.2	0.2	7.148	A
A-B	0	0			0				
A-C	26	6			26				
D-ABC	0	0	435	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	543	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	30	7			30				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	577	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	506	0.000	0	0.0	0.0	0.000	A
A-BCD	73	18	591	0.124	74	0.2	0.1	6.959	A
A-B	0	0			0				
A-C	22	6			22				
D-ABC	0	0	440	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	548	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	25	6			25				

2023 Early Years , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		7.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	346	100.000
B - Station Road North		ONE HOUR	✓	2	100.000
C - B1078 South East		ONE HOUR	✓	137	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	1	81	265
	B - Station Road North	2	0	0	0
	C - B1078 South East	85	0	0	52
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	2
	B - Station Road North	0	0	0	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.54	12.60	1.3	B	277	416
A-B					0.55	0.82
A-C					40	60
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					48	72
C-A					78	117

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	542	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	460	0.000	0	0.0	0.0	0.000	A
A-BCD	221	55	618	0.358	219	0.0	0.6	8.977	A
A-B	0.54	0.13			0.54				
A-C	39	10			39				
D-ABC	0	0	396	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	499	0.000	0	0.0	0.0	0.000	A
C-D	39	10			39				
C-A	64	16			64				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	530	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	445	0.000	0	0.0	0.0	0.000	A
A-BCD	270	68	622	0.434	269	0.6	0.8	10.195	B
A-B	0.56	0.14			0.56				
A-C	41	10			41				
D-ABC	0	0	381	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	484	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	77	19			77				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	513	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	425	0.000	0	0.0	0.0	0.000	A
A-BCD	341	85	627	0.543	339	0.8	1.3	12.449	B
A-B	0.55	0.14			0.55				
A-C	40	10			40				
D-ABC	0	0	360	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	464	0.000	0	0.0	0.0	0.000	A
C-D	57	14			57				
C-A	94	23			94				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	513	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	425	0.000	0	0.0	0.0	0.000	A
A-BCD	341	85	627	0.544	341	1.3	1.3	12.605	B
A-B	0.55	0.14			0.55				
A-C	40	10			40				
D-ABC	0	0	360	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	463	0.000	0	0.0	0.0	0.000	A
C-D	57	14			57				
C-A	94	23			94				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	529	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	445	0.000	0	0.0	0.0	0.000	A
A-BCD	270	68	622	0.435	272	1.3	0.9	10.361	B
A-B	0.56	0.14			0.56				
A-C	40	10			40				
D-ABC	0	0	380	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	483	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	77	19			77				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	541	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	460	0.000	0	0.0	0.0	0.000	A
A-BCD	222	55	618	0.358	223	0.9	0.6	9.132	A
A-B	0.53	0.13			0.53				
A-C	39	10			39				
D-ABC	0	0	395	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	498	0.000	0	0.0	0.0	0.000	A
C-D	39	10			39				
C-A	64	16			64				

2023 Early Years , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		20.39	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	545	100.000
B - Station Road North		ONE HOUR	✓	1	100.000
C - B1078 South East		ONE HOUR	✓	209	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	190	355
	B - Station Road North	1	0	0	0
	C - B1078 South East	142	1	0	67
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	3	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	4	0	0	3
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.83	31.34	5.4	D	449	673
A-B					0	0
A-C					51	77
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	6.27	0.0	A	2	2
C-D					61	91
C-A					130	194

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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B-CD	0	0	503	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	416	0.000	0	0.0	0.0	0.000	A
A-BCD	343	86	650	0.527	338	0.0	1.3	11.393	B
A-B	0	0			0				
A-C	68	17			68				
D-ABC	0	0	358	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.29	580	0.002	1	0.0	0.0	6.217	A
C-D	50	12			50				
C-A	106	27			106				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	481	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	391	0.000	0	0.0	0.0	0.000	A
A-BCD	431	108	664	0.650	428	1.3	2.1	15.213	C
A-B	0	0			0				
A-C	59	15			59				
D-ABC	0	0	334	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.37	581	0.003	1	0.0	0.0	6.207	A
C-D	60	15			60				
C-A	127	32			127				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	452	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	359	0.000	0	0.0	0.0	0.000	A
A-BCD	567	142	683	0.831	556	2.1	4.9	27.273	D
A-B	0	0			0				
A-C	33	8			33				
D-ABC	0	0	302	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.50	584	0.003	2	0.0	0.0	6.174	A
C-D	73	18			73				
C-A	155	39			155				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	449	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	356	0.000	0	0.0	0.0	0.000	A
A-BCD	571	143	685	0.833	569	4.9	5.4	31.345	D
A-B	0	0			0				
A-C	29	7			29				
D-ABC	0	0	299	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.51	582	0.003	2	0.0	0.0	6.212	A
C-D	73	18			73				
C-A	155	39			155				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	478	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	388	0.000	0	0.0	0.0	0.000	A
A-BCD	436	109	668	0.652	448	5.4	2.3	17.368	C
A-B	0	0			0				
A-C	54	14			54				
D-ABC	0	0	330	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.37	577	0.003	1	0.0	0.0	6.266	A
C-D	60	15			60				
C-A	127	32			127				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	501	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	414	0.000	0	0.0	0.0	0.000	A
A-BCD	345	86	652	0.529	349	2.3	1.3	12.070	B
A-B	0	0			0				
A-C	66	16			66				
D-ABC	0	0	355	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.29	578	0.002	1	0.0	0.0	6.254	A
C-D	50	12			50				
C-A	106	27			106				

2023 Early Years , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		4.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	329	100.000
B - Station Road North		ONE HOUR	✓	4	100.000
C - B1078 South East		ONE HOUR	✓	149	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	139	191
	B - Station Road North	2	0	0	2
	C - B1078 South East	102	0	0	47
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	4	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	2	0	0	17
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.42	9.53	0.9	A	220	330
A-B					0	0
A-C					82	123
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					43	64
C-A					94	141

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	538	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	461	0.000	0	0.0	0.0	0.000	A
A-BCD	172	43	631	0.272	170	0.0	0.4	7.792	A
A-B	0	0			0				
A-C	76	19			76				
D-ABC	0	0	401	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	490	0.000	0	0.0	0.0	0.000	A
C-D	35	9			35				
C-A	77	19			77				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	526	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	446	0.000	0	0.0	0.0	0.000	A
A-BCD	213	53	640	0.333	213	0.4	0.6	8.417	A
A-B	0	0			0				
A-C	83	21			83				
D-ABC	0	0	388	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	477	0.000	0	0.0	0.0	0.000	A
C-D	42	10			42				
C-A	92	23			92				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	508	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	426	0.000	0	0.0	0.0	0.000	A
A-BCD	275	69	653	0.420	273	0.6	0.8	9.477	A
A-B	0	0			0				
A-C	88	22			88				
D-ABC	0	0	370	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	459	0.000	0	0.0	0.0	0.000	A
C-D	51	13			51				
C-A	112	28			112				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	508	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	425	0.000	0	0.0	0.0	0.000	A
A-BCD	275	69	654	0.420	275	0.8	0.9	9.527	A
A-B	0	0			0				
A-C	88	22			88				
D-ABC	0	0	369	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	459	0.000	0	0.0	0.0	0.000	A
C-D	51	13			51				
C-A	112	28			112				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	525	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	445	0.000	0	0.0	0.0	0.000	A
A-BCD	213	53	641	0.333	214	0.9	0.6	8.477	A
A-B	0	0			0				
A-C	83	21			83				
D-ABC	0	0	388	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	476	0.000	0	0.0	0.0	0.000	A
C-D	42	10			42				
C-A	92	23			92				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	538	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	460	0.000	0	0.0	0.0	0.000	A
A-BCD	172	43	631	0.273	173	0.6	0.4	7.869	A
A-B	0	0			0				
A-C	76	19			76				
D-ABC	0	0	401	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	489	0.000	0	0.0	0.0	0.000	A
C-D	35	9			35				
C-A	77	19			77				

2023 Early Years , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		4.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	376	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	153	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	178	198
	B - Station Road North	0	0	0	0
	C - B1078 South East	120	0	0	33
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	3	2
	B - Station Road North	0	0	0	0
	C - B1078 South East	2	0	0	12
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.44	9.24	1.0	A	242	363
A-B					0	0
A-C					103	155
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					30	45
C-A					110	165

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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B-CD	0	0	531	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	452	0.000	0	0.0	0.0	0.000	A
A-BCD	187	47	664	0.282	185	0.0	0.5	7.493	A
A-B	0	0			0				
A-C	96	24			96				
D-ABC	0	0	396	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	490	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	90	23			90				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	517	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	436	0.000	0	0.0	0.0	0.000	A
A-BCD	234	58	678	0.345	233	0.5	0.6	8.105	A
A-B	0	0			0				
A-C	104	26			104				
D-ABC	0	0	382	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	475	0.000	0	0.0	0.0	0.000	A
C-D	30	7			30				
C-A	108	27			108				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	497	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	414	0.000	0	0.0	0.0	0.000	A
A-BCD	305	76	696	0.438	304	0.6	0.9	9.181	A
A-B	0	0			0				
A-C	110	27			110				
D-ABC	0	0	362	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	455	0.000	0	0.0	0.0	0.000	A
C-D	36	9			36				
C-A	132	33			132				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	497	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	413	0.000	0	0.0	0.0	0.000	A
A-BCD	305	76	696	0.438	305	0.9	1.0	9.239	A
A-B	0	0			0				
A-C	109	27			109				
D-ABC	0	0	361	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	455	0.000	0	0.0	0.0	0.000	A
C-D	36	9			36				
C-A	132	33			132				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	516	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	435	0.000	0	0.0	0.0	0.000	A
A-BCD	234	59	678	0.346	236	1.0	0.7	8.177	A
A-B	0	0			0				
A-C	104	26			104				
D-ABC	0	0	381	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	474	0.000	0	0.0	0.0	0.000	A
C-D	30	7			30				
C-A	108	27			108				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	530	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	452	0.000	0	0.0	0.0	0.000	A
A-BCD	188	47	665	0.282	188	0.7	0.5	7.577	A
A-B	0	0			0				
A-C	96	24			96				
D-ABC	0	0	396	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	489	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	90	23			90				

2028 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		3.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	123	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	63	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	35	88
	B - Station Road North	0	0	0	0
	C - B1078 South East	35	0	0	28
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	0	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.17	7.34	0.2	A	86	129
A-B					0	0
A-C					27	41
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					25	38
C-A					32	48

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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B-CD	0	0	578	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	507	0.000	0	0.0	0.0	0.000	A
A-BCD	69	17	591	0.118	69	0.0	0.1	6.888	A
A-B	0	0			0				
A-C	23	6			23				
D-ABC	0	0	441	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	549	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	26	7			26				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	573	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	501	0.000	0	0.0	0.0	0.000	A
A-BCD	84	21	592	0.141	84	0.1	0.2	7.072	A
A-B	0	0			0				
A-C	27	7			27				
D-ABC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	544	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	31	8			31				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	567	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	494	0.000	0	0.0	0.0	0.000	A
A-BCD	104	26	595	0.175	104	0.2	0.2	7.333	A
A-B	0	0			0				
A-C	32	8			32				
D-ABC	0	0	429	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	537	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	39	10			39				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	567	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	494	0.000	0	0.0	0.0	0.000	A
A-BCD	104	26	595	0.175	104	0.2	0.2	7.337	A
A-B	0	0			0				
A-C	32	8			32				
D-ABC	0	0	429	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	537	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	39	10			39				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	573	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	501	0.000	0	0.0	0.0	0.000	A
A-BCD	84	21	593	0.141	84	0.2	0.2	7.081	A
A-B	0	0			0				
A-C	27	7			27				
D-ABC	0	0	436	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	544	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	31	8			31				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	577	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	507	0.000	0	0.0	0.0	0.000	A
A-BCD	70	17	591	0.118	70	0.2	0.1	6.909	A
A-B	0	0			0				
A-C	23	6			23				
D-ABC	0	0	441	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	549	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	26	7			26				

2028 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		7.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	333	100.000
B - Station Road North		ONE HOUR	✓	2	100.000
C - B1078 South East		ONE HOUR	✓	140	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	1	84	249
	B - Station Road North	2	0	0	0
	C - B1078 South East	87	0	0	53
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	3
	B - Station Road North	0	0	0	0
	C - B1078 South East	3	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.51	11.79	1.1	B	262	393
A-B					0.60	0.91
A-C					43	65
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					49	73
C-A					80	120

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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B-CD	0	0	543	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	462	0.000	0	0.0	0.0	0.000	A
A-BCD	209	52	618	0.337	207	0.0	0.5	8.702	A
A-B	0.58	0.15			0.58				
A-C	42	10			42				
D-ABC	0	0	398	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	503	0.000	0	0.0	0.0	0.000	A
C-D	40	10			40				
C-A	66	16			66				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	531	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	448	0.000	0	0.0	0.0	0.000	A
A-BCD	255	64	622	0.410	254	0.5	0.7	9.761	A
A-B	0.62	0.15			0.62				
A-C	44	11			44				
D-ABC	0	0	384	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	488	0.000	0	0.0	0.0	0.000	A
C-D	48	12			48				
C-A	78	20			78				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	515	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	428	0.000	0	0.0	0.0	0.000	A
A-BCD	322	80	628	0.513	320	0.7	1.1	11.669	B
A-B	0.62	0.16			0.62				
A-C	44	11			44				
D-ABC	0	0	364	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	469	0.000	0	0.0	0.0	0.000	A
C-D	58	15			58				
C-A	96	24			96				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	515	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	428	0.000	0	0.0	0.0	0.000	A
A-BCD	322	81	628	0.513	322	1.1	1.1	11.787	B
A-B	0.62	0.15			0.62				
A-C	44	11			44				
D-ABC	0	0	364	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	468	0.000	0	0.0	0.0	0.000	A
C-D	58	15			58				
C-A	96	24			96				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	531	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	447	0.000	0	0.0	0.0	0.000	A
A-BCD	255	64	623	0.410	257	1.1	0.8	9.895	A
A-B	0.61	0.15			0.61				
A-C	44	11			44				
D-ABC	0	0	383	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	488	0.000	0	0.0	0.0	0.000	A
C-D	48	12			48				
C-A	78	20			78				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	543	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	462	0.000	0	0.0	0.0	0.000	A
A-BCD	209	52	619	0.338	210	0.8	0.6	8.833	A
A-B	0.58	0.14			0.58				
A-C	41	10			41				
D-ABC	0	0	397	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	502	0.000	0	0.0	0.0	0.000	A
C-D	40	10			40				
C-A	66	16			66				

2028 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		14.74	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	523	100.000
B - Station Road North		ONE HOUR	✓	1	100.000
C - B1078 South East		ONE HOUR	✓	220	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	193	330
	B - Station Road North	1	0	0	0
	C - B1078 South East	150	1	0	70
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	4	0	0	1
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.78	23.86	4.0	C	419	628
A-B					0	0
A-C					61	91
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	6.12	0.0	A	2	2
C-D					64	95
C-A					137	205

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	505	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	419	0.000	0	0.0	0.0	0.000	A
A-BCD	320	80	651	0.491	316	0.0	1.1	10.637	B
A-B	0	0			0				
A-C	74	18			74				
D-ABC	0	0	361	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.30	592	0.002	1	0.0	0.0	6.096	A
C-D	52	13			52				
C-A	112	28			112				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	484	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	396	0.000	0	0.0	0.0	0.000	A
A-BCD	403	101	665	0.606	400	1.1	1.8	13.688	B
A-B	0	0			0				
A-C	67	17			67				
D-ABC	0	0	339	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.39	595	0.003	2	0.0	0.0	6.063	A
C-D	62	16			62				
C-A	134	34			134				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	456	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	364	0.000	0	0.0	0.0	0.000	A
A-BCD	530	133	683	0.776	522	1.8	3.7	21.943	C
A-B	0	0			0				
A-C	45	11			45				
D-ABC	0	0	308	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.54	602	0.004	2	0.0	0.0	5.999	A
C-D	76	19			76				
C-A	164	41			164				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	454	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	362	0.000	0	0.0	0.0	0.000	A
A-BCD	533	133	685	0.778	532	3.7	4.0	23.861	C
A-B	0	0			0				
A-C	43	11			43				
D-ABC	0	0	306	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.54	600	0.004	2	0.0	0.0	6.024	A
C-D	76	19			76				
C-A	164	41			164				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	482	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	393	0.000	0	0.0	0.0	0.000	A
A-BCD	406	101	667	0.608	414	4.0	1.9	14.751	B
A-B	0	0			0				
A-C	64	16			64				
D-ABC	0	0	336	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.39	592	0.003	2	0.0	0.0	6.106	A
C-D	62	16			62				
C-A	134	34			134				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	503	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	417	0.000	0	0.0	0.0	0.000	A
A-BCD	322	80	652	0.493	325	1.9	1.2	11.117	B
A-B	0	0			0				
A-C	72	18			72				
D-ABC	0	0	359	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.31	590	0.002	1	0.0	0.0	6.123	A
C-D	52	13			52				
C-A	112	28			112				

2028 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		4.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	316	100.000
B - Station Road North		ONE HOUR	✓	5	100.000
C - B1078 South East		ONE HOUR	✓	159	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	142	175
	B - Station Road North	2	0	0	2
	C - B1078 South East	108	0	0	51
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	3	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	2	0	0	12
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.39	8.93	0.7	A	202	304
A-B					0	0
A-C					88	132
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					46	70
C-A					99	149

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	539	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	463	0.000	0	0.0	0.0	0.000	A
A-BCD	158	40	634	0.249	156	0.0	0.4	7.520	A
A-B	0	0			0				
A-C	80	20			80				
D-ABC	0	0	403	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	500	0.000	0	0.0	0.0	0.000	A
C-D	38	10			38				
C-A	81	20			81				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	527	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	448	0.000	0	0.0	0.0	0.000	A
A-BCD	196	49	644	0.305	196	0.4	0.5	8.036	A
A-B	0	0			0				
A-C	88	22			88				
D-ABC	0	0	390	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	487	0.000	0	0.0	0.0	0.000	A
C-D	45	11			45				
C-A	97	24			97				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	510	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	429	0.000	0	0.0	0.0	0.000	A
A-BCD	253	63	657	0.385	252	0.5	0.7	8.894	A
A-B	0	0			0				
A-C	96	24			96				
D-ABC	0	0	373	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	470	0.000	0	0.0	0.0	0.000	A
C-D	56	14			56				
C-A	119	30			119				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	510	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	428	0.000	0	0.0	0.0	0.000	A
A-BCD	253	63	657	0.385	253	0.7	0.7	8.931	A
A-B	0	0			0				
A-C	96	24			96				
D-ABC	0	0	373	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	470	0.000	0	0.0	0.0	0.000	A
C-D	56	14			56				
C-A	119	30			119				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	527	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	448	0.000	0	0.0	0.0	0.000	A
A-BCD	196	49	644	0.305	197	0.7	0.5	8.080	A
A-B	0	0			0				
A-C	88	22			88				
D-ABC	0	0	390	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	487	0.000	0	0.0	0.0	0.000	A
C-D	45	11			45				
C-A	97	24			97				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	539	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	462	0.000	0	0.0	0.0	0.000	A
A-BCD	158	40	635	0.250	159	0.5	0.4	7.583	A
A-B	0	0			0				
A-C	80	20			80				
D-ABC	0	0	403	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	499	0.000	0	0.0	0.0	0.000	A
C-D	38	10			38				
C-A	81	20			81				

2028 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		3.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	355	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	157	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	185	170
	B - Station Road North	0	0	0	0
	C - B1078 South East	126	0	0	31
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	2
	B - Station Road North	0	0	0	0
	C - B1078 South East	2	0	0	6
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.38	8.25	0.8	A	210	315
A-B					0	0
A-C					116	174
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					28	43
C-A					115	173

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	533	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	456	0.000	0	0.0	0.0	0.000	A
A-BCD	162	40	670	0.242	160	0.0	0.4	7.056	A
A-B	0	0			0				
A-C	106	26			106				
D-ABC	0	0	400	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	502	0.000	0	0.0	0.0	0.000	A
C-D	23	6			23				
C-A	95	24			95				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	520	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	440	0.000	0	0.0	0.0	0.000	A
A-BCD	203	51	683	0.297	202	0.4	0.5	7.487	A
A-B	0	0			0				
A-C	117	29			117				
D-ABC	0	0	387	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	488	0.000	0	0.0	0.0	0.000	A
C-D	28	7			28				
C-A	113	28			113				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	501	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	419	0.000	0	0.0	0.0	0.000	A
A-BCD	265	66	703	0.377	264	0.5	0.8	8.211	A
A-B	0	0			0				
A-C	126	32			126				
D-ABC	0	0	368	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	470	0.000	0	0.0	0.0	0.000	A
C-D	34	9			34				
C-A	138	35			138				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	501	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	419	0.000	0	0.0	0.0	0.000	A
A-BCD	265	66	703	0.377	265	0.8	0.8	8.245	A
A-B	0	0			0				
A-C	126	32			126				
D-ABC	0	0	368	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	469	0.000	0	0.0	0.0	0.000	A
C-D	34	9			34				
C-A	138	35			138				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	519	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	440	0.000	0	0.0	0.0	0.000	A
A-BCD	203	51	684	0.297	204	0.8	0.5	7.530	A
A-B	0	0			0				
A-C	116	29			116				
D-ABC	0	0	386	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	488	0.000	0	0.0	0.0	0.000	A
C-D	28	7			28				
C-A	113	28			113				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	533	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	456	0.000	0	0.0	0.0	0.000	A
A-BCD	162	41	670	0.242	163	0.5	0.4	7.115	A
A-B	0	0			0				
A-C	105	26			105				
D-ABC	0	0	400	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	501	0.000	0	0.0	0.0	0.000	A
C-D	23	6			23				
C-A	95	24			95				

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		3.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	127	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	63	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	35	92
	B - Station Road North	0	0	0	0
	C - B1078 South East	35	0	0	28
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	6	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	0	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.18	7.39	0.2	A	90	134
A-B					0	0
A-C					27	41
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					25	38
C-A					32	48

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	577	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	506	0.000	0	0.0	0.0	0.000	A
A-BCD	73	18	592	0.123	72	0.0	0.1	6.914	A
A-B	0	0			0				
A-C	23	6			23				
D-ABC	0	0	440	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	549	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	26	7			26				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	573	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	501	0.000	0	0.0	0.0	0.000	A
A-BCD	88	22	594	0.147	87	0.1	0.2	7.108	A
A-B	0	0			0				
A-C	27	7			27				
D-ABC	0	0	435	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	543	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	31	8			31				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	567	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	493	0.000	0	0.0	0.0	0.000	A
A-BCD	109	27	596	0.182	108	0.2	0.2	7.386	A
A-B	0	0			0				
A-C	31	8			31				
D-ABC	0	0	428	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	535	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	39	10			39				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	567	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	493	0.000	0	0.0	0.0	0.000	A
A-BCD	109	27	596	0.182	109	0.2	0.2	7.393	A
A-B	0	0			0				
A-C	31	8			31				
D-ABC	0	0	427	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	535	0.000	0	0.0	0.0	0.000	A
C-D	30	8			30				
C-A	39	10			39				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	573	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	501	0.000	0	0.0	0.0	0.000	A
A-BCD	88	22	594	0.147	88	0.2	0.2	7.118	A
A-B	0	0			0				
A-C	27	7			27				
D-ABC	0	0	435	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	543	0.000	0	0.0	0.0	0.000	A
C-D	25	6			25				
C-A	31	8			31				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	577	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	506	0.000	0	0.0	0.0	0.000	A
A-BCD	73	18	592	0.123	73	0.2	0.1	6.935	A
A-B	0	0			0				
A-C	23	6			23				
D-ABC	0	0	440	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	548	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	26	7			26				

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		8.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	358	100.000
B - Station Road North		ONE HOUR	✓	2	100.000
C - B1078 South East		ONE HOUR	✓	140	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	1	86	272
	B - Station Road North	2	0	0	0
	C - B1078 South East	87	0	0	53
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	2
	B - Station Road North	0	0	0	0
	C - B1078 South East	3	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.56	13.00	1.4	B	287	431
A-B					0.56	0.84
A-C					41	62
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					49	73
C-A					80	120

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
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B-CD	0	0	540	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	458	0.000	0	0.0	0.0	0.000	A
A-BCD	229	57	621	0.368	226	0.0	0.6	9.076	A
A-B	0.56	0.14			0.56				
A-C	41	10			41				
D-ABC	0	0	394	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	497	0.000	0	0.0	0.0	0.000	A
C-D	40	10			40				
C-A	66	16			66				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	527	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	442	0.000	0	0.0	0.0	0.000	A
A-BCD	279	70	625	0.447	278	0.6	0.9	10.372	B
A-B	0.58	0.14			0.58				
A-C	42	11			42				
D-ABC	0	0	378	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	482	0.000	0	0.0	0.0	0.000	A
C-D	48	12			48				
C-A	78	20			78				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	510	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	422	0.000	0	0.0	0.0	0.000	A
A-BCD	353	88	631	0.560	351	0.9	1.4	12.816	B
A-B	0.56	0.14			0.56				
A-C	41	10			41				
D-ABC	0	0	357	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	461	0.000	0	0.0	0.0	0.000	A
C-D	58	15			58				
C-A	96	24			96				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	510	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	421	0.000	0	0.0	0.0	0.000	A
A-BCD	353	88	631	0.560	353	1.4	1.4	12.995	B
A-B	0.56	0.14			0.56				
A-C	41	10			41				
D-ABC	0	0	357	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	460	0.000	0	0.0	0.0	0.000	A
C-D	58	15			58				
C-A	96	24			96				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	527	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	442	0.000	0	0.0	0.0	0.000	A
A-BCD	280	70	625	0.447	282	1.4	0.9	10.557	B
A-B	0.57	0.14			0.57				
A-C	42	10			42				
D-ABC	0	0	378	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	481	0.000	0	0.0	0.0	0.000	A
C-D	48	12			48				
C-A	78	20			78				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	539	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	457	0.000	0	0.0	0.0	0.000	A
A-BCD	229	57	621	0.369	230	0.9	0.6	9.245	A
A-B	0.55	0.14			0.55				
A-C	40	10			40				
D-ABC	0	0	393	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	496	0.000	0	0.0	0.0	0.000	A
C-D	40	10			40				
C-A	66	16			66				

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		21.37	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	552	100.000
B - Station Road North		ONE HOUR	✓	1	100.000
C - B1078 South East		ONE HOUR	✓	226	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	197	355
	B - Station Road North	1	0	0	0
	C - B1078 South East	164	1	0	62
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	4	0	0	2
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.84	33.38	5.8	D	455	682
A-B					0	0
A-C					52	77
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	6.16	0.0	A	2	3
C-D					56	84
C-A					150	224

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	500	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	413	0.000	0	0.0	0.0	0.000	A
A-BCD	346	87	651	0.532	341	0.0	1.3	11.494	B
A-B	0	0			0				
A-C	69	17			69				
D-ABC	0	0	354	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.31	589	0.002	1	0.0	0.0	6.127	A
C-D	46	12			46				
C-A	123	31			123				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	478	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	388	0.000	0	0.0	0.0	0.000	A
A-BCD	437	109	665	0.657	433	1.3	2.2	15.496	C
A-B	0	0			0				
A-C	59	15			59				
D-ABC	0	0	330	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.40	591	0.003	2	0.0	0.0	6.098	A
C-D	55	14			55				
C-A	147	37			147				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	448	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	354	0.000	0	0.0	0.0	0.000	A
A-BCD	576	144	684	0.842	564	2.1	5.3	28.569	D
A-B	0	0			0				
A-C	32	8			32				
D-ABC	0	0	296	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.55	598	0.004	2	0.0	0.0	6.040	A
C-D	67	17			67				
C-A	179	45			179				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	445	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	351	0.000	0	0.0	0.0	0.000	A
A-BCD	580	145	687	0.844	578	5.3	5.8	33.380	D
A-B	0	0			0				
A-C	27	7			27				
D-ABC	0	0	293	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.55	595	0.004	2	0.0	0.0	6.078	A
C-D	67	17			67				
C-A	179	45			179				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	474	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	383	0.000	0	0.0	0.0	0.000	A
A-BCD	442	110	669	0.660	455	5.8	2.4	17.953	C
A-B	0	0			0				
A-C	55	14			55				
D-ABC	0	0	326	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.40	587	0.003	2	0.0	0.0	6.160	A
C-D	55	14			55				
C-A	147	37			147				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	498	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	410	0.000	0	0.0	0.0	0.000	A
A-BCD	348	87	653	0.534	353	2.4	1.4	12.207	B
A-B	0	0			0				
A-C	67	17			67				
D-ABC	0	0	352	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.31	586	0.002	1	0.0	0.0	6.160	A
C-D	46	12			46				
C-A	123	31			123				

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		7.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	403	100.000
B - Station Road North		ONE HOUR	✓	5	100.000
C - B1078 South East		ONE HOUR	✓	154	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	143	261
	B - Station Road North	2	0	0	2
	C - B1078 South East	109	0	0	45
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	3	3
	B - Station Road North	0	0	0	0
	C - B1078 South East	2	0	0	13
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.57	12.52	1.5	B	302	453
A-B					0	0
A-C					68	103
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					41	61
C-A					100	150

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	529	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	448	0.000	0	0.0	0.0	0.000	A
A-BCD	236	59	643	0.367	233	0.0	0.6	8.747	A
A-B	0	0			0				
A-C	68	17			68				
D-ABC	0	0	388	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	479	0.000	0	0.0	0.0	0.000	A
C-D	34	8			34				
C-A	82	21			82				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	514	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	430	0.000	0	0.0	0.0	0.000	A
A-BCD	292	73	652	0.448	291	0.6	0.9	9.962	A
A-B	0	0			0				
A-C	70	18			70				
D-ABC	0	0	371	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	463	0.000	0	0.0	0.0	0.000	A
C-D	40	10			40				
C-A	98	25			98				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	494	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	406	0.000	0	0.0	0.0	0.000	A
A-BCD	377	94	666	0.566	374	0.9	1.5	12.337	B
A-B	0	0			0				
A-C	68	17			68				
D-ABC	0	0	349	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	440	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	120	30			120				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	494	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	406	0.000	0	0.0	0.0	0.000	A
A-BCD	377	94	666	0.566	377	1.5	1.5	12.520	B
A-B	0	0			0				
A-C	67	17			67				
D-ABC	0	0	348	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	440	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	120	30			120				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	514	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	429	0.000	0	0.0	0.0	0.000	A
A-BCD	293	73	653	0.449	295	1.5	1.0	10.146	B
A-B	0	0			0				
A-C	70	17			70				
D-ABC	0	0	370	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	462	0.000	0	0.0	0.0	0.000	A
C-D	40	10			40				
C-A	98	25			98				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	528	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	447	0.000	0	0.0	0.0	0.000	A
A-BCD	236	59	643	0.367	237	1.0	0.7	8.910	A
A-B	0	0			0				
A-C	68	17			68				
D-ABC	0	0	387	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	478	0.000	0	0.0	0.0	0.000	A
C-D	34	8			34				
C-A	82	21			82				

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		5.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	408	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	160	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	183	225
	B - Station Road North	0	0	0	0
	C - B1078 South East	130	0	0	30
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	2
	B - Station Road North	0	0	0	0
	C - B1078 South East	2	0	0	7
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.50	10.21	1.2	B	277	415
A-B					0	0
A-C					98	147
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					28	41
C-A					119	178

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	527	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	446	0.000	0	0.0	0.0	0.000	A
A-BCD	214	53	671	0.318	211	0.0	0.5	7.810	A
A-B	0	0			0				
A-C	94	23			94				
D-ABC	0	0	390	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	490	0.000	0	0.0	0.0	0.000	A
C-D	23	6			23				
C-A	98	24			98				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	512	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	429	0.000	0	0.0	0.0	0.000	A
A-BCD	267	67	684	0.391	266	0.5	0.8	8.616	A
A-B	0	0			0				
A-C	100	25			100				
D-ABC	0	0	374	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	473	0.000	0	0.0	0.0	0.000	A
C-D	27	7			27				
C-A	116	29			116				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	491	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	405	0.000	0	0.0	0.0	0.000	A
A-BCD	349	87	703	0.496	347	0.8	1.2	10.112	B
A-B	0	0			0				
A-C	101	25			101				
D-ABC	0	0	352	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	452	0.000	0	0.0	0.0	0.000	A
C-D	33	8			33				
C-A	143	36			143				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	490	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	404	0.000	0	0.0	0.0	0.000	A
A-BCD	349	87	704	0.497	349	1.2	1.2	10.208	B
A-B	0	0			0				
A-C	100	25			100				
D-ABC	0	0	352	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	451	0.000	0	0.0	0.0	0.000	A
C-D	33	8			33				
C-A	143	36			143				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	511	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	428	0.000	0	0.0	0.0	0.000	A
A-BCD	268	67	685	0.391	270	1.2	0.8	8.720	A
A-B	0	0			0				
A-C	99	25			99				
D-ABC	0	0	373	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	473	0.000	0	0.0	0.0	0.000	A
C-D	27	7			27				
C-A	116	29			116				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	526	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	446	0.000	0	0.0	0.0	0.000	A
A-BCD	214	54	671	0.319	215	0.8	0.6	7.918	A
A-B	0	0			0				
A-C	93	23			93				
D-ABC	0	0	389	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	489	0.000	0	0.0	0.0	0.000	A
C-D	23	6			23				
C-A	98	24			98				

2034 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		3.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	131	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	66	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	37	94
	B - Station Road North	0	0	0	0
	C - B1078 South East	37	0	0	29
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	0	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.19	7.42	0.2	A	92	138
A-B					0	0
A-C					29	43
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					26	39
C-A					34	51

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	576	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	505	0.000	0	0.0	0.0	0.000	A
A-BCD	74	19	593	0.125	74	0.0	0.1	6.926	A
A-B	0	0			0				
A-C	24	6			24				
D-ABC	0	0	439	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	548	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	28	7			28				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	572	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	499	0.000	0	0.0	0.0	0.000	A
A-BCD	90	22	595	0.151	90	0.1	0.2	7.126	A
A-B	0	0			0				
A-C	28	7			28				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	542	0.000	0	0.0	0.0	0.000	A
C-D	26	6			26				
C-A	33	8			33				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	565	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	491	0.000	0	0.0	0.0	0.000	A
A-BCD	111	28	597	0.187	111	0.2	0.2	7.411	A
A-B	0	0			0				
A-C	33	8			33				
D-ABC	0	0	426	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	534	0.000	0	0.0	0.0	0.000	A
C-D	31	8			31				
C-A	41	10			41				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	565	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	491	0.000	0	0.0	0.0	0.000	A
A-BCD	111	28	597	0.187	111	0.2	0.2	7.419	A
A-B	0	0			0				
A-C	33	8			33				
D-ABC	0	0	426	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	534	0.000	0	0.0	0.0	0.000	A
C-D	31	8			31				
C-A	41	10			41				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	572	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	499	0.000	0	0.0	0.0	0.000	A
A-BCD	90	22	595	0.151	90	0.2	0.2	7.136	A
A-B	0	0			0				
A-C	28	7			28				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	542	0.000	0	0.0	0.0	0.000	A
C-D	26	6			26				
C-A	33	8			33				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	576	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	505	0.000	0	0.0	0.0	0.000	A
A-BCD	74	19	593	0.126	75	0.2	0.2	6.948	A
A-B	0	0			0				
A-C	24	6			24				
D-ABC	0	0	439	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	548	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	28	7			28				

2034 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		7.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	342	100.000
B - Station Road North		ONE HOUR	✓	2	100.000
C - B1078 South East		ONE HOUR	✓	162	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	1	87	255
	B - Station Road North	2	0	0	0
	C - B1078 South East	91	0	0	71
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	3
	B - Station Road North	0	0	0	0
	C - B1078 South East	3	0	0	1
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.53	12.30	1.2	B	270	405
A-B					0.61	0.92
A-C					44	65
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					65	96
C-A					84	125

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	540	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	459	0.000	0	0.0	0.0	0.000	A
A-BCD	215	54	617	0.348	212	0.0	0.6	8.863	A
A-B	0.59	0.15			0.59				
A-C	42	11			42				
D-ABC	0	0	395	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	502	0.000	0	0.0	0.0	0.000	A
C-D	53	13			53				
C-A	69	17			69				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	528	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	444	0.000	0	0.0	0.0	0.000	A
A-BCD	263	66	620	0.423	262	0.6	0.8	10.021	B
A-B	0.62	0.16			0.62				
A-C	45	11			45				
D-ABC	0	0	380	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	487	0.000	0	0.0	0.0	0.000	A
C-D	64	16			64				
C-A	82	20			82				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	510	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	424	0.000	0	0.0	0.0	0.000	A
A-BCD	332	83	625	0.531	330	0.8	1.2	12.158	B
A-B	0.62	0.15			0.62				
A-C	44	11			44				
D-ABC	0	0	360	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	467	0.000	0	0.0	0.0	0.000	A
C-D	78	20			78				
C-A	100	25			100				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	510	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	423	0.000	0	0.0	0.0	0.000	A
A-BCD	332	83	626	0.531	332	1.2	1.2	12.299	B
A-B	0.62	0.15			0.62				
A-C	44	11			44				
D-ABC	0	0	359	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	78	20			78				
C-A	100	25			100				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	527	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	443	0.000	0	0.0	0.0	0.000	A
A-BCD	263	66	621	0.424	265	1.2	0.8	10.174	B
A-B	0.62	0.15			0.62				
A-C	44	11			44				
D-ABC	0	0	379	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	486	0.000	0	0.0	0.0	0.000	A
C-D	64	16			64				
C-A	82	20			82				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	540	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	459	0.000	0	0.0	0.0	0.000	A
A-BCD	215	54	617	0.349	216	0.8	0.6	9.009	A
A-B	0.59	0.15			0.59				
A-C	42	11			42				
D-ABC	0	0	394	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	501	0.000	0	0.0	0.0	0.000	A
C-D	53	13			53				
C-A	69	17			69				

2034 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		21.48	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	565	100.000
B - Station Road North		ONE HOUR	✓	1	100.000
C - B1078 South East		ONE HOUR	✓	266	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	216	349
	B - Station Road North	1	0	0	0
	C - B1078 South East	183	1	0	83
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	4	0	0	1
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.85	35.23	6.3	E	463	695
A-B					0	0
A-C					55	83
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	5.95	0.0	A	2	3
C-D					75	113
C-A					167	250

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	494	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	407	0.000	0	0.0	0.0	0.000	A
A-BCD	349	87	656	0.532	344	0.0	1.3	11.405	B
A-B	0	0			0				
A-C	76	19			76				
D-ABC	0	0	349	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.34	610	0.002	1	0.0	0.0	5.917	A
C-D	62	15			62				
C-A	137	34			137				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	471	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	381	0.000	0	0.0	0.0	0.000	A
A-BCD	443	111	671	0.661	440	1.3	2.2	15.497	C
A-B	0	0			0				
A-C	64	16			64				
D-ABC	0	0	324	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.44	617	0.003	2	0.0	0.0	5.847	A
C-D	74	18			74				
C-A	164	41			164				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	438	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	346	0.000	0	0.0	0.0	0.000	A
A-BCD	590	147	692	0.852	576	2.2	5.7	29.550	D
A-B	0	0			0				
A-C	32	8			32				
D-ABC	0	0	290	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.62	630	0.004	2	0.0	0.0	5.733	A
C-D	90	23			90				
C-A	200	50			200				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	435	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	342	0.000	0	0.0	0.0	0.000	A
A-BCD	595	149	696	0.855	592	5.7	6.3	35.232	E
A-B	0	0			0				
A-C	27	7			27				
D-ABC	0	0	286	0.000	0	0.0	0.0	0.000	A
C-ABD	3	0.63	626	0.004	3	0.0	0.0	5.768	A
C-D	90	23			90				
C-A	200	50			200				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	467	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	376	0.000	0	0.0	0.0	0.000	A
A-BCD	449	112	677	0.664	464	6.3	2.5	18.270	C
A-B	0	0			0				
A-C	59	15			59				
D-ABC	0	0	320	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.45	612	0.003	2	0.0	0.0	5.906	A
C-D	74	18			74				
C-A	164	41			164				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	492	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	405	0.000	0	0.0	0.0	0.000	A
A-BCD	352	88	659	0.534	356	2.5	1.4	12.136	B
A-B	0	0			0				
A-C	73	18			73				
D-ABC	0	0	347	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.34	607	0.002	1	0.0	0.0	5.951	A
C-D	62	15			62				
C-A	137	34			137				

2034 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		4.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	353	100.000
B - Station Road North		ONE HOUR	✓	5	100.000
C - B1078 South East		ONE HOUR	✓	185	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	160	194
	B - Station Road North	2	0	0	2
	C - B1078 South East	119	0	0	66
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	3	4
	B - Station Road North	0	0	0	0
	C - B1078 South East	2	0	0	9
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.44	9.60	0.9	A	231	347
A-B					0	0
A-C					93	140
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					60	90
C-A					109	164

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	532	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	454	0.000	0	0.0	0.0	0.000	A
A-BCD	179	45	641	0.280	178	0.0	0.4	7.745	A
A-B	0	0			0				
A-C	87	22			87				
D-ABC	0	0	396	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	496	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	90	22			90				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	518	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	438	0.000	0	0.0	0.0	0.000	A
A-BCD	224	56	652	0.343	223	0.4	0.6	8.402	A
A-B	0	0			0				
A-C	94	24			94				
D-ABC	0	0	381	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	482	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	107	27			107				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	499	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	416	0.000	0	0.0	0.0	0.000	A
A-BCD	290	73	666	0.436	289	0.6	0.9	9.546	A
A-B	0	0			0				
A-C	99	25			99				
D-ABC	0	0	361	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	463	0.000	0	0.0	0.0	0.000	A
C-D	72	18			72				
C-A	131	33			131				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	498	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	416	0.000	0	0.0	0.0	0.000	A
A-BCD	291	73	667	0.436	291	0.9	0.9	9.600	A
A-B	0	0			0				
A-C	99	25			99				
D-ABC	0	0	361	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	462	0.000	0	0.0	0.0	0.000	A
C-D	72	18			72				
C-A	131	33			131				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	517	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	437	0.000	0	0.0	0.0	0.000	A
A-BCD	224	56	652	0.344	225	0.9	0.6	8.466	A
A-B	0	0			0				
A-C	94	23			94				
D-ABC	0	0	381	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	481	0.000	0	0.0	0.0	0.000	A
C-D	59	15			59				
C-A	107	27			107				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	531	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	453	0.000	0	0.0	0.0	0.000	A
A-BCD	180	45	642	0.280	181	0.6	0.5	7.828	A
A-B	0	0			0				
A-C	86	22			86				
D-ABC	0	0	395	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	495	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	90	22			90				

2034 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		4.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	395	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	196	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	205	190
	B - Station Road North	0	0	0	0
	C - B1078 South East	141	0	0	55
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	2
	B - Station Road North	0	0	0	0
	C - B1078 South East	1	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.43	8.99	1.0	A	243	364
A-B					0	0
A-C					120	180
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					50	76
C-A					129	194

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	524	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	446	0.000	0	0.0	0.0	0.000	A
A-BCD	186	46	675	0.275	184	0.0	0.5	7.320	A
A-B	0	0			0				
A-C	112	28			112				
D-ABC	0	0	391	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	498	0.000	0	0.0	0.0	0.000	A
C-D	41	10			41				
C-A	106	26			106				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	509	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	428	0.000	0	0.0	0.0	0.000	A
A-BCD	234	59	690	0.340	233	0.5	0.6	7.899	A
A-B	0	0			0				
A-C	121	30			121				
D-ABC	0	0	376	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	482	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	126	32			126				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	487	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	404	0.000	0	0.0	0.0	0.000	A
A-BCD	308	77	710	0.434	307	0.6	1.0	8.933	A
A-B	0	0			0				
A-C	127	32			127				
D-ABC	0	0	355	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	461	0.000	0	0.0	0.0	0.000	A
C-D	61	15			61				
C-A	155	39			155				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	487	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	404	0.000	0	0.0	0.0	0.000	A
A-BCD	309	77	711	0.434	309	1.0	1.0	8.987	A
A-B	0	0			0				
A-C	127	32			127				
D-ABC	0	0	354	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	461	0.000	0	0.0	0.0	0.000	A
C-D	61	15			61				
C-A	155	39			155				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	508	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	428	0.000	0	0.0	0.0	0.000	A
A-BCD	235	59	690	0.340	236	1.0	0.7	7.964	A
A-B	0	0			0				
A-C	121	30			121				
D-ABC	0	0	376	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	482	0.000	0	0.0	0.0	0.000	A
C-D	49	12			49				
C-A	126	32			126				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	524	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	446	0.000	0	0.0	0.0	0.000	A
A-BCD	186	47	675	0.276	187	0.7	0.5	7.396	A
A-B	0	0			0				
A-C	111	28			111				
D-ABC	0	0	391	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	497	0.000	0	0.0	0.0	0.000	A
C-D	41	10			41				
C-A	106	26			106				

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		3.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	131	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	66	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	37	94
	B - Station Road North	0	0	0	0
	C - B1078 South East	37	0	0	29
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	5	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	0	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.19	7.42	0.2	A	92	138
A-B					0	0
A-C					29	43
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					26	39
C-A					34	51

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	576	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	505	0.000	0	0.0	0.0	0.000	A
A-BCD	74	19	593	0.125	74	0.0	0.1	6.926	A
A-B	0	0			0				
A-C	24	6			24				
D-ABC	0	0	439	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	548	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	28	7			28				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	572	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	499	0.000	0	0.0	0.0	0.000	A
A-BCD	90	22	595	0.151	90	0.1	0.2	7.126	A
A-B	0	0			0				
A-C	28	7			28				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	542	0.000	0	0.0	0.0	0.000	A
C-D	26	6			26				
C-A	33	8			33				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	565	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	491	0.000	0	0.0	0.0	0.000	A
A-BCD	111	28	597	0.187	111	0.2	0.2	7.411	A
A-B	0	0			0				
A-C	33	8			33				
D-ABC	0	0	426	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	534	0.000	0	0.0	0.0	0.000	A
C-D	31	8			31				
C-A	41	10			41				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	565	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	491	0.000	0	0.0	0.0	0.000	A
A-BCD	111	28	597	0.187	111	0.2	0.2	7.419	A
A-B	0	0			0				
A-C	33	8			33				
D-ABC	0	0	426	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	534	0.000	0	0.0	0.0	0.000	A
C-D	31	8			31				
C-A	41	10			41				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	572	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	499	0.000	0	0.0	0.0	0.000	A
A-BCD	90	22	595	0.151	90	0.2	0.2	7.136	A
A-B	0	0			0				
A-C	28	7			28				
D-ABC	0	0	434	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	542	0.000	0	0.0	0.0	0.000	A
C-D	26	6			26				
C-A	33	8			33				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	576	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	505	0.000	0	0.0	0.0	0.000	A
A-BCD	74	19	593	0.126	75	0.2	0.2	6.948	A
A-B	0	0			0				
A-C	24	6			24				
D-ABC	0	0	439	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	548	0.000	0	0.0	0.0	0.000	A
C-D	21	5			21				
C-A	28	7			28				

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		7.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	344	100.000
B - Station Road North		ONE HOUR	✓	2	100.000
C - B1078 South East		ONE HOUR	✓	162	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	1	89	255
	B - Station Road North	2	0	0	0
	C - B1078 South East	91	0	0	71
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	4	3
	B - Station Road North	0	0	0	0
	C - B1078 South East	3	0	0	1
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.53	12.28	1.2	B	271	406
A-B					0.61	0.91
A-C					45	67
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					65	98
C-A					84	125

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	540	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	459	0.000	0	0.0	0.0	0.000	A
A-BCD	215	54	618	0.348	213	0.0	0.6	8.851	A
A-B	0.59	0.15			0.59				
A-C	43	11			43				
D-ABC	0	0	395	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	501	0.000	0	0.0	0.0	0.000	A
C-D	53	13			53				
C-A	69	17			69				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	527	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	444	0.000	0	0.0	0.0	0.000	A
A-BCD	263	66	622	0.424	262	0.6	0.8	10.007	B
A-B	0.62	0.16			0.62				
A-C	46	11			46				
D-ABC	0	0	380	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	486	0.000	0	0.0	0.0	0.000	A
C-D	64	16			64				
C-A	82	20			82				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	510	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	423	0.000	0	0.0	0.0	0.000	A
A-BCD	333	83	627	0.532	332	0.8	1.2	12.142	B
A-B	0.62	0.15			0.62				
A-C	45	11			45				
D-ABC	0	0	359	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	78	20			78				
C-A	100	25			100				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	510	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	423	0.000	0	0.0	0.0	0.000	A
A-BCD	334	83	627	0.532	334	1.2	1.2	12.282	B
A-B	0.61	0.15			0.61				
A-C	45	11			45				
D-ABC	0	0	359	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	466	0.000	0	0.0	0.0	0.000	A
C-D	78	20			78				
C-A	100	25			100				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	527	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	443	0.000	0	0.0	0.0	0.000	A
A-BCD	264	66	622	0.424	265	1.2	0.8	10.160	B
A-B	0.62	0.15			0.62				
A-C	45	11			45				
D-ABC	0	0	379	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	486	0.000	0	0.0	0.0	0.000	A
C-D	64	16			64				
C-A	82	20			82				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	539	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	458	0.000	0	0.0	0.0	0.000	A
A-BCD	216	54	618	0.349	217	0.8	0.6	8.997	A
A-B	0.59	0.15			0.59				
A-C	43	11			43				
D-ABC	0	0	394	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	500	0.000	0	0.0	0.0	0.000	A
C-D	53	13			53				
C-A	69	17			69				

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		22.74	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	568	100.000
B - Station Road North		ONE HOUR	✓	1	100.000
C - B1078 South East		ONE HOUR	✓	270	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	218	350
	B - Station Road North	1	0	0	0
	C - B1078 South East	183	1	0	87
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	2	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	4	0	0	1
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.86	37.26	6.7	E	467	700
A-B					0	0
A-C					54	81
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	5.94	0.0	A	2	3
C-D					79	119
C-A					167	250

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	493	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	406	0.000	0	0.0	0.0	0.000	A
A-BCD	352	88	655	0.537	346	0.0	1.3	11.541	B
A-B	0	0			0				
A-C	76	19			76				
D-ABC	0	0	349	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.34	611	0.002	1	0.0	0.0	5.903	A
C-D	65	16			65				
C-A	137	34			137				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	470	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	380	0.000	0	0.0	0.0	0.000	A
A-BCD	447	112	670	0.667	443	1.3	2.3	15.801	C
A-B	0	0			0				
A-C	64	16			64				
D-ABC	0	0	323	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.45	619	0.003	2	0.0	0.0	5.830	A
C-D	78	19			78				
C-A	164	41			164				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	437	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	344	0.000	0	0.0	0.0	0.000	A
A-BCD	595	149	691	0.861	580	2.3	6.0	30.785	D
A-B	0	0			0				
A-C	30	8			30				
D-ABC	0	0	288	0.000	0	0.0	0.0	0.000	A
C-ABD	3	0.63	632	0.004	3	0.0	0.0	5.713	A
C-D	95	24			95				
C-A	200	50			200				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	433	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	341	0.000	0	0.0	0.0	0.000	A
A-BCD	601	150	695	0.864	598	6.0	6.7	37.265	E
A-B	0	0			0				
A-C	25	6			25				
D-ABC	0	0	285	0.000	0	0.0	0.0	0.000	A
C-ABD	3	0.63	629	0.004	3	0.0	0.0	5.751	A
C-D	95	24			95				
C-A	200	50			200				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	465	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	375	0.000	0	0.0	0.0	0.000	A
A-BCD	453	113	676	0.670	469	6.7	2.6	18.917	C
A-B	0	0			0				
A-C	58	14			58				
D-ABC	0	0	319	0.000	0	0.0	0.0	0.000	A
C-ABD	2	0.45	614	0.003	2	0.0	0.0	5.894	A
C-D	78	19			78				
C-A	164	41			164				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	491	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	404	0.000	0	0.0	0.0	0.000	A
A-BCD	354	89	657	0.539	359	2.6	1.4	12.314	B
A-B	0	0			0				
A-C	73	18			73				
D-ABC	0	0	346	0.000	0	0.0	0.0	0.000	A
C-ABD	1	0.34	608	0.002	1	0.0	0.0	5.935	A
C-D	65	16			65				
C-A	137	34			137				

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		4.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	352	100.000
B - Station Road North		ONE HOUR	✓	5	100.000
C - B1078 South East		ONE HOUR	✓	187	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	160	193
	B - Station Road North	2	0	0	2
	C - B1078 South East	120	0	0	67
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	3	5
	B - Station Road North	0	0	0	0
	C - B1078 South East	2	0	0	9
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.44	9.62	0.9	A	230	346
A-B					0	0
A-C					93	140
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					61	92
C-A					110	165

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	532	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	454	0.000	0	0.0	0.0	0.000	A
A-BCD	179	45	639	0.279	177	0.0	0.4	7.763	A
A-B	0	0			0				
A-C	87	22			87				
D-ABC	0	0	396	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	496	0.000	0	0.0	0.0	0.000	A
C-D	50	13			50				
C-A	90	23			90				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	518	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	438	0.000	0	0.0	0.0	0.000	A
A-BCD	223	56	650	0.343	222	0.4	0.6	8.420	A
A-B	0	0			0				
A-C	94	24			94				
D-ABC	0	0	381	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	482	0.000	0	0.0	0.0	0.000	A
C-D	60	15			60				
C-A	108	27			108				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	498	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	416	0.000	0	0.0	0.0	0.000	A
A-BCD	289	72	665	0.435	288	0.6	0.9	9.564	A
A-B	0	0			0				
A-C	99	25			99				
D-ABC	0	0	361	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	463	0.000	0	0.0	0.0	0.000	A
C-D	73	18			73				
C-A	132	33			132				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	498	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	415	0.000	0	0.0	0.0	0.000	A
A-BCD	289	72	665	0.435	289	0.9	0.9	9.620	A
A-B	0	0			0				
A-C	99	25			99				
D-ABC	0	0	361	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	463	0.000	0	0.0	0.0	0.000	A
C-D	73	18			73				
C-A	132	33			132				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	517	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	437	0.000	0	0.0	0.0	0.000	A
A-BCD	223	56	650	0.343	224	0.9	0.6	8.485	A
A-B	0	0			0				
A-C	94	23			94				
D-ABC	0	0	381	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	482	0.000	0	0.0	0.0	0.000	A
C-D	60	15			60				
C-A	108	27			108				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	531	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	453	0.000	0	0.0	0.0	0.000	A
A-BCD	179	45	640	0.280	180	0.6	0.5	7.844	A
A-B	0	0			0				
A-C	86	22			86				
D-ABC	0	0	395	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	496	0.000	0	0.0	0.0	0.000	A
C-D	50	13			50				
C-A	90	23			90				

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J34c	A12 Southbound on slip / B1078 / Station Road	Crossroads	Two-way		3.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - B1078 North West		ONE HOUR	✓	393	100.000
B - Station Road North		ONE HOUR	✓	0	100.000
C - B1078 South East		ONE HOUR	✓	195	100.000
D - A12 On Slip SB		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	205	188
	B - Station Road North	0	0	0	0
	C - B1078 South East	143	0	0	52
	D - A12 On Slip SB	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - B1078 North West	B - Station Road North	C - B1078 South East	D - A12 On Slip SB
From	A - B1078 North West	0	0	1	2
	B - Station Road North	0	0	0	0
	C - B1078 South East	1	0	0	4
	D - A12 On Slip SB	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-CD	0.00	0.00	0.0	A	0	0
B-AD	0.00	0.00	0.0	A	0	0
A-BCD	0.43	8.91	1.0	A	240	361
A-B					0	0
A-C					121	181
D-ABC	0.00	0.00	0.0	A	0	0
C-ABD	0.00	0.00	0.0	A	0	0
C-D					48	72
C-A					131	196

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service

B-CD	0	0	524	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	446	0.000	0	0.0	0.0	0.000	A
A-BCD	184	46	675	0.272	182	0.0	0.5	7.288	A
A-B	0	0			0				
A-C	112	28			112				
D-ABC	0	0	392	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	498	0.000	0	0.0	0.0	0.000	A
C-D	39	10			39				
C-A	107	27			107				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	509	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	429	0.000	0	0.0	0.0	0.000	A
A-BCD	232	58	690	0.336	231	0.5	0.6	7.853	A
A-B	0	0			0				
A-C	122	31			122				
D-ABC	0	0	376	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	483	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	128	32			128				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	488	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	405	0.000	0	0.0	0.0	0.000	A
A-BCD	305	76	710	0.429	304	0.6	0.9	8.857	A
A-B	0	0			0				
A-C	128	32			128				
D-ABC	0	0	355	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	462	0.000	0	0.0	0.0	0.000	A
C-D	57	14			57				
C-A	157	39			157				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	487	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	405	0.000	0	0.0	0.0	0.000	A
A-BCD	305	76	711	0.430	305	0.9	1.0	8.909	A
A-B	0	0			0				
A-C	128	32			128				
D-ABC	0	0	355	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	462	0.000	0	0.0	0.0	0.000	A
C-D	57	14			57				
C-A	157	39			157				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	509	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	428	0.000	0	0.0	0.0	0.000	A
A-BCD	232	58	690	0.336	233	1.0	0.6	7.915	A
A-B	0	0			0				
A-C	122	30			122				
D-ABC	0	0	376	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	482	0.000	0	0.0	0.0	0.000	A
C-D	47	12			47				
C-A	128	32			128				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-CD	0	0	524	0.000	0	0.0	0.0	0.000	A
B-AD	0	0	446	0.000	0	0.0	0.0	0.000	A
A-BCD	184	46	675	0.273	185	0.6	0.5	7.363	A
A-B	0	0			0				
A-C	112	28			112				
D-ABC	0	0	391	0.000	0	0.0	0.0	0.000	A
C-ABD	0	0	497	0.000	0	0.0	0.0	0.000	A
C-D	39	10			39				
C-A	107	27			107				

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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- »Base Year, 6-7 AM
- »Base Year, 7-8 AM
- »Base Year, 8-9 AM
- »Base Year, 3-4 PM
- »Base Year, 5-6 PM
- »2023 Reference Case , 6-7 AM
- »2023 Reference Case , 7-8 AM
- »2023 Reference Case , 8-9 AM
- »2023 Reference Case , 3-4 PM
- »2023 Reference Case , 5-6 PM
- »2023 Early Years , 6-7 AM
- »2023 Early Years , 7-8 AM
- »2023 Early Years , 8-9 AM
- »2023 Early Years , 3-4 PM
- »2023 Early Years , 5-6 PM
- »2028 Reference Case , 6-7 AM
- »2028 Reference Case , 7-8 AM
- »2028 Reference Case , 8-9 AM
- »2028 Reference Case , 3-4 PM
- »2028 Reference Case , 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case , 6-7 AM
- »2034 Reference Case , 7-8 AM
- »2034 Reference Case , 8-9 AM
- »2034 Reference Case , 3-4 PM
- »2034 Reference Case , 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM						
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS		
Base Year																											
Stream B-AC	D1	0.1	8.85	0.06	A	D2	0.2	12.93	0.17	B	D3	0.4	14.38	0.27	B	D4	0.6	16.82	0.40	C	D5	0.4	12.72	0.26	B		
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	5.10	0.01	A		0.0	4.66	0.01	A		0.0	4.82	0.01	A		
2023 Reference Case																											
Stream B-AC	D6	0.1	8.98	0.08	A	D7	0.3	13.54	0.21	B	D8	0.4	15.04	0.28	C	D9	0.7	18.24	0.42	C	D10	0.6	15.26	0.38	C		
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	5.13	0.01	A		0.0	4.64	0.01	A		0.0	4.79	0.01	A		
2023 Early Years																											
Stream B-AC	D11	0.1	9.53	0.11	A	D12	0.5	18.89	0.35	C	D13	0.5	16.26	0.32	C	D14	0.8	19.44	0.46	C	D15	1.5	24.67	0.61	C		
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	5.17	0.01	A		0.0	4.66	0.01	A		0.0	4.61	0.01	A		
2028 Reference Case																											
Stream B-AC	D16	0.1	9.10	0.08	A	D17	0.3	13.99	0.22	B	D18	0.4	15.40	0.30	C	D19	0.7	18.26	0.42	C	D20	0.6	15.54	0.38	C		
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	5.01	0.01	A		0.0	4.64	0.01	A		0.0	4.76	0.01	A		
2028 Peak Construction																											
Stream B-AC	D21	0.1	10.51	0.09	B	D22	0.3	16.97	0.26	C	D23	0.5	16.52	0.32	C	D24	1.0	22.50	0.50	C	D25	0.7	17.06	0.41	C		
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	5.01	0.01	A		0.0	4.42	0.01	A		0.0	4.58	0.01	A		
2034 Reference Case																											
Stream B-AC	D26	0.1	9.22	0.08	A	D27	0.3	14.30	0.23	B	D28	0.5	16.20	0.33	C	D29	0.8	20.54	0.46	C	D30	0.3	12.83	0.22	B		
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	4.80	0.01	A		0.0	4.58	0.01	A		0.0	4.81	0.01	A		
2034 Operational Led																											
Stream B-AC	D31	0.1	9.18	0.08	A	D32	0.3	14.29	0.23	B	D33	0.5	16.06	0.32	C	D34	0.8	20.50	0.46	C	D35	0.3	12.81	0.22	B		
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A		0.0	4.79	0.01	A		0.0	4.58	0.01	A		0.0	4.80	0.01	A		

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / B1125 Angel Lane
Location	52.321370, 1.598029
Site number	38
Date	01/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 North		Major
B	Angel Lane South East		Minor
C	A12 South West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 South West	5.50			80.6	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Angel Lane South East	One lane	3.72	16	75

Slope / Intercept / Capacity

Stream Intercept Adjustments

Stream intercept adjustment	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
B-AC	✓	Please refer column "V" in "modelled vs Observed" worksheet in "Queue validation" spreadsheet	0

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	557	0.104	0.262	0.165	0.374
B-C	720	0.113	0.285	-	-
C-B	621	0.246	0.246	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	308	100.000
B - Angel Lane South East		ONE HOUR	✓	25	100.000
C - A12 South West		ONE HOUR	✓	96	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 North	B - Angel Lane South East	C - A12 South West
A - A12 North	0	58	250
B - Angel Lane South East	25	0	0
C - A12 South West	96	0	0

Vehicle Mix

Heavy Vehicle Percentages

	From	To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
	A - A12 North	0	7	8
	B - Angel Lane South East	4	0	0
	C - A12 South West	16	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.06	8.85	0.1	A	23	34
C-AB	0.00	0.00	0.0	A	0	0
C-A					88	132
A-B					53	80
A-C					229	344

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	5	466	0.040	19	0.0	0.0	8.041	A
C-AB	0	0	519	0.000	0	0.0	0.0	0.000	A
C-A	72	18			72				
A-B	44	11			44				
A-C	188	47			188				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	453	0.050	22	0.0	0.1	8.365	A
C-AB	0	0	507	0.000	0	0.0	0.0	0.000	A
C-A	86	22			86				
A-B	52	13			52				
A-C	225	56			225				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	434	0.063	27	0.1	0.1	8.850	A
C-AB	0	0	492	0.000	0	0.0	0.0	0.000	A
C-A	106	26			106				
A-B	64	16			64				
A-C	275	69			275				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	434	0.063	28	0.1	0.1	8.852	A
C-AB	0	0	492	0.000	0	0.0	0.0	0.000	A
C-A	106	26			106				
A-B	64	16			64				
A-C	275	69			275				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	453	0.050	23	0.1	0.1	8.367	A
C-AB	0	0	507	0.000	0	0.0	0.0	0.000	A
C-A	86	22			86				
A-B	52	13			52				
A-C	225	56			225				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	5	466	0.040	19	0.1	0.0	8.047	A
C-AB	0	0	519	0.000	0	0.0	0.0	0.000	A
C-A	72	18			72				
A-B	44	11			44				
A-C	188	47			188				

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	607	100.000
B - Angel Lane South East		ONE HOUR	✓	53	100.000
C - A12 South West		ONE HOUR	✓	262	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	163	444
	B - Angel Lane South East	51	0	2
	C - A12 South West	262	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	9
	B - Angel Lane South East	4	0	0
	C - A12 South West	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.17	12.93	0.2	B	49	73
C-AB	0.00	0.00	0.0	A	0	0
C-A					240	361
A-B					150	224
A-C					407	611

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	10	402	0.099	39	0.0	0.1	9.931	A
C-AB	0	0	474	0.000	0	0.0	0.0	0.000	A
C-A	197	49			197				
A-B	123	31			123				

A-C	334	84			334				
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07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	374	0.127	48	0.1	0.1	11.009	B
C-AB	0	0	451	0.000	0	0.0	0.0	0.000	A
C-A	236	59			236				
A-B	147	37			147				
A-C	399	100			399				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	15	337	0.173	58	0.1	0.2	12.906	B
C-AB	0	0	420	0.000	0	0.0	0.0	0.000	A
C-A	288	72			288				
A-B	179	45			179				
A-C	489	122			489				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	15	337	0.173	58	0.2	0.2	12.929	B
C-AB	0	0	420	0.000	0	0.0	0.0	0.000	A
C-A	288	72			288				
A-B	179	45			179				
A-C	489	122			489				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	48	12	374	0.127	48	0.2	0.1	11.034	B
C-AB	0	0	451	0.000	0	0.0	0.0	0.000	A
C-A	236	59			236				
A-B	147	37			147				
A-C	399	100			399				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	40	10	402	0.099	40	0.1	0.1	9.963	A
C-AB	0	0	474	0.000	0	0.0	0.0	0.000	A
C-A	197	49			197				
A-B	123	31			123				
A-C	334	84			334				

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		1.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	476	100.000
B - Angel Lane South East		ONE HOUR	✓	85	100.000
C - A12 South West		ONE HOUR	✓	365	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	118	358
	B - Angel Lane South East	85	0	0
	C - A12 South West	363	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	9
	B - Angel Lane South East	4	0	0
	C - A12 South West	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.27	14.38	0.4	B	78	117
C-AB	0.01	5.10	0.0	A	3	5
C-A					331	497
A-B					108	162
A-C					329	493

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	64	16	405	0.158	63	0.0	0.2	10.505	B
C-AB	2	0.61	710	0.003	2	0.0	0.0	5.085	A
C-A	272	68			272				
A-B	89	22			89				

A-C	270	67			270				
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08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	76	19	379	0.201	76	0.2	0.2	11.858	B
C-AB	3	0.81	731	0.004	3	0.0	0.0	4.931	A
C-A	325	81			325				
A-B	106	27			106				
A-C	322	80			322				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	94	23	344	0.272	93	0.2	0.4	14.328	B
C-AB	5	1	762	0.006	5	0.0	0.0	4.734	A
C-A	397	99			397				
A-B	130	32			130				
A-C	394	99			394				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	94	23	344	0.272	94	0.4	0.4	14.379	B
C-AB	5	1	762	0.006	5	0.0	0.0	4.750	A
C-A	397	99			397				
A-B	130	32			130				
A-C	394	99			394				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	76	19	379	0.201	77	0.4	0.3	11.915	B
C-AB	3	0.81	731	0.004	3	0.0	0.0	4.969	A
C-A	325	81			325				
A-B	106	27			106				
A-C	322	80			322				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	64	16	405	0.158	64	0.3	0.2	10.567	B
C-AB	2	0.61	710	0.003	2	0.0	0.0	5.104	A
C-A	272	68			272				
A-B	89	22			89				
A-C	270	67			270				

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		2.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	408	100.000
B - Angel Lane South East		ONE HOUR	✓	127	100.000
C - A12 South West		ONE HOUR	✓	465	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	74	334
	B - Angel Lane South East	125	0	2
	C - A12 South West	463	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	7
	B - Angel Lane South East	1	0	0
	C - A12 South West	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.40	16.82	0.6	C	117	175
C-AB	0.01	4.66	0.0	A	4	6
C-A					423	634
A-B					68	102
A-C					306	460

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	96	24	417	0.229	94	0.0	0.3	11.111	B
C-AB	3	0.68	777	0.004	3	0.0	0.0	4.648	A
C-A	347	87			347				
A-B	56	14			56				

A-C	251	63			251				
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15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	114	29	391	0.292	114	0.3	0.4	12.977	B
C-AB	4	0.93	811	0.005	4	0.0	0.0	4.449	A
C-A	414	104			414				
A-B	67	17			67				
A-C	300	75			300				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	140	35	354	0.395	139	0.4	0.6	16.684	C
C-AB	5	1	861	0.006	5	0.0	0.0	4.200	A
C-A	507	127			507				
A-B	81	20			81				
A-C	368	92			368				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	140	35	354	0.395	140	0.6	0.6	16.819	C
C-AB	5	1	861	0.006	5	0.0	0.0	4.208	A
C-A	507	127			507				
A-B	81	20			81				
A-C	368	92			368				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	114	29	391	0.292	115	0.6	0.4	13.107	B
C-AB	4	0.93	811	0.005	4	0.0	0.0	4.472	A
C-A	414	104			414				
A-B	67	17			67				
A-C	300	75			300				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	96	24	417	0.229	96	0.4	0.3	11.225	B
C-AB	3	0.68	777	0.004	3	0.0	0.0	4.660	A
C-A	347	87			347				
A-B	56	14			56				
A-C	251	63			251				

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		1.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	361	100.000
B - Angel Lane South East		ONE HOUR	✓	91	100.000
C - A12 South West		ONE HOUR	✓	389	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	71	290
	B - Angel Lane South East	90	0	1
	C - A12 South West	387	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	1
	B - Angel Lane South East	2	0	0
	C - A12 South West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.26	12.72	0.4	B	84	125
C-AB	0.01	4.82	0.0	A	3	5
C-A					354	530
A-B					65	98
A-C					266	399

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	435	0.158	68	0.0	0.2	9.790	A
C-AB	2	0.62	751	0.003	2	0.0	0.0	4.809	A
C-A	290	73			290				
A-B	53	13			53				

A-C	218	55			218				
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17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	82	20	413	0.198	82	0.2	0.2	10.852	B
C-AB	3	0.81	779	0.004	3	0.0	0.0	4.636	A
C-A	346	87			346				
A-B	64	16			64				
A-C	261	65			261				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	100	25	383	0.262	100	0.2	0.3	12.687	B
C-AB	5	1	819	0.006	5	0.0	0.0	4.415	A
C-A	424	106			424				
A-B	78	20			78				
A-C	319	80			319				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	100	25	383	0.262	100	0.3	0.4	12.724	B
C-AB	5	1	819	0.006	5	0.0	0.0	4.422	A
C-A	424	106			424				
A-B	78	20			78				
A-C	319	80			319				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	82	20	413	0.198	82	0.4	0.3	10.895	B
C-AB	3	0.81	779	0.004	3	0.0	0.0	4.650	A
C-A	346	87			346				
A-B	64	16			64				
A-C	261	65			261				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	435	0.158	69	0.3	0.2	9.844	A
C-AB	2	0.62	751	0.003	2	0.0	0.0	4.817	A
C-A	290	73			290				
A-B	53	13			53				
A-C	218	55			218				

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	336	100.000
B - Angel Lane South East		ONE HOUR	✓	31	100.000
C - A12 South West		ONE HOUR	✓	99	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	78	258
	B - Angel Lane South East	31	0	0
	C - A12 South West	99	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	8
	B - Angel Lane South East	3	0	0
	C - A12 South West	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.08	8.98	0.1	A	28	42
C-AB	0.00	0.00	0.0	A	0	0
C-A					91	136
A-B					72	107
A-C					236	355

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	468	0.049	23	0.0	0.1	8.075	A
C-AB	0	0	516	0.000	0	0.0	0.0	0.000	A
C-A	75	19			75				
A-B	59	15			59				

A-C	194	49			194				
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06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	454	0.061	27	0.1	0.1	8.435	A
C-AB	0	0	504	0.000	0	0.0	0.0	0.000	A
C-A	89	22			89				
A-B	70	18			70				
A-C	232	58			232				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	8	435	0.078	34	0.1	0.1	8.977	A
C-AB	0	0	487	0.000	0	0.0	0.0	0.000	A
C-A	109	27			109				
A-B	86	21			86				
A-C	284	71			284				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	8	435	0.078	34	0.1	0.1	8.982	A
C-AB	0	0	487	0.000	0	0.0	0.0	0.000	A
C-A	109	27			109				
A-B	86	21			86				
A-C	284	71			284				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	454	0.061	28	0.1	0.1	8.439	A
C-AB	0	0	504	0.000	0	0.0	0.0	0.000	A
C-A	89	22			89				
A-B	70	18			70				
A-C	232	58			232				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	468	0.049	23	0.1	0.1	8.084	A
C-AB	0	0	516	0.000	0	0.0	0.0	0.000	A
C-A	75	19			75				
A-B	59	15			59				
A-C	194	49			194				

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	598	100.000
B - Angel Lane South East		ONE HOUR	✓	63	100.000
C - A12 South West		ONE HOUR	✓	293	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	159	438
	B - Angel Lane South East	61	0	2
	C - A12 South West	293	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.21	13.54	0.3	B	58	86
C-AB	0.00	0.00	0.0	A	0	0
C-A					269	403
A-B					146	219
A-C					402	603

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	402	0.118	47	0.0	0.1	10.132	B
C-AB	0	0	477	0.000	0	0.0	0.0	0.000	A
C-A	220	55			220				
A-B	120	30			120				

A-C	330	83			330				
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07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	14	374	0.151	56	0.1	0.2	11.338	B
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	263	66			263				
A-B	143	36			143				
A-C	394	99			394				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	335	0.206	69	0.2	0.3	13.511	B
C-AB	0	0	424	0.000	0	0.0	0.0	0.000	A
C-A	322	81			322				
A-B	176	44			176				
A-C	483	121			483				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	335	0.206	69	0.3	0.3	13.542	B
C-AB	0	0	424	0.000	0	0.0	0.0	0.000	A
C-A	322	81			322				
A-B	176	44			176				
A-C	483	121			483				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	56	14	374	0.151	57	0.3	0.2	11.373	B
C-AB	0	0	454	0.000	0	0.0	0.0	0.000	A
C-A	263	66			263				
A-B	143	36			143				
A-C	394	99			394				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	402	0.118	47	0.2	0.1	10.172	B
C-AB	0	0	477	0.000	0	0.0	0.0	0.000	A
C-A	220	55			220				
A-B	120	30			120				
A-C	330	83			330				

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		1.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	523	100.000
B - Angel Lane South East		ONE HOUR	✓	86	100.000
C - A12 South West		ONE HOUR	✓	374	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	151	372
	B - Angel Lane South East	86	0	0
	C - A12 South West	372	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	10
	B - Angel Lane South East	4	0	0
	C - A12 South West	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.28	15.04	0.4	C	78	118
C-AB	0.01	5.13	0.0	A	4	5
C-A					340	510
A-B					139	208
A-C					341	512

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	64	16	398	0.162	64	0.0	0.2	10.738	B
C-AB	2	0.62	707	0.004	2	0.0	0.0	5.109	A
C-A	279	70			279				
A-B	114	28			114				

A-C	280	70			280				
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08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	371	0.207	77	0.2	0.3	12.216	B
C-AB	3	0.83	728	0.005	3	0.0	0.0	4.954	A
C-A	333	83			333				
A-B	136	34			136				
A-C	334	84			334				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	94	24	333	0.282	94	0.3	0.4	14.977	B
C-AB	5	1	759	0.006	5	0.0	0.0	4.756	A
C-A	407	102			407				
A-B	167	42			167				
A-C	409	102			409				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	94	24	333	0.282	94	0.4	0.4	15.039	C
C-AB	5	1	759	0.006	5	0.0	0.0	4.774	A
C-A	407	102			407				
A-B	167	42			167				
A-C	409	102			409				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	77	19	371	0.207	77	0.4	0.3	12.282	B
C-AB	3	0.83	728	0.005	3	0.0	0.0	4.995	A
C-A	333	83			333				
A-B	136	34			136				
A-C	334	84			334				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	64	16	398	0.162	65	0.3	0.2	10.805	B
C-AB	3	0.63	707	0.004	3	0.0	0.0	5.132	A
C-A	279	70			279				
A-B	114	28			114				
A-C	280	70			280				

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		2.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	434	100.000
B - Angel Lane South East		ONE HOUR	✓	132	100.000
C - A12 South West		ONE HOUR	✓	480	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	77	357
	B - Angel Lane South East	130	0	2
	C - A12 South West	478	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	8
	B - Angel Lane South East	1	0	0
	C - A12 South West	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.42	18.24	0.7	C	121	182
C-AB	0.01	4.64	0.0	A	4	6
C-A					437	655
A-B					71	106
A-C					328	491

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	99	25	410	0.243	98	0.0	0.3	11.508	B
C-AB	3	0.70	780	0.004	3	0.0	0.0	4.629	A
C-A	359	90			359				
A-B	58	15			58				

A-C	269	67			269				
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15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	382	0.311	118	0.3	0.4	13.642	B
C-AB	4	0.95	816	0.005	4	0.0	0.0	4.426	A
C-A	428	107			428				
A-B	69	17			69				
A-C	321	80			321				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	145	36	343	0.425	144	0.4	0.7	18.059	C
C-AB	6	1	867	0.007	6	0.0	0.0	4.171	A
C-A	523	131			523				
A-B	85	21			85				
A-C	393	98			393				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	145	36	343	0.425	145	0.7	0.7	18.245	C
C-AB	6	1	867	0.007	6	0.0	0.0	4.181	A
C-A	523	131			523				
A-B	85	21			85				
A-C	393	98			393				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	119	30	382	0.311	120	0.7	0.5	13.808	B
C-AB	4	0.95	815	0.005	4	0.0	0.0	4.449	A
C-A	428	107			428				
A-B	69	17			69				
A-C	321	80			321				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	99	25	410	0.243	100	0.5	0.3	11.642	B
C-AB	3	0.70	780	0.004	3	0.0	0.0	4.642	A
C-A	359	90			359				
A-B	58	15			58				
A-C	269	67			269				

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		2.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	375	100.000
B - Angel Lane South East		ONE HOUR	✓	129	100.000
C - A12 South West		ONE HOUR	✓	403	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	73	302
	B - Angel Lane South East	128	0	1
	C - A12 South West	401	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	2
	B - Angel Lane South East	2	0	0
	C - A12 South West	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	15.26	0.6	C	118	178
C-AB	0.01	4.79	0.0	A	4	5
C-A					366	549
A-B					67	100
A-C					277	416

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	97	24	432	0.225	96	0.0	0.3	10.673	B
C-AB	3	0.63	755	0.003	2	0.0	0.0	4.783	A
C-A	301	75			301				
A-B	55	14			55				

A-C	228	57			228				
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17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	409	0.283	116	0.3	0.4	12.235	B
C-AB	3	0.83	784	0.004	3	0.0	0.0	4.605	A
C-A	359	90			359				
A-B	65	16			65				
A-C	272	68			272				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	142	35	378	0.376	141	0.4	0.6	15.158	C
C-AB	5	1	826	0.006	5	0.0	0.0	4.378	A
C-A	439	110			439				
A-B	80	20			80				
A-C	333	83			333				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	142	35	378	0.376	142	0.6	0.6	15.257	C
C-AB	5	1	826	0.006	5	0.0	0.0	4.386	A
C-A	439	110			439				
A-B	80	20			80				
A-C	333	83			333				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	409	0.283	117	0.6	0.4	12.336	B
C-AB	3	0.83	784	0.004	3	0.0	0.0	4.622	A
C-A	359	90			359				
A-B	65	16			65				
A-C	272	68			272				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	97	24	432	0.225	98	0.4	0.3	10.775	B
C-AB	3	0.63	755	0.003	3	0.0	0.0	4.791	A
C-A	301	75			301				
A-B	55	14			55				
A-C	228	57			228				

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	416	100.000
B - Angel Lane South East		ONE HOUR	✓	43	100.000
C - A12 South West		ONE HOUR	✓	99	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	135	281
	B - Angel Lane South East	43	0	0
	C - A12 South West	99	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	8
	B - Angel Lane South East	2	0	0
	C - A12 South West	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.11	9.53	0.1	A	39	59
C-AB	0.00	0.00	0.0	A	0	0
C-A					91	136
A-B					124	186
A-C					258	386

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	463	0.069	32	0.0	0.1	8.343	A
C-AB	0	0	502	0.000	0	0.0	0.0	0.000	A
C-A	75	19			75				
A-B	102	25			102				

A-C	211	53			211				
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06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	38	10	447	0.086	38	0.1	0.1	8.810	A
C-AB	0	0	487	0.000	0	0.0	0.0	0.000	A
C-A	89	22			89				
A-B	121	30			121				
A-C	252	63			252				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	425	0.111	47	0.1	0.1	9.527	A
C-AB	0	0	467	0.000	0	0.0	0.0	0.000	A
C-A	109	27			109				
A-B	149	37			149				
A-C	309	77			309				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	425	0.111	47	0.1	0.1	9.533	A
C-AB	0	0	467	0.000	0	0.0	0.0	0.000	A
C-A	109	27			109				
A-B	149	37			149				
A-C	309	77			309				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	38	10	447	0.086	38	0.1	0.1	8.816	A
C-AB	0	0	487	0.000	0	0.0	0.0	0.000	A
C-A	89	22			89				
A-B	121	30			121				
A-C	252	63			252				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	463	0.069	32	0.1	0.1	8.358	A
C-AB	0	0	502	0.000	0	0.0	0.0	0.000	A
C-A	75	19			75				
A-B	102	25			102				
A-C	211	53			211				

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		1.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	792	100.000
B - Angel Lane South East		ONE HOUR	✓	94	100.000
C - A12 South West		ONE HOUR	✓	290	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	253	538
	B - Angel Lane South East	92	0	2
	C - A12 South West	290	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	4	11
	B - Angel Lane South East	2	0	0
	C - A12 South West	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.35	18.89	0.5	C	86	129
C-AB	0.00	0.00	0.0	A	0	0
C-A					266	399
A-B					233	349
A-C					494	741

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	374	0.188	70	0.0	0.2	11.775	B
C-AB	0	0	439	0.000	0	0.0	0.0	0.000	A
C-A	218	55			218				
A-B	191	48			191				

A-C	405	101			405				
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07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	341	0.247	84	0.2	0.3	14.002	B
C-AB	0	0	410	0.000	0	0.0	0.0	0.000	A
C-A	261	65			261				
A-B	228	57			228				
A-C	484	121			484				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	103	26	294	0.351	102	0.3	0.5	18.743	C
C-AB	0	0	369	0.000	0	0.0	0.0	0.000	A
C-A	319	80			319				
A-B	279	70			279				
A-C	593	148			593				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	103	26	294	0.351	103	0.5	0.5	18.886	C
C-AB	0	0	369	0.000	0	0.0	0.0	0.000	A
C-A	319	80			319				
A-B	279	70			279				
A-C	593	148			593				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	341	0.247	85	0.5	0.3	14.133	B
C-AB	0	0	410	0.000	0	0.0	0.0	0.000	A
C-A	261	65			261				
A-B	228	57			228				
A-C	484	121			484				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	374	0.188	71	0.3	0.2	11.876	B
C-AB	0	0	439	0.000	0	0.0	0.0	0.000	A
C-A	218	55			218				
A-B	191	48			191				
A-C	405	101			405				

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		1.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	546	100.000
B - Angel Lane South East		ONE HOUR	✓	97	100.000
C - A12 South West		ONE HOUR	✓	373	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	153	393
	B - Angel Lane South East	97	0	0
	C - A12 South West	371	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	11
	B - Angel Lane South East	3	0	0
	C - A12 South West	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	16.26	0.5	C	89	133
C-AB	0.01	5.17	0.0	A	4	5
C-A					339	508
A-B					141	211
A-C					360	541

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	395	0.184	72	0.0	0.2	11.106	B
C-AB	3	0.63	702	0.004	2	0.0	0.0	5.147	A
C-A	278	70			278				
A-B	115	29			115				

A-C	296	74			296				
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08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22	367	0.237	86	0.2	0.3	12.828	B
C-AB	3	0.84	722	0.005	3	0.0	0.0	4.995	A
C-A	332	83			332				
A-B	138	34			138				
A-C	353	88			353				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	106	27	328	0.324	106	0.3	0.5	16.174	C
C-AB	5	1	752	0.006	5	0.0	0.0	4.800	A
C-A	406	102			406				
A-B	169	42			169				
A-C	433	108			433				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	106	27	328	0.324	106	0.5	0.5	16.265	C
C-AB	5	1	752	0.006	5	0.0	0.0	4.817	A
C-A	406	102			406				
A-B	169	42			169				
A-C	433	108			433				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22	367	0.237	87	0.5	0.3	12.919	B
C-AB	3	0.84	722	0.005	3	0.0	0.0	5.036	A
C-A	332	83			332				
A-B	138	34			138				
A-C	353	88			353				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	395	0.184	73	0.3	0.2	11.191	B
C-AB	3	0.63	702	0.004	3	0.0	0.0	5.170	A
C-A	278	70			278				
A-B	115	29			115				
A-C	296	74			296				

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		2.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	434	100.000
B - Angel Lane South East		ONE HOUR	✓	141	100.000
C - A12 South West		ONE HOUR	✓	479	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	79	355
	B - Angel Lane South East	139	0	2
	C - A12 South West	477	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	10
	B - Angel Lane South East	1	0	0
	C - A12 South West	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.46	19.44	0.8	C	130	194
C-AB	0.01	4.66	0.0	A	4	6
C-A					436	654
A-B					73	109
A-C					326	489

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	106	27	408	0.260	105	0.0	0.3	11.810	B
C-AB	3	0.70	778	0.004	3	0.0	0.0	4.645	A
C-A	358	90			358				
A-B	60	15			60				

A-C	267	67			267				
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15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32	380	0.334	126	0.3	0.5	14.154	B
C-AB	4	0.95	812	0.005	4	0.0	0.0	4.441	A
C-A	427	107			427				
A-B	71	18			71				
A-C	319	80			319				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	155	39	340	0.457	154	0.5	0.8	19.194	C
C-AB	6	1	863	0.007	6	0.0	0.0	4.188	A
C-A	522	131			522				
A-B	87	22			87				
A-C	391	98			391				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	155	39	340	0.457	155	0.8	0.8	19.439	C
C-AB	6	1	863	0.007	6	0.0	0.0	4.198	A
C-A	522	131			522				
A-B	87	22			87				
A-C	391	98			391				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	127	32	380	0.334	128	0.8	0.5	14.370	B
C-AB	4	0.96	812	0.005	4	0.0	0.0	4.470	A
C-A	427	107			427				
A-B	71	18			71				
A-C	319	80			319				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	106	27	408	0.260	107	0.5	0.4	11.964	B
C-AB	3	0.70	778	0.004	3	0.0	0.0	4.661	A
C-A	358	90			358				
A-B	60	15			60				
A-C	267	67			267				

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		4.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	369	100.000
B - Angel Lane South East		ONE HOUR	✓	204	100.000
C - A12 South West		ONE HOUR	✓	462	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	76	293
	B - Angel Lane South East	203	0	1
	C - A12 South West	460	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	3
	B - Angel Lane South East	1	0	0
	C - A12 South West	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.61	24.67	1.5	C	187	281
C-AB	0.01	4.61	0.0	A	4	6
C-A					420	630
A-B					69	104
A-C					269	404

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	38	428	0.359	151	0.0	0.5	12.926	B
C-AB	3	0.67	785	0.003	3	0.0	0.0	4.602	A
C-A	345	86			345				
A-B	57	14			57				

A-C	221	55			221				
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17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	183	46	403	0.454	182	0.5	0.8	16.198	C
C-AB	4	0.91	820	0.004	4	0.0	0.0	4.403	A
C-A	412	103			412				
A-B	68	17			68				
A-C	264	66			264				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	225	56	370	0.607	222	0.8	1.5	23.925	C
C-AB	5	1	870	0.006	5	0.0	0.0	4.154	A
C-A	503	126			503				
A-B	83	21			83				
A-C	323	81			323				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	225	56	370	0.607	224	1.5	1.5	24.671	C
C-AB	5	1	870	0.006	5	0.0	0.0	4.161	A
C-A	503	126			503				
A-B	83	21			83				
A-C	323	81			323				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	183	46	403	0.454	186	1.5	0.9	16.733	C
C-AB	4	0.91	820	0.004	4	0.0	0.0	4.421	A
C-A	412	103			412				
A-B	68	17			68				
A-C	264	66			264				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	154	38	428	0.359	155	0.9	0.6	13.236	B
C-AB	3	0.68	785	0.003	3	0.0	0.0	4.614	A
C-A	345	86			345				
A-B	57	14			57				
A-C	221	55			221				

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	351	100.000
B - Angel Lane South East		ONE HOUR	✓	32	100.000
C - A12 South West		ONE HOUR	✓	103	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	81	270
	B - Angel Lane South East	32	0	0
	C - A12 South West	103	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	8
	B - Angel Lane South East	3	0	0
	C - A12 South West	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.08	9.10	0.1	A	29	44
C-AB	0.00	0.00	0.0	A	0	0
C-A					95	142
A-B					74	111
A-C					247	371

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	24	6	466	0.051	24	0.0	0.1	8.140	A
C-AB	0	0	516	0.000	0	0.0	0.0	0.000	A
C-A	78	19			78				
A-B	61	15			61				

A-C	203	51			203				
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06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	451	0.063	28	0.1	0.1	8.521	A
C-AB	0	0	503	0.000	0	0.0	0.0	0.000	A
C-A	93	23			93				
A-B	73	18			73				
A-C	242	61			242				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	430	0.081	35	0.1	0.1	9.100	A
C-AB	0	0	485	0.000	0	0.0	0.0	0.000	A
C-A	113	28			113				
A-B	89	22			89				
A-C	297	74			297				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	430	0.081	35	0.1	0.1	9.104	A
C-AB	0	0	485	0.000	0	0.0	0.0	0.000	A
C-A	113	28			113				
A-B	89	22			89				
A-C	297	74			297				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	451	0.063	29	0.1	0.1	8.526	A
C-AB	0	0	503	0.000	0	0.0	0.0	0.000	A
C-A	93	23			93				
A-B	73	18			73				
A-C	242	61			242				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	24	6	466	0.051	24	0.1	0.1	8.149	A
C-AB	0	0	516	0.000	0	0.0	0.0	0.000	A
C-A	78	19			78				
A-B	61	15			61				
A-C	203	51			203				

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	604	100.000
B - Angel Lane South East		ONE HOUR	✓	66	100.000
C - A12 South West		ONE HOUR	✓	314	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	159	444
	B - Angel Lane South East	64	0	2
	C - A12 South West	314	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.22	13.99	0.3	B	60	90
C-AB	0.00	0.00	0.0	A	0	0
C-A					288	432
A-B					146	219
A-C					408	612

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	12	398	0.124	49	0.0	0.1	10.296	B
C-AB	0	0	477	0.000	0	0.0	0.0	0.000	A
C-A	236	59			236				
A-B	120	30			120				

A-C	335	84			335				
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07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	369	0.160	59	0.1	0.2	11.588	B
C-AB	0	0	455	0.000	0	0.0	0.0	0.000	A
C-A	282	71			282				
A-B	143	36			143				
A-C	399	100			399				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	72	18	330	0.220	72	0.2	0.3	13.950	B
C-AB	0	0	424	0.000	0	0.0	0.0	0.000	A
C-A	345	86			345				
A-B	176	44			176				
A-C	489	122			489				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	72	18	330	0.220	72	0.3	0.3	13.988	B
C-AB	0	0	424	0.000	0	0.0	0.0	0.000	A
C-A	345	86			345				
A-B	176	44			176				
A-C	489	122			489				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	59	15	369	0.160	59	0.3	0.2	11.627	B
C-AB	0	0	455	0.000	0	0.0	0.0	0.000	A
C-A	282	71			282				
A-B	143	36			143				
A-C	399	100			399				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	12	398	0.124	50	0.2	0.1	10.342	B
C-AB	0	0	477	0.000	0	0.0	0.0	0.000	A
C-A	236	59			236				
A-B	120	30			120				
A-C	335	84			335				

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		1.32	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	515	100.000
B - Angel Lane South East		ONE HOUR	✓	90	100.000
C - A12 South West		ONE HOUR	✓	403	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	149	366
	B - Angel Lane South East	90	0	0
	C - A12 South West	401	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.30	15.40	0.4	C	82	123
C-AB	0.01	5.01	0.0	A	4	6
C-A					366	549
A-B					137	206
A-C					336	504

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	398	0.169	67	0.0	0.2	10.839	B
C-AB	3	0.65	724	0.004	3	0.0	0.0	4.988	A
C-A	301	75			301				
A-B	112	28			112				

A-C	275	69			275				
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08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	370	0.217	80	0.2	0.3	12.394	B
C-AB	3	0.87	749	0.005	3	0.0	0.0	4.818	A
C-A	359	90			359				
A-B	134	34			134				
A-C	329	82			329				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	99	25	332	0.297	98	0.3	0.4	15.333	C
C-AB	5	1	785	0.006	5	0.0	0.0	4.602	A
C-A	439	110			439				
A-B	164	41			164				
A-C	403	101			403				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	99	25	332	0.297	99	0.4	0.4	15.403	C
C-AB	5	1	785	0.006	5	0.0	0.0	4.616	A
C-A	439	110			439				
A-B	164	41			164				
A-C	403	101			403				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	80	20	370	0.217	81	0.4	0.3	12.467	B
C-AB	3	0.87	748	0.005	3	0.0	0.0	4.855	A
C-A	359	90			359				
A-B	134	34			134				
A-C	329	82			329				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	67	17	398	0.169	68	0.3	0.2	10.910	B
C-AB	3	0.65	724	0.004	3	0.0	0.0	5.009	A
C-A	301	75			301				
A-B	112	28			112				
A-C	275	69			275				

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		2.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	443	100.000
B - Angel Lane South East		ONE HOUR	✓	130	100.000
C - A12 South West		ONE HOUR	✓	483	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	80	363
	B - Angel Lane South East	128	0	2
	C - A12 South West	481	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	2	8
	B - Angel Lane South East	1	0	0
	C - A12 South West	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.42	18.26	0.7	C	119	179
C-AB	0.01	4.64	0.0	A	4	6
C-A					439	659
A-B					73	110
A-C					333	500

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	24	408	0.240	97	0.0	0.3	11.502	B
C-AB	3	0.70	781	0.004	3	0.0	0.0	4.627	A
C-A	361	90			361				
A-B	60	15			60				

A-C	273	68			273				
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15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	117	29	380	0.308	116	0.3	0.4	13.643	B
C-AB	4	0.96	816	0.005	4	0.0	0.0	4.423	A
C-A	431	108			431				
A-B	72	18			72				
A-C	326	82			326				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	143	36	340	0.421	142	0.4	0.7	18.062	C
C-AB	6	1	868	0.007	6	0.0	0.0	4.167	A
C-A	527	132			527				
A-B	88	22			88				
A-C	400	100			400				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	143	36	340	0.421	143	0.7	0.7	18.259	C
C-AB	6	1	868	0.007	6	0.0	0.0	4.178	A
C-A	527	132			527				
A-B	88	22			88				
A-C	400	100			400				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	117	29	380	0.308	118	0.7	0.5	13.812	B
C-AB	4	0.96	816	0.005	4	0.0	0.0	4.445	A
C-A	431	108			431				
A-B	72	18			72				
A-C	326	82			326				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	98	24	408	0.240	99	0.5	0.3	11.641	B
C-AB	3	0.70	781	0.004	3	0.0	0.0	4.641	A
C-A	361	90			361				
A-B	60	15			60				
A-C	273	68			273				

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		2.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	383	100.000
B - Angel Lane South East		ONE HOUR	✓	129	100.000
C - A12 South West		ONE HOUR	✓	414	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	72	311
	B - Angel Lane South East	128	0	1
	C - A12 South West	412	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	2
	B - Angel Lane South East	2	0	0
	C - A12 South West	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.38	15.54	0.6	C	118	178
C-AB	0.01	4.76	0.0	A	4	5
C-A					376	564
A-B					66	98
A-C					286	428

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	97	24	429	0.226	96	0.0	0.3	10.769	B
C-AB	3	0.64	760	0.003	3	0.0	0.0	4.754	A
C-A	309	77			309				
A-B	54	13			54				

A-C	234	59			234				
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17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	406	0.286	116	0.3	0.4	12.383	B
C-AB	3	0.85	790	0.004	3	0.0	0.0	4.572	A
C-A	369	92			369				
A-B	64	16			64				
A-C	280	70			280				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	142	35	373	0.380	141	0.4	0.6	15.441	C
C-AB	5	1	833	0.006	5	0.0	0.0	4.341	A
C-A	451	113			451				
A-B	79	20			79				
A-C	343	86			343				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	142	35	373	0.380	142	0.6	0.6	15.544	C
C-AB	5	1	833	0.006	5	0.0	0.0	4.347	A
C-A	451	113			451				
A-B	79	20			79				
A-C	343	86			343				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	116	29	406	0.286	117	0.6	0.4	12.490	B
C-AB	3	0.85	790	0.004	3	0.0	0.0	4.587	A
C-A	369	92			369				
A-B	64	16			64				
A-C	280	70			280				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	97	24	429	0.226	98	0.4	0.3	10.873	B
C-AB	3	0.64	760	0.003	3	0.0	0.0	4.762	A
C-A	309	77			309				
A-B	54	13			54				
A-C	234	59			234				

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	530	100.000
B - Angel Lane South East		ONE HOUR	✓	32	100.000
C - A12 South West		ONE HOUR	✓	110	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	81	449
	B - Angel Lane South East	32	0	0
	C - A12 South West	110	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	6
	B - Angel Lane South East	3	0	0
	C - A12 South West	15	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	10.51	0.1	B	29	44
C-AB	0.00	0.00	0.0	A	0	0
C-A					101	152
A-B					74	111
A-C					412	618

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	24	6	430	0.055	24	0.0	0.1	8.860	A
C-AB	0	0	482	0.000	0	0.0	0.0	0.000	A
C-A	83	21			83				
A-B	61	15			61				

A-C	338	84			338				
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06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	408	0.070	28	0.1	0.1	9.488	A
C-AB	0	0	463	0.000	0	0.0	0.0	0.000	A
C-A	99	25			99				
A-B	73	18			73				
A-C	403	101			403				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	377	0.092	35	0.1	0.1	10.501	B
C-AB	0	0	437	0.000	0	0.0	0.0	0.000	A
C-A	121	30			121				
A-B	89	22			89				
A-C	494	124			494				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	377	0.092	35	0.1	0.1	10.507	B
C-AB	0	0	437	0.000	0	0.0	0.0	0.000	A
C-A	121	30			121				
A-B	89	22			89				
A-C	494	124			494				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	408	0.070	29	0.1	0.1	9.495	A
C-AB	0	0	463	0.000	0	0.0	0.0	0.000	A
C-A	99	25			99				
A-B	73	18			73				
A-C	403	101			403				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	24	6	430	0.055	24	0.1	0.1	8.874	A
C-AB	0	0	482	0.000	0	0.0	0.0	0.000	A
C-A	83	21			83				
A-B	61	15			61				
A-C	338	84			338				

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	733	100.000
B - Angel Lane South East		ONE HOUR	✓	68	100.000
C - A12 South West		ONE HOUR	✓	331	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	159	573
	B - Angel Lane South East	66	0	2
	C - A12 South West	331	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.26	16.97	0.3	C	62	93
C-AB	0.00	0.00	0.0	A	0	0
C-A					304	455
A-B					146	219
A-C					526	789

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	369	0.138	50	0.0	0.2	11.283	B
C-AB	0	0	452	0.000	0	0.0	0.0	0.000	A
C-A	249	62			249				
A-B	120	30			120				

A-C	432	108			432				
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07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	334	0.182	61	0.2	0.2	13.144	B
C-AB	0	0	425	0.000	0	0.0	0.0	0.000	A
C-A	297	74			297				
A-B	143	36			143				
A-C	515	129			515				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	287	0.260	74	0.2	0.3	16.896	C
C-AB	0	0	387	0.000	0	0.0	0.0	0.000	A
C-A	364	91			364				
A-B	176	44			176				
A-C	631	158			631				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	287	0.260	75	0.3	0.3	16.971	C
C-AB	0	0	387	0.000	0	0.0	0.0	0.000	A
C-A	364	91			364				
A-B	176	44			176				
A-C	631	158			631				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	334	0.182	61	0.3	0.2	13.214	B
C-AB	0	0	425	0.000	0	0.0	0.0	0.000	A
C-A	297	74			297				
A-B	143	36			143				
A-C	515	129			515				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	369	0.138	51	0.2	0.2	11.351	B
C-AB	0	0	452	0.000	0	0.0	0.0	0.000	A
C-A	249	62			249				
A-B	120	30			120				
A-C	432	108			432				

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		1.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	539	100.000
B - Angel Lane South East		ONE HOUR	✓	93	100.000
C - A12 South West		ONE HOUR	✓	413	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	147	392
	B - Angel Lane South East	93	0	0
	C - A12 South West	411	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	12
	B - Angel Lane South East	3	0	0
	C - A12 South West	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	16.52	0.5	C	85	127
C-AB	0.01	5.01	0.0	A	4	6
C-A					375	563
A-B					135	203
A-C					360	539

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	17	389	0.179	69	0.0	0.2	11.197	B
C-AB	3	0.66	723	0.004	3	0.0	0.0	4.994	A
C-A	308	77			308				
A-B	111	28			111				

A-C	295	74			295				
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08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	83	21	360	0.231	83	0.2	0.3	12.964	B
C-AB	4	0.89	748	0.005	4	0.0	0.0	4.821	A
C-A	368	92			368				
A-B	132	33			132				
A-C	352	88			352				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	102	25	320	0.319	101	0.3	0.5	16.432	C
C-AB	5	1	785	0.007	5	0.0	0.0	4.601	A
C-A	450	112			450				
A-B	162	41			162				
A-C	431	108			431				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	102	25	320	0.319	102	0.5	0.5	16.524	C
C-AB	5	1	785	0.007	5	0.0	0.0	4.617	A
C-A	450	112			450				
A-B	162	41			162				
A-C	431	108			431				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	83	21	360	0.231	84	0.5	0.3	13.054	B
C-AB	4	0.89	748	0.005	4	0.0	0.0	4.859	A
C-A	368	92			368				
A-B	132	33			132				
A-C	352	88			352				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	17	389	0.179	70	0.3	0.2	11.281	B
C-AB	3	0.66	723	0.004	3	0.0	0.0	5.015	A
C-A	308	77			308				
A-B	111	28			111				
A-C	295	74			295				

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		2.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	453	100.000
B - Angel Lane South East		ONE HOUR	✓	145	100.000
C - A12 South West		ONE HOUR	✓	565	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	85	368
	B - Angel Lane South East	143	0	2
	C - A12 South West	563	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	2	10
	B - Angel Lane South East	1	0	0
	C - A12 South West	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.50	22.50	1.0	C	133	200
C-AB	0.01	4.42	0.0	A	5	7
C-A					514	771
A-B					78	117
A-C					338	507

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	394	0.277	108	0.0	0.4	12.513	B
C-AB	3	0.78	820	0.004	3	0.0	0.0	4.408	A
C-A	423	106			423				
A-B	64	16			64				

A-C	277	69			277				
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15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	130	33	363	0.360	130	0.4	0.5	15.406	C
C-AB	4	1	864	0.005	4	0.0	0.0	4.180	A
C-A	504	126			504				
A-B	76	19			76				
A-C	331	83			331				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	160	40	319	0.500	158	0.5	1.0	22.088	C
C-AB	7	2	927	0.007	7	0.0	0.0	3.901	A
C-A	616	154			616				
A-B	94	23			94				
A-C	405	101			405				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	160	40	319	0.500	160	1.0	1.0	22.500	C
C-AB	7	2	927	0.007	7	0.0	0.0	3.912	A
C-A	616	154			616				
A-B	94	23			94				
A-C	405	101			405				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	130	33	363	0.360	132	1.0	0.6	15.713	C
C-AB	4	1	863	0.005	4	0.0	0.0	4.205	A
C-A	504	126			504				
A-B	76	19			76				
A-C	331	83			331				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	394	0.277	110	0.6	0.4	12.708	B
C-AB	3	0.78	819	0.004	3	0.0	0.0	4.424	A
C-A	423	106			423				
A-B	64	16			64				
A-C	277	69			277				

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		2.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	390	100.000
B - Angel Lane South East		ONE HOUR	✓	134	100.000
C - A12 South West		ONE HOUR	✓	480	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	77	313
	B - Angel Lane South East	133	0	1
	C - A12 South West	478	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	3
	B - Angel Lane South East	2	0	0
	C - A12 South West	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.41	17.06	0.7	C	123	184
C-AB	0.01	4.58	0.0	A	4	6
C-A					436	654
A-B					70	105
A-C					287	431

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	101	25	419	0.241	100	0.0	0.3	11.232	B
C-AB	3	0.69	791	0.003	3	0.0	0.0	4.567	A
C-A	358	90			358				
A-B	58	14			58				

A-C	236	59			236				
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17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	394	0.306	120	0.3	0.4	13.136	B
C-AB	4	0.94	827	0.005	4	0.0	0.0	4.363	A
C-A	428	107			428				
A-B	69	17			69				
A-C	282	70			282				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	147	37	358	0.412	147	0.4	0.7	16.910	C
C-AB	5	1	880	0.006	5	0.0	0.0	4.108	A
C-A	523	131			523				
A-B	84	21			84				
A-C	345	86			345				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	147	37	358	0.412	147	0.7	0.7	17.059	C
C-AB	5	1	880	0.006	5	0.0	0.0	4.117	A
C-A	523	131			523				
A-B	84	21			84				
A-C	345	86			345				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	120	30	393	0.306	121	0.7	0.4	13.274	B
C-AB	4	0.94	827	0.005	4	0.0	0.0	4.382	A
C-A	428	107			428				
A-B	69	17			69				
A-C	282	70			282				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	101	25	419	0.241	101	0.4	0.3	11.355	B
C-AB	3	0.69	791	0.004	3	0.0	0.0	4.579	A
C-A	358	90			358				
A-B	58	14			58				
A-C	236	59			236				

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	362	100.000
B - Angel Lane South East		ONE HOUR	✓	32	100.000
C - A12 South West		ONE HOUR	✓	112	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	83	279
	B - Angel Lane South East	32	0	0
	C - A12 South West	112	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	8
	B - Angel Lane South East	3	0	0
	C - A12 South West	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.08	9.22	0.1	A	29	44
C-AB	0.00	0.00	0.0	A	0	0
C-A					103	154
A-B					76	114
A-C					256	384

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	24	6	462	0.052	24	0.0	0.1	8.204	A
C-AB	0	0	513	0.000	0	0.0	0.0	0.000	A
C-A	84	21			84				
A-B	62	16			62				

A-C	210	52			210				
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06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	447	0.064	28	0.1	0.1	8.603	A
C-AB	0	0	500	0.000	0	0.0	0.0	0.000	A
C-A	101	25			101				
A-B	75	19			75				
A-C	251	63			251				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	425	0.082	35	0.1	0.1	9.213	A
C-AB	0	0	482	0.000	0	0.0	0.0	0.000	A
C-A	123	31			123				
A-B	91	23			91				
A-C	307	77			307				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	9	425	0.082	35	0.1	0.1	9.217	A
C-AB	0	0	482	0.000	0	0.0	0.0	0.000	A
C-A	123	31			123				
A-B	91	23			91				
A-C	307	77			307				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	447	0.064	29	0.1	0.1	8.610	A
C-AB	0	0	500	0.000	0	0.0	0.0	0.000	A
C-A	101	25			101				
A-B	75	19			75				
A-C	251	63			251				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	24	6	462	0.052	24	0.1	0.1	8.214	A
C-AB	0	0	513	0.000	0	0.0	0.0	0.000	A
C-A	84	21			84				
A-B	62	16			62				
A-C	210	52			210				

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	599	100.000
B - Angel Lane South East		ONE HOUR	✓	67	100.000
C - A12 South West		ONE HOUR	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	159	439
	B - Angel Lane South East	65	0	2
	C - A12 South West	345	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.23	14.30	0.3	B	61	92
C-AB	0.00	0.00	0.0	A	0	0
C-A					316	475
A-B					146	219
A-C					403	605

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	395	0.127	50	0.0	0.1	10.413	B
C-AB	0	0	481	0.000	0	0.0	0.0	0.000	A
C-A	260	65			260				
A-B	120	30			120				

A-C	331	83			331				
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07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	366	0.164	60	0.1	0.2	11.764	B
C-AB	0	0	458	0.000	0	0.0	0.0	0.000	A
C-A	310	77			310				
A-B	143	36			143				
A-C	395	99			395				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	325	0.226	73	0.2	0.3	14.259	B
C-AB	0	0	427	0.000	0	0.0	0.0	0.000	A
C-A	380	95			380				
A-B	176	44			176				
A-C	484	121			484				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	325	0.226	73	0.3	0.3	14.301	B
C-AB	0	0	427	0.000	0	0.0	0.0	0.000	A
C-A	380	95			380				
A-B	176	44			176				
A-C	484	121			484				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	366	0.164	60	0.3	0.2	11.808	B
C-AB	0	0	458	0.000	0	0.0	0.0	0.000	A
C-A	310	77			310				
A-B	143	36			143				
A-C	395	99			395				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	395	0.127	50	0.2	0.1	10.461	B
C-AB	0	0	481	0.000	0	0.0	0.0	0.000	A
C-A	260	65			260				
A-B	120	30			120				
A-C	331	83			331				

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		1.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	459	100.000
B - Angel Lane South East		ONE HOUR	✓	99	100.000
C - A12 South West		ONE HOUR	✓	447	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	93	366
	B - Angel Lane South East	99	0	0
	C - A12 South West	445	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	7	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.33	16.20	0.5	C	90	136
C-AB	0.01	4.80	0.0	A	4	6
C-A					406	610
A-B					86	128
A-C					336	504

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	74	19	397	0.187	73	0.0	0.2	11.091	B
C-AB	3	0.68	756	0.004	3	0.0	0.0	4.781	A
C-A	334	83			334				
A-B	70	18			70				

A-C	275	69			275				
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08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22	369	0.240	88	0.2	0.3	12.802	B
C-AB	4	0.92	786	0.005	4	0.0	0.0	4.589	A
C-A	398	100			398				
A-B	84	21			84				
A-C	329	82			329				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	108	27	331	0.328	108	0.3	0.5	16.111	C
C-AB	5	1	831	0.006	5	0.0	0.0	4.349	A
C-A	487	122			487				
A-B	103	26			103				
A-C	403	101			403				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	108	27	331	0.328	108	0.5	0.5	16.204	C
C-AB	5	1	831	0.006	5	0.0	0.0	4.362	A
C-A	487	122			487				
A-B	103	26			103				
A-C	403	101			403				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22	369	0.240	89	0.5	0.3	12.891	B
C-AB	4	0.92	786	0.005	4	0.0	0.0	4.621	A
C-A	398	100			398				
A-B	84	21			84				
A-C	329	82			329				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	74	19	397	0.187	75	0.3	0.2	11.179	B
C-AB	3	0.68	755	0.004	3	0.0	0.0	4.800	A
C-A	334	83			334				
A-B	70	18			70				
A-C	275	69			275				

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		2.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	482	100.000
B - Angel Lane South East		ONE HOUR	✓	137	100.000
C - A12 South West		ONE HOUR	✓	512	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	87	395
	B - Angel Lane South East	135	0	2
	C - A12 South West	510	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	2	7
	B - Angel Lane South East	1	0	0
	C - A12 South West	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.46	20.54	0.8	C	126	189
C-AB	0.01	4.58	0.0	A	4	7
C-A					466	699
A-B					80	120
A-C					363	544

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	103	26	398	0.259	102	0.0	0.3	12.082	B
C-AB	3	0.73	791	0.004	3	0.0	0.0	4.565	A
C-A	383	96			383				
A-B	66	16			66				

A-C	297	74			297				
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15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	123	31	368	0.335	123	0.3	0.5	14.633	B
C-AB	4	1	830	0.005	4	0.0	0.0	4.353	A
C-A	457	114			457				
A-B	78	20			78				
A-C	355	89			355				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	151	38	326	0.463	150	0.5	0.8	20.254	C
C-AB	6	2	885	0.007	6	0.0	0.0	4.088	A
C-A	558	140			558				
A-B	96	24			96				
A-C	435	109			435				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	151	38	326	0.463	151	0.8	0.8	20.541	C
C-AB	6	2	885	0.007	6	0.0	0.0	4.096	A
C-A	558	140			558				
A-B	96	24			96				
A-C	435	109			435				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	123	31	368	0.335	125	0.8	0.5	14.866	B
C-AB	4	1	829	0.005	4	0.0	0.0	4.373	A
C-A	457	114			457				
A-B	78	20			78				
A-C	355	89			355				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	103	26	398	0.259	104	0.5	0.4	12.247	B
C-AB	3	0.73	791	0.004	3	0.0	0.0	4.577	A
C-A	383	96			383				
A-B	66	16			66				
A-C	297	74			297				

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		1.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	426	100.000
B - Angel Lane South East		ONE HOUR	✓	72	100.000
C - A12 South West		ONE HOUR	✓	412	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	78	348
	B - Angel Lane South East	71	0	1
	C - A12 South West	410	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	1
	B - Angel Lane South East	3	0	0
	C - A12 South West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.22	12.83	0.3	B	66	99
C-AB	0.01	4.81	0.0	A	4	5
C-A					374	561
A-B					71	107
A-C					320	479

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	14	418	0.130	54	0.0	0.1	9.864	A
C-AB	3	0.64	753	0.003	3	0.0	0.0	4.797	A
C-A	308	77			308				
A-B	58	15			58				

A-C	262	66			262				
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17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	394	0.164	65	0.1	0.2	10.932	B
C-AB	3	0.85	782	0.004	3	0.0	0.0	4.619	A
C-A	367	92			367				
A-B	70	17			70				
A-C	313	78			313				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	20	360	0.220	79	0.2	0.3	12.800	B
C-AB	5	1	824	0.006	5	0.0	0.0	4.391	A
C-A	449	112			449				
A-B	85	21			85				
A-C	383	96			383				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	20	360	0.220	79	0.3	0.3	12.830	B
C-AB	5	1	824	0.006	5	0.0	0.0	4.398	A
C-A	449	112			449				
A-B	85	21			85				
A-C	383	96			383				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	394	0.164	65	0.3	0.2	10.970	B
C-AB	3	0.85	782	0.004	3	0.0	0.0	4.632	A
C-A	367	92			367				
A-B	70	17			70				
A-C	313	78			313				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	14	418	0.130	54	0.2	0.2	9.906	A
C-AB	3	0.64	753	0.003	3	0.0	0.0	4.806	A
C-A	308	77			308				
A-B	58	15			58				
A-C	262	66			262				

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	359	100.000
B - Angel Lane South East		ONE HOUR	✓	31	100.000
C - A12 South West		ONE HOUR	✓	111	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	80	279
	B - Angel Lane South East	31	0	0
	C - A12 South West	111	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	5	8
	B - Angel Lane South East	3	0	0
	C - A12 South West	14	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.08	9.18	0.1	A	28	42
C-AB	0.00	0.00	0.0	A	0	0
C-A					102	153
A-B					73	110
A-C					256	384

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	463	0.050	23	0.0	0.1	8.183	A
C-AB	0	0	514	0.000	0	0.0	0.0	0.000	A
C-A	84	21			84				
A-B	60	15			60				

A-C	210	52			210				
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06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	447	0.062	27	0.1	0.1	8.576	A
C-AB	0	0	501	0.000	0	0.0	0.0	0.000	A
C-A	100	25			100				
A-B	72	18			72				
A-C	251	63			251				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	8	426	0.079	34	0.1	0.1	9.175	A
C-AB	0	0	483	0.000	0	0.0	0.0	0.000	A
C-A	122	31			122				
A-B	88	22			88				
A-C	307	77			307				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	34	8	426	0.079	34	0.1	0.1	9.178	A
C-AB	0	0	483	0.000	0	0.0	0.0	0.000	A
C-A	122	31			122				
A-B	88	22			88				
A-C	307	77			307				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	7	447	0.062	28	0.1	0.1	8.581	A
C-AB	0	0	501	0.000	0	0.0	0.0	0.000	A
C-A	100	25			100				
A-B	72	18			72				
A-C	251	63			251				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	463	0.050	23	0.1	0.1	8.193	A
C-AB	0	0	514	0.000	0	0.0	0.0	0.000	A
C-A	84	21			84				
A-B	60	15			60				
A-C	210	52			210				

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	595	100.000
B - Angel Lane South East		ONE HOUR	✓	67	100.000
C - A12 South West		ONE HOUR	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	155	439
	B - Angel Lane South East	65	0	2
	C - A12 South West	345	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	6	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.23	14.29	0.3	B	61	92
C-AB	0.00	0.00	0.0	A	0	0
C-A					316	475
A-B					143	214
A-C					403	605

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	395	0.127	50	0.0	0.1	10.410	B
C-AB	0	0	481	0.000	0	0.0	0.0	0.000	A
C-A	260	65			260				
A-B	117	29			117				

A-C	331	83			331				
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07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	366	0.164	60	0.1	0.2	11.759	B
C-AB	0	0	459	0.000	0	0.0	0.0	0.000	A
C-A	310	77			310				
A-B	140	35			140				
A-C	395	99			395				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	325	0.226	73	0.2	0.3	14.249	B
C-AB	0	0	428	0.000	0	0.0	0.0	0.000	A
C-A	380	95			380				
A-B	171	43			171				
A-C	484	121			484				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	325	0.226	73	0.3	0.3	14.291	B
C-AB	0	0	428	0.000	0	0.0	0.0	0.000	A
C-A	380	95			380				
A-B	171	43			171				
A-C	484	121			484				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	366	0.164	60	0.3	0.2	11.800	B
C-AB	0	0	459	0.000	0	0.0	0.0	0.000	A
C-A	310	77			310				
A-B	140	35			140				
A-C	395	99			395				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	13	395	0.127	50	0.2	0.1	10.457	B
C-AB	0	0	481	0.000	0	0.0	0.0	0.000	A
C-A	260	65			260				
A-B	117	29			117				
A-C	331	83			331				

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		1.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	454	100.000
B - Angel Lane South East		ONE HOUR	✓	98	100.000
C - A12 South West		ONE HOUR	✓	448	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	89	365
	B - Angel Lane South East	98	0	0
	C - A12 South West	446	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	8	10
	B - Angel Lane South East	3	0	0
	C - A12 South West	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.32	16.06	0.5	C	89	134
C-AB	0.01	4.79	0.0	A	4	6
C-A					407	611
A-B					82	123
A-C					335	502

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	398	0.185	73	0.0	0.2	11.048	B
C-AB	3	0.68	757	0.004	3	0.0	0.0	4.771	A
C-A	335	84			335				
A-B	67	17			67				

A-C	275	69			275				
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08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	88	22	370	0.237	87	0.2	0.3	12.730	B
C-AB	4	0.92	788	0.005	4	0.0	0.0	4.578	A
C-A	399	100			399				
A-B	80	20			80				
A-C	328	82			328				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	331	0.324	107	0.3	0.5	15.974	C
C-AB	5	1	833	0.006	5	0.0	0.0	4.337	A
C-A	488	122			488				
A-B	98	25			98				
A-C	402	100			402				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	331	0.324	107	0.5	0.5	16.062	C
C-AB	5	1	833	0.006	5	0.0	0.0	4.350	A
C-A	488	122			488				
A-B	98	25			98				
A-C	402	100			402				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	88	22	370	0.237	88	0.5	0.3	12.820	B
C-AB	4	0.92	788	0.005	4	0.0	0.0	4.611	A
C-A	399	100			399				
A-B	80	20			80				
A-C	328	82			328				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	398	0.185	74	0.3	0.2	11.132	B
C-AB	3	0.68	757	0.004	3	0.0	0.0	4.789	A
C-A	335	84			335				
A-B	67	17			67				
A-C	275	69			275				

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		2.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	480	100.000
B - Angel Lane South East		ONE HOUR	✓	137	100.000
C - A12 South West		ONE HOUR	✓	512	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	86	394
	B - Angel Lane South East	135	0	2
	C - A12 South West	510	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	2	7
	B - Angel Lane South East	1	0	0
	C - A12 South West	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.46	20.50	0.8	C	126	189
C-AB	0.01	4.58	0.0	A	4	7
C-A					466	699
A-B					79	118
A-C					362	542

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	103	26	399	0.259	102	0.0	0.3	12.073	B
C-AB	3	0.73	792	0.004	3	0.0	0.0	4.563	A
C-A	383	96			383				
A-B	65	16			65				

A-C	297	74			297				
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15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	123	31	368	0.335	123	0.3	0.5	14.617	B
C-AB	4	1	830	0.005	4	0.0	0.0	4.352	A
C-A	457	114			457				
A-B	77	19			77				
A-C	354	89			354				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	151	38	326	0.463	150	0.5	0.8	20.219	C
C-AB	6	2	885	0.007	6	0.0	0.0	4.087	A
C-A	558	140			558				
A-B	95	24			95				
A-C	434	108			434				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	151	38	326	0.463	151	0.8	0.8	20.504	C
C-AB	6	2	885	0.007	6	0.0	0.0	4.096	A
C-A	558	140			558				
A-B	95	24			95				
A-C	434	108			434				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	123	31	368	0.335	125	0.8	0.5	14.846	B
C-AB	4	1	830	0.005	4	0.0	0.0	4.373	A
C-A	457	114			457				
A-B	77	19			77				
A-C	354	89			354				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	103	26	399	0.259	104	0.5	0.4	12.238	B
C-AB	3	0.73	792	0.004	3	0.0	0.0	4.576	A
C-A	383	96			383				
A-B	65	16			65				
A-C	297	74			297				

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 South West - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J38	A12 / B1125 Angel Lane	T-Junction	Two-way		1.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 North		ONE HOUR	✓	424	100.000
B - Angel Lane South East		ONE HOUR	✓	72	100.000
C - A12 South West		ONE HOUR	✓	412	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	77	347
	B - Angel Lane South East	71	0	1
	C - A12 South West	410	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 North	B - Angel Lane South East	C - A12 South West
From	A - A12 North	0	3	1
	B - Angel Lane South East	3	0	0
	C - A12 South West	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.22	12.81	0.3	B	66	99
C-AB	0.01	4.80	0.0	A	4	5
C-A					374	561
A-B					70	105
A-C					319	478

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	14	418	0.130	54	0.0	0.1	9.857	A
C-AB	3	0.64	753	0.003	3	0.0	0.0	4.795	A
C-A	308	77			308				
A-B	58	14			58				

A-C	261	65			261				
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17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	394	0.164	65	0.1	0.2	10.925	B
C-AB	3	0.85	782	0.004	3	0.0	0.0	4.617	A
C-A	367	92			367				
A-B	69	17			69				
A-C	312	78			312				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	20	360	0.220	79	0.2	0.3	12.781	B
C-AB	5	1	824	0.006	5	0.0	0.0	4.389	A
C-A	449	112			449				
A-B	84	21			84				
A-C	382	96			382				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	79	20	360	0.220	79	0.3	0.3	12.811	B
C-AB	5	1	824	0.006	5	0.0	0.0	4.394	A
C-A	449	112			449				
A-B	84	21			84				
A-C	382	96			382				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	65	16	394	0.164	65	0.3	0.2	10.956	B
C-AB	3	0.85	782	0.004	3	0.0	0.0	4.632	A
C-A	367	92			367				
A-B	69	17			69				
A-C	312	78			312				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	54	14	418	0.130	54	0.2	0.2	9.900	A
C-AB	3	0.64	753	0.003	3	0.0	0.0	4.802	A
C-A	308	77			308				
A-B	58	14			58				
A-C	261	65			261				

Junctions 9															
PICADY 9 - Priority Intersection Module															
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Report generation date: 13/03/2020 15:17:06

- »Base Year, 6-7 AM
- »Base Year, 7-8 AM
- »Base Year, 8-9 AM
- »Base Year, 3-4 PM
- »Base Year, 5-6 PM
- »2023 Reference Case , 6-7 AM
- »2023 Reference Case , 7-8 AM
- »2023 Reference Case , 8-9 AM
- »2023 Reference Case , 3-4 PM
- »2023 Reference Case , 5-6 PM
- »2023 Early Years , 6-7 AM
- »2023 Early Years , 7-8 AM
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- »2023 Early Years , 3-4 PM
- »2023 Early Years , 5-6 PM
- »2028 Reference Case , 6-7 AM
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- »2028 Reference Case , 8-9 AM
- »2028 Reference Case , 3-4 PM
- »2028 Reference Case , 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case , 6-7 AM
- »2034 Reference Case , 7-8 AM
- »2034 Reference Case , 8-9 AM
- »2034 Reference Case , 3-4 PM
- »2034 Reference Case , 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
Base Year																									
Stream B-C		0.0	6.60	0.00	A		0.0	8.45	0.00	A		0.0	0.00	0.00	A		0.0	9.05	0.01	A		0.0	9.31	0.01	A
Stream B-A	D1	0.1	10.30	0.05	B	D2	0.2	19.40	0.18	C	D3	0.4	23.51	0.28	C	D4	0.2	22.87	0.16	C	D5	0.1	21.24	0.13	C
Stream C-AB		0.0	4.56	0.00	A		0.0	4.43	0.02	A		0.0	0.00	0.00	A		0.0	4.28	0.01	A		0.0	4.60	0.02	A
2023 Reference Case																									
Stream B-C		0.0	6.80	0.00	A		0.0	9.05	0.00	A		0.0	0.00	0.00	A		0.0	9.82	0.01	A		0.0	9.84	0.01	A
Stream B-A	D6	0.1	10.95	0.06	B	D7	0.3	23.89	0.23	C	D8	0.6	31.22	0.37	D	D9	0.3	30.48	0.23	D	D10	0.2	27.22	0.18	D
Stream C-AB		0.0	4.52	0.00	A		0.0	4.38	0.03	A		0.0	0.00	0.00	A		0.0	4.15	0.02	A		0.0	4.34	0.02	A
2023 Early Years																									
Stream B-C		0.0	7.36	0.00	A		0.0	12.41	0.00	B		0.0	0.00	0.00	A		0.0	10.17	0.01	B		0.0	10.37	0.01	B
Stream B-A	D11	0.1	12.55	0.06	B	D12	0.7	55.79	0.41	F	D13	0.9	51.63	0.49	F	D14	0.3	36.18	0.26	E	D15	0.3	38.46	0.23	E
Stream C-AB		0.0	4.61	0.00	A		0.0	4.36	0.04	A		0.0	0.00	0.00	A		0.0	4.11	0.02	A		0.0	4.05	0.03	A
2028 Reference Case																									
Stream B-C		0.0	6.87	0.00	A		0.0	9.35	0.00	A		0.0	0.00	0.00	A		0.0	9.90	0.01	A		0.0	10.12	0.01	B
Stream B-A	D16	0.1	11.25	0.06	B	D17	0.3	25.94	0.26	D	D18	0.7	35.97	0.41	E	D19	0.3	30.91	0.24	D	D20	0.2	30.09	0.20	D
Stream C-AB		0.0	4.49	0.00	A		0.0	4.36	0.03	A		0.0	0.00	0.00	A		0.0	4.16	0.02	A		0.0	4.26	0.02	A
2028 Peak Construction																									
Stream B-C		0.0	7.10	0.01	A		0.0	10.72	0.00	B		0.0	0.00	0.00	A		0.0	11.30	0.01	B		0.0	11.31	0.02	B
Stream B-A	D21	0.1	12.03	0.06	B	D22	0.5	38.79	0.34	E	D23	1.4	75.40	0.60	F	D24	0.5	51.14	0.34	F	D25	0.4	48.07	0.28	E
Stream C-AB		0.0	4.52	0.00	A		0.0	4.36	0.03	A		0.0	0.00	0.00	A		0.0	4.06	0.02	A		0.0	4.20	0.03	A
2034 Reference Case																									
Stream B-C		0.0	6.93	0.01	A		0.0	9.90	0.00	A		0.0	0.00	0.00	A		0.0	10.77	0.01	B		0.0	10.73	0.02	B
Stream B-A	D26	0.1	11.52	0.06	B	D27	0.4	30.43	0.29	D	D28	0.8	41.97	0.46	E	D29	0.4	42.67	0.31	E	D30	0.3	34.82	0.23	D
Stream C-AB		0.0	4.47	0.00	A		0.0	4.31	0.03	A		0.0	0.00	0.00	A		0.0	3.96	0.02	A		0.0	4.30	0.03	A
2034 Operational Led																									

Stream B-C		0.0	6.93	0.01	A		0.0	10.20	0.00	B		0.0	0.00	0.00	A		0.0	10.89	0.01	B		0.0	10.81	0.02	B
Stream B-A	D31	0.1	11.54	0.06	B	D32	0.4	32.82	0.31	D	D33	0.8	43.02	0.47	E	D34	0.4	44.19	0.32	E	D35	0.3	35.62	0.23	E
Stream C-AB		0.0	4.46	0.00	A		0.0	4.32	0.03	A		0.0	0.00	0.00	A		0.0	3.96	0.02	A		0.0	4.29	0.03	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description

Title	A12 / Bell Lane
Location	52°10'8.75"N, 1°24'9.72"E
Site number	40
Date	02/04/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JV
Description	The Give way width on minor arm has been modelled as 10m as Junctions 9 restricts the give way width to less than 10m.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A12 South West		Major
B	Bell Ln North		Minor
C	A12 North East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A12 North East	5.75			154.2	✓	0.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Bell Ln North	One lane plus flare	10.00	5.50	3.30	3.30	3.20	✓	1.00	18	49

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	555	0.102	0.258	0.163	0.369
B-C	641	0.099	0.251	-	-
C-B	663	0.260	0.260	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	279	100.000
B - Bell Ln North		ONE HOUR	✓	18	100.000
C - A12 North East		ONE HOUR	✓	396	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A12 South West	B - Bell Ln North	C - A12 North East
A - A12 South West	0	5	274
B - Bell Ln North	16	0	2
C - A12 North East	395	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	13
	B - Bell Ln North	6	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	6.60	0.0	A	2	3
B-A	0.05	10.30	0.1	B	15	22
C-AB	0.00	4.56	0.0	A	2	3
C-A					362	543
A-B					5	7
A-C					251	377

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.38	578	0.003	1	0.0	0.0	6.249	A
B-A	12	3	416	0.029	12	0.0	0.0	8.901	A
C-AB	1	0.30	792	0.002	1	0.0	0.0	4.550	A
C-A	297	74			297				
A-B	4	0.94			4				
A-C	206	52			206				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.45	565	0.003	2	0.0	0.0	6.391	A
B-A	14	4	396	0.036	14	0.0	0.0	9.441	A
C-AB	2	0.40	820	0.002	2	0.0	0.0	4.391	A
C-A	354	89			354				
A-B	4	1			4				
A-C	246	62			246				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.55	548	0.004	2	0.0	0.0	6.598	A
B-A	18	4	367	0.048	18	0.0	0.0	10.296	B
C-AB	2	0.56	859	0.003	2	0.0	0.0	4.190	A
C-A	434	108			434				
A-B	6	1			6				
A-C	302	75			302				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.55	548	0.004	2	0.0	0.0	6.599	A
B-A	18	4	367	0.048	18	0.0	0.1	10.298	B
C-AB	2	0.56	859	0.003	2	0.0	0.0	4.201	A
C-A	434	108			434				
A-B	6	1			6				
A-C	302	75			302				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.45	565	0.003	2	0.0	0.0	6.391	A
B-A	14	4	396	0.036	14	0.1	0.0	9.443	A
C-AB	2	0.40	820	0.002	2	0.0	0.0	4.412	A
C-A	354	89			354				
A-B	4	1			4				
A-C	246	62			246				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.38	577	0.003	2	0.0	0.0	6.250	A
B-A	12	3	416	0.029	12	0.0	0.0	8.906	A
C-AB	1	0.30	792	0.002	1	0.0	0.0	4.561	A
C-A	297	74			297				

A-B	4	0.94			4				
A-C	206	52			206				

Base Year, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	632	100.000
B - Bell Ln North		ONE HOUR	✓	38	100.000
C - A12 North East		ONE HOUR	✓	708	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	20	612
	B - Bell Ln North	37	0	1
	C - A12 North East	704	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	10
	B - Bell Ln North	0	0	0
	C - A12 North East	6	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	8.45	0.0	A	0.92	1
B-A	0.18	19.40	0.2	C	34	51
C-AB	0.02	4.43	0.0	A	14	21
C-A					635	953
A-B					18	28
A-C					562	842

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.75	0.19	499	0.002	0.75	0.0	0.0	7.226	A
B-A	28	7	331	0.084	27	0.0	0.1	11.861	B
C-AB	9	2	821	0.010	8	0.0	0.0	4.432	A

C-A	525	131			525				
A-B	15	4			15				
A-C	461	115			461				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.90	0.22	470	0.002	0.90	0.0	0.0	7.672	A
B-A	33	8	287	0.116	33	0.1	0.1	14.182	B
C-AB	13	3	885	0.014	13	0.0	0.0	4.147	A
C-A	624	156			624				
A-B	18	4			18				
A-C	550	138			550				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.28	428	0.003	1	0.0	0.0	8.442	A
B-A	41	10	226	0.180	40	0.1	0.2	19.331	C
C-AB	21	5	978	0.022	21	0.0	0.0	3.782	A
C-A	758	190			758				
A-B	22	6			22				
A-C	674	168			674				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.28	427	0.003	1	0.0	0.0	8.446	A
B-A	41	10	226	0.180	41	0.2	0.2	19.397	C
C-AB	21	5	978	0.022	21	0.0	0.0	3.766	A
C-A	758	190			758				
A-B	22	6			22				
A-C	674	168			674				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.90	0.22	470	0.002	0.90	0.0	0.0	7.676	A
B-A	33	8	287	0.116	34	0.2	0.1	14.239	B
C-AB	13	3	885	0.014	13	0.0	0.0	4.092	A
C-A	624	156			624				
A-B	18	4			18				
A-C	550	138			550				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.75	0.19	499	0.002	0.75	0.0	0.0	7.232	A
B-A	28	7	331	0.084	28	0.1	0.1	11.908	B
C-AB	9	2	821	0.010	9	0.0	0.0	4.402	A
C-A	524	131			524				
A-B	15	4			15				
A-C	461	115			461				

Base Year, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	618	100.000
B - Bell Ln North		ONE HOUR	✓	55	100.000
C - A12 North East		ONE HOUR	✓	744	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	20	598
	B - Bell Ln North	55	0	0
	C - A12 North East	744	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	10
	B - Bell Ln North	5	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.28	23.51	0.4	C	50	76
C-AB	0.00	0.00	0.0	A	0	0
C-A					683	1024
A-B					18	28
A-C					549	823

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	496	0.000	0	0.0	0.0	0.000	A
B-A	41	10	313	0.132	41	0.0	0.2	13.210	B
C-AB	0	0	516	0.000	0	0.0	0.0	0.000	A

C-A	560	140			560				
A-B	15	4			15				
A-C	450	113			450				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	466	0.000	0	0.0	0.0	0.000	A
B-A	49	12	271	0.182	49	0.2	0.2	16.200	C
C-AB	0	0	491	0.000	0	0.0	0.0	0.000	A
C-A	669	167			669				
A-B	18	4			18				
A-C	538	134			538				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	422	0.000	0	0.0	0.0	0.000	A
B-A	61	15	214	0.284	60	0.2	0.4	23.328	C
C-AB	0	0	456	0.000	0	0.0	0.0	0.000	A
C-A	819	205			819				
A-B	22	6			22				
A-C	658	165			658				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	422	0.000	0	0.0	0.0	0.000	A
B-A	61	15	214	0.284	61	0.4	0.4	23.514	C
C-AB	0	0	456	0.000	0	0.0	0.0	0.000	A
C-A	819	205			819				
A-B	22	6			22				
A-C	658	165			658				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	466	0.000	0	0.0	0.0	0.000	A
B-A	49	12	271	0.182	50	0.4	0.2	16.335	C
C-AB	0	0	491	0.000	0	0.0	0.0	0.000	A
C-A	669	167			669				
A-B	18	4			18				
A-C	538	134			538				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	495	0.000	0	0.0	0.0	0.000	A
B-A	41	10	313	0.132	42	0.2	0.2	13.298	B
C-AB	0	0	516	0.000	0	0.0	0.0	0.000	A
C-A	560	140			560				
A-B	15	4			15				
A-C	450	113			450				

Base Year, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	785	100.000
B - Bell Ln North		ONE HOUR	✓	30	100.000
C - A12 North East		ONE HOUR	✓	661	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	33	752
	B - Bell Ln North	28	0	2
	C - A12 North East	658	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	4
	B - Bell Ln North	7	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	9.05	0.0	A	2	3
B-A	0.16	22.87	0.2	C	26	39
C-AB	0.01	4.28	0.0	A	9	13
C-A					598	897
A-B					30	45
A-C					690	1035

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.38	479	0.003	1	0.0	0.0	7.530	A
B-A	21	5	293	0.072	21	0.0	0.1	13.220	B
C-AB	5	1	850	0.006	5	0.0	0.0	4.261	A

C-A	492	123			492				
A-B	25	6			25				
A-C	566	142			566				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.45	447	0.004	2	0.0	0.0	8.082	A
B-A	25	6	249	0.101	25	0.1	0.1	16.072	C
C-AB	8	2	897	0.009	8	0.0	0.0	4.038	A
C-A	586	147			586				
A-B	30	7			30				
A-C	676	169			676				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.55	400	0.006	2	0.0	0.0	9.047	A
B-A	31	8	188	0.164	31	0.1	0.2	22.782	C
C-AB	13	3	969	0.014	13	0.0	0.0	3.758	A
C-A	715	179			715				
A-B	36	9			36				
A-C	828	207			828				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.55	400	0.006	2	0.0	0.0	9.053	A
B-A	31	8	188	0.164	31	0.2	0.2	22.870	C
C-AB	13	3	969	0.014	13	0.0	0.0	3.770	A
C-A	715	179			715				
A-B	36	9			36				
A-C	828	207			828				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.45	447	0.004	2	0.0	0.0	8.088	A
B-A	25	6	249	0.101	25	0.2	0.1	16.136	C
C-AB	8	2	897	0.009	8	0.0	0.0	4.063	A
C-A	586	147			586				
A-B	30	7			30				
A-C	676	169			676				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.38	479	0.003	2	0.0	0.0	7.536	A
B-A	21	5	293	0.072	21	0.1	0.1	13.263	B
C-AB	5	1	850	0.006	5	0.0	0.0	4.277	A
C-A	492	123			492				
A-B	25	6			25				
A-C	566	142			566				

Base Year, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	870	100.000
B - Bell Ln North		ONE HOUR	✓	27	100.000
C - A12 North East		ONE HOUR	✓	562	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	45	825
	B - Bell Ln North	23	0	4
	C - A12 North East	558	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	3
	B - Bell Ln North	4	0	0
	C - A12 North East	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	9.31	0.0	A	4	6
B-A	0.13	21.24	0.1	C	21	32
C-AB	0.02	4.60	0.0	A	10	15
C-A					506	758
A-B					41	62
A-C					757	1136

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.75	475	0.006	3	0.0	0.0	7.627	A
B-A	17	4	301	0.058	17	0.0	0.1	12.678	B
C-AB	6	2	791	0.008	6	0.0	0.0	4.587	A

C-A	417	104			417				
A-B	34	8			34				
A-C	621	155			621				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.90	440	0.008	4	0.0	0.0	8.241	A
B-A	21	5	256	0.081	21	0.1	0.1	15.264	C
C-AB	9	2	826	0.011	9	0.0	0.0	4.405	A
C-A	496	124			496				
A-B	40	10			40				
A-C	742	185			742				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	391	0.011	4	0.0	0.0	9.307	A
B-A	25	6	195	0.130	25	0.1	0.1	21.181	C
C-AB	15	4	879	0.017	15	0.0	0.0	4.162	A
C-A	604	151			604				
A-B	50	12			50				
A-C	908	227			908				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	391	0.011	4	0.0	0.0	9.313	A
B-A	25	6	195	0.130	25	0.1	0.1	21.236	C
C-AB	15	4	879	0.017	15	0.0	0.0	4.166	A
C-A	604	151			604				
A-B	50	12			50				
A-C	908	227			908				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.90	440	0.008	4	0.0	0.0	8.250	A
B-A	21	5	256	0.081	21	0.1	0.1	15.307	C
C-AB	9	2	826	0.011	9	0.0	0.0	4.417	A
C-A	496	124			496				
A-B	40	10			40				
A-C	742	185			742				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.75	475	0.006	3	0.0	0.0	7.632	A
B-A	17	4	301	0.058	17	0.1	0.1	12.709	B
C-AB	6	2	791	0.008	6	0.0	0.0	4.596	A
C-A	417	104			417				
A-B	34	8			34				
A-C	621	155			621				

2023 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	338	100.000
B - Bell Ln North		ONE HOUR	✓	20	100.000
C - A12 North East		ONE HOUR	✓	425	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	6	332
	B - Bell Ln North	18	0	2
	C - A12 North East	424	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	9
	B - Bell Ln North	6	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	6.80	0.0	A	2	3
B-A	0.06	10.95	0.1	B	16	24
C-AB	0.00	4.52	0.0	A	2	3
C-A					388	583
A-B					5	8
A-C					305	457

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.42	567	0.003	2	0.0	0.0	6.366	A
B-A	13	3	403	0.033	13	0.0	0.0	9.223	A
C-AB	1	0.35	799	0.002	1	0.0	0.0	4.512	A

C-A	319	80			319				
A-B	4	1			4				
A-C	250	62			250				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.50	552	0.004	2	0.0	0.0	6.539	A
B-A	16	4	380	0.042	16	0.0	0.0	9.877	A
C-AB	2	0.46	829	0.002	2	0.0	0.0	4.347	A
C-A	381	95			381				
A-B	5	1			5				
A-C	298	75			298				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.61	532	0.005	2	0.0	0.0	6.795	A
B-A	20	5	348	0.056	19	0.0	0.1	10.945	B
C-AB	3	0.66	871	0.003	3	0.0	0.0	4.137	A
C-A	466	116			466				
A-B	6	2			6				
A-C	365	91			365				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.61	532	0.005	2	0.0	0.0	6.795	A
B-A	20	5	348	0.056	20	0.1	0.1	10.946	B
C-AB	3	0.66	871	0.003	3	0.0	0.0	4.145	A
C-A	466	116			466				
A-B	6	2			6				
A-C	365	91			365				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.50	552	0.004	2	0.0	0.0	6.543	A
B-A	16	4	380	0.042	16	0.1	0.0	9.884	A
C-AB	2	0.46	828	0.002	2	0.0	0.0	4.368	A
C-A	381	95			381				
A-B	5	1			5				
A-C	298	75			298				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.42	567	0.003	2	0.0	0.0	6.370	A
B-A	13	3	403	0.033	13	0.0	0.0	9.230	A
C-AB	1	0.35	799	0.002	1	0.0	0.0	4.522	A
C-A	319	80			319				
A-B	4	1			4				
A-C	250	62			250				

2023 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	699	100.000
B - Bell Ln North		ONE HOUR	✓	42	100.000
C - A12 North East		ONE HOUR	✓	745	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	22	677
	B - Bell Ln North	41	0	1
	C - A12 North East	740	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	11
	B - Bell Ln North	0	0	0
	C - A12 North East	7	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	9.05	0.0	A	1	2
B-A	0.23	23.89	0.3	C	38	57
C-AB	0.03	4.38	0.0	A	17	26
C-A					666	999
A-B					20	31
A-C					621	931

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.84	0.21	483	0.002	0.83	0.0	0.0	7.468	A
B-A	31	8	310	0.100	30	0.0	0.1	12.873	B
C-AB	10	3	831	0.012	10	0.0	0.0	4.383	A

C-A	551	138			551				
A-B	17	4			17				
A-C	509	127			509				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1.00	0.25	450	0.002	1.00	0.0	0.0	8.017	A
B-A	37	9	262	0.141	37	0.1	0.2	15.970	C
C-AB	15	4	899	0.017	15	0.0	0.0	4.091	A
C-A	654	164			654				
A-B	20	5			20				
A-C	608	152			608				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.31	399	0.003	1	0.0	0.0	9.040	A
B-A	45	11	196	0.231	45	0.2	0.3	23.736	C
C-AB	27	7	998	0.027	27	0.0	0.0	3.724	A
C-A	793	198			793				
A-B	24	6			24				
A-C	745	186			745				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.31	399	0.003	1	0.0	0.0	9.050	A
B-A	45	11	196	0.231	45	0.3	0.3	23.892	C
C-AB	27	7	998	0.027	27	0.0	0.0	3.707	A
C-A	793	198			793				
A-B	24	6			24				
A-C	745	186			745				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1.00	0.25	450	0.002	1	0.0	0.0	8.025	A
B-A	37	9	262	0.141	37	0.3	0.2	16.074	C
C-AB	15	4	899	0.017	16	0.0	0.0	4.042	A
C-A	654	164			654				
A-B	20	5			20				
A-C	608	152			608				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.84	0.21	482	0.002	0.84	0.0	0.0	7.473	A
B-A	31	8	310	0.100	31	0.2	0.1	12.935	B
C-AB	10	3	832	0.012	10	0.0	0.0	4.352	A
C-A	551	138			551				
A-B	17	4			17				
A-C	509	127			509				

2023 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		1.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	700	100.000
B - Bell Ln North		ONE HOUR	✓	61	100.000
C - A12 North East		ONE HOUR	✓	778	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	22	678
	B - Bell Ln North	61	0	0
	C - A12 North East	778	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	10
	B - Bell Ln North	5	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.37	31.22	0.6	D	56	84
C-AB	0.00	0.00	0.0	A	0	0
C-A					714	1071
A-B					20	31
A-C					622	933

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	477	0.000	0	0.0	0.0	0.000	A
B-A	46	11	291	0.158	45	0.0	0.2	14.587	B
C-AB	0	0	496	0.000	0	0.0	0.0	0.000	A

C-A	586	146			586				
A-B	17	4			17				
A-C	510	128			510				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	443	0.000	0	0.0	0.0	0.000	A
B-A	55	14	246	0.224	55	0.2	0.3	18.799	C
C-AB	0	0	468	0.000	0	0.0	0.0	0.000	A
C-A	699	175			699				
A-B	20	5			20				
A-C	610	152			610				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	391	0.000	0	0.0	0.0	0.000	A
B-A	67	17	182	0.369	66	0.3	0.6	30.698	D
C-AB	0	0	429	0.000	0	0.0	0.0	0.000	A
C-A	856	214			856				
A-B	24	6			24				
A-C	747	187			747				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	390	0.000	0	0.0	0.0	0.000	A
B-A	67	17	182	0.369	67	0.6	0.6	31.225	D
C-AB	0	0	429	0.000	0	0.0	0.0	0.000	A
C-A	856	214			856				
A-B	24	6			24				
A-C	747	187			747				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	442	0.000	0	0.0	0.0	0.000	A
B-A	55	14	246	0.224	56	0.6	0.3	19.092	C
C-AB	0	0	468	0.000	0	0.0	0.0	0.000	A
C-A	699	175			699				
A-B	20	5			20				
A-C	610	152			610				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	476	0.000	0	0.0	0.0	0.000	A
B-A	46	11	291	0.158	46	0.3	0.2	14.719	B
C-AB	0	0	496	0.000	0	0.0	0.0	0.000	A
C-A	586	146			586				
A-B	17	4			17				
A-C	510	128			510				

2023 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	858	100.000
B - Bell Ln North		ONE HOUR	✓	33	100.000
C - A12 North East		ONE HOUR	✓	736	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	37	822
	B - Bell Ln North	31	0	2
	C - A12 North East	732	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	5
	B - Bell Ln North	7	0	0
	C - A12 North East	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	9.82	0.0	A	2	3
B-A	0.23	30.48	0.3	D	29	43
C-AB	0.02	4.15	0.0	A	12	17
C-A					663	995
A-B					34	51
A-C					754	1131

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.42	462	0.004	2	0.0	0.0	7.813	A
B-A	23	6	268	0.087	23	0.0	0.1	14.661	B
C-AB	7	2	878	0.008	7	0.0	0.0	4.133	A

C-A	547	137			547				
A-B	28	7			28				
A-C	619	155			619				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.50	426	0.005	2	0.0	0.0	8.492	A
B-A	28	7	220	0.128	28	0.1	0.1	18.750	C
C-AB	10	3	933	0.011	10	0.0	0.0	3.893	A
C-A	651	163			651				
A-B	33	8			33				
A-C	739	185			739				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.61	370	0.007	2	0.0	0.0	9.803	A
B-A	34	9	152	0.225	34	0.1	0.3	30.219	D
C-AB	18	4	1016	0.018	18	0.0	0.0	3.597	A
C-A	792	198			792				
A-B	40	10			40				
A-C	905	226			905				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.61	369	0.007	2	0.0	0.0	9.818	A
B-A	34	9	152	0.225	34	0.3	0.3	30.477	D
C-AB	18	4	1016	0.018	18	0.0	0.0	3.608	A
C-A	792	198			792				
A-B	40	10			40				
A-C	905	226			905				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.50	425	0.005	2	0.0	0.0	8.504	A
B-A	28	7	220	0.128	29	0.3	0.1	18.895	C
C-AB	10	3	933	0.011	10	0.0	0.0	3.919	A
C-A	651	163			651				
A-B	33	8			33				
A-C	739	185			739				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.42	462	0.004	2	0.0	0.0	7.818	A
B-A	23	6	268	0.087	24	0.1	0.1	14.730	B
C-AB	7	2	877	0.008	7	0.0	0.0	4.148	A
C-A	547	137			547				
A-B	28	7			28				
A-C	619	155			619				

2023 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	914	100.000
B - Bell Ln North		ONE HOUR	✓	30	100.000
C - A12 North East		ONE HOUR	✓	668	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	50	863
	B - Bell Ln North	26	0	4
	C - A12 North East	663	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	4
	B - Bell Ln North	4	0	0
	C - A12 North East	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	9.84	0.0	A	4	6
B-A	0.18	27.22	0.2	D	23	35
C-AB	0.02	4.34	0.0	A	14	21
C-A					599	898
A-B					46	69
A-C					792	1189

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.84	463	0.007	3	0.0	0.0	7.823	A
B-A	19	5	277	0.070	19	0.0	0.1	13.922	B
C-AB	8	2	839	0.010	8	0.0	0.0	4.334	A

C-A	494	124			494				
A-B	38	9			38				
A-C	650	163			650				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	426	0.009	4	0.0	0.0	8.529	A
B-A	23	6	228	0.101	23	0.1	0.1	17.519	C
C-AB	12	3	885	0.014	12	0.0	0.0	4.118	A
C-A	588	147			588				
A-B	45	11			45				
A-C	776	194			776				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	371	0.013	5	0.0	0.0	9.830	A
B-A	28	7	160	0.176	28	0.1	0.2	27.072	D
C-AB	21	5	956	0.022	21	0.0	0.0	3.843	A
C-A	714	179			714				
A-B	55	14			55				
A-C	951	238			951				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	371	0.013	5	0.0	0.0	9.842	A
B-A	28	7	160	0.176	28	0.2	0.2	27.216	D
C-AB	21	5	956	0.022	21	0.0	0.0	3.850	A
C-A	714	179			714				
A-B	55	14			55				
A-C	951	238			951				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	426	0.009	4	0.0	0.0	8.542	A
B-A	23	6	228	0.101	23	0.2	0.1	17.605	C
C-AB	12	3	885	0.014	12	0.0	0.0	4.133	A
C-A	588	147			588				
A-B	45	11			45				
A-C	776	194			776				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.84	463	0.007	3	0.0	0.0	7.832	A
B-A	19	5	277	0.069	19	0.1	0.1	13.968	B
C-AB	8	2	839	0.010	8	0.0	0.0	4.345	A
C-A	494	124			494				
A-B	38	9			38				
A-C	650	163			650				

2023 Early Years , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	466	100.000
B - Bell Ln North		ONE HOUR	✓	20	100.000
C - A12 North East		ONE HOUR	✓	442	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	6	460
	B - Bell Ln North	18	0	2
	C - A12 North East	441	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	10
	B - Bell Ln North	6	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	7.36	0.0	A	2	3
B-A	0.06	12.55	0.1	B	16	24
C-AB	0.00	4.61	0.0	A	2	3
C-A					404	606
A-B					5	8
A-C					422	633

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.42	539	0.003	2	0.0	0.0	6.693	A
B-A	13	3	375	0.036	13	0.0	0.0	9.950	A
C-AB	1	0.36	785	0.002	1	0.0	0.0	4.596	A

C-A	332	83			332				
A-B	4	1			4				
A-C	346	87			346				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.50	519	0.004	2	0.0	0.0	6.957	A
B-A	16	4	346	0.046	16	0.0	0.0	10.902	B
C-AB	2	0.49	813	0.002	2	0.0	0.0	4.432	A
C-A	396	99			396				
A-B	5	1			5				
A-C	414	103			414				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.61	492	0.005	2	0.0	0.0	7.360	A
B-A	20	5	306	0.064	19	0.0	0.1	12.542	B
C-AB	3	0.71	854	0.003	3	0.0	0.0	4.220	A
C-A	484	121			484				
A-B	6	2			6				
A-C	506	127			506				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.61	491	0.005	2	0.0	0.0	7.361	A
B-A	20	5	306	0.064	20	0.1	0.1	12.547	B
C-AB	3	0.71	854	0.003	3	0.0	0.0	4.231	A
C-A	484	121			484				
A-B	6	2			6				
A-C	506	127			506				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.50	519	0.004	2	0.0	0.0	6.961	A
B-A	16	4	346	0.046	16	0.1	0.0	10.908	B
C-AB	2	0.49	813	0.002	2	0.0	0.0	4.455	A
C-A	396	99			396				
A-B	5	1			5				
A-C	414	103			414				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.42	539	0.003	2	0.0	0.0	6.695	A
B-A	13	3	375	0.036	13	0.0	0.0	9.965	A
C-AB	1	0.36	784	0.002	1	0.0	0.0	4.607	A
C-A	332	83			332				
A-B	4	1			4				
A-C	346	87			346				

2023 Early Years , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		1.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	922	100.000
B - Bell Ln North		ONE HOUR	✓	42	100.000
C - A12 North East		ONE HOUR	✓	801	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	22	900
	B - Bell Ln North	41	0	1
	C - A12 North East	796	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	13
	B - Bell Ln North	0	0	0
	C - A12 North East	7	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	12.41	0.0	B	1	2
B-A	0.41	55.79	0.7	F	38	57
C-AB	0.04	4.36	0.0	A	22	33
C-A					713	1069
A-B					20	31
A-C					826	1238

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.84	0.21	431	0.002	0.83	0.0	0.0	8.368	A
B-A	31	8	251	0.123	30	0.0	0.1	16.307	C
C-AB	12	3	837	0.014	12	0.0	0.0	4.364	A

C-A	591	148			591				
A-B	17	4			17				
A-C	677	169			677				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1.00	0.25	385	0.003	1.00	0.0	0.0	9.367	A
B-A	37	9	191	0.193	37	0.1	0.2	23.204	C
C-AB	19	5	909	0.021	19	0.0	0.0	4.060	A
C-A	701	175			701				
A-B	20	5			20				
A-C	809	202			809				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.31	295	0.004	1	0.0	0.0	12.248	B
B-A	45	11	109	0.414	44	0.2	0.6	53.511	F
C-AB	36	9	1017	0.035	35	0.0	0.0	3.682	A
C-A	846	212			846				
A-B	24	6			24				
A-C	991	248			991				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.31	291	0.004	1	0.0	0.0	12.412	B
B-A	45	11	109	0.414	45	0.6	0.7	55.787	F
C-AB	36	9	1017	0.035	36	0.0	0.0	3.666	A
C-A	846	212			846				
A-B	24	6			24				
A-C	991	248			991				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1.00	0.25	384	0.003	1	0.0	0.0	9.409	A
B-A	37	9	191	0.193	39	0.7	0.2	23.822	C
C-AB	19	5	910	0.021	19	0.0	0.0	4.009	A
C-A	701	175			701				
A-B	20	5			20				
A-C	809	202			809				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.84	0.21	430	0.002	0.84	0.0	0.0	8.380	A
B-A	31	8	251	0.123	31	0.2	0.1	16.451	C
C-AB	12	3	837	0.014	12	0.0	0.0	4.335	A
C-A	591	148			591				
A-B	17	4			17				
A-C	677	169			677				

2023 Early Years , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		1.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	785	100.000
B - Bell Ln North		ONE HOUR	✓	61	100.000
C - A12 North East		ONE HOUR	✓	800	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	22	763
	B - Bell Ln North	61	0	0
	C - A12 North East	800	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	17
	B - Bell Ln North	5	0	0
	C - A12 North East	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.49	51.63	0.9	F	56	84
C-AB	0.00	0.00	0.0	A	0	0
C-A					734	1101
A-B					20	31
A-C					700	1050

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	448	0.000	0	0.0	0.0	0.000	A
B-A	46	11	260	0.177	45	0.0	0.2	16.693	C
C-AB	0	0	465	0.000	0	0.0	0.0	0.000	A

C-A	602	151			602				
A-B	17	4			17				
A-C	574	144			574				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	407	0.000	0	0.0	0.0	0.000	A
B-A	55	14	208	0.264	54	0.2	0.3	23.330	C
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	719	180			719				
A-B	20	5			20				
A-C	686	171			686				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	341	0.000	0	0.0	0.0	0.000	A
B-A	67	17	136	0.493	65	0.3	0.9	49.130	E
C-AB	0	0	385	0.000	0	0.0	0.0	0.000	A
C-A	881	220			881				
A-B	24	6			24				
A-C	840	210			840				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	340	0.000	0	0.0	0.0	0.000	A
B-A	67	17	136	0.493	67	0.9	0.9	51.630	F
C-AB	0	0	385	0.000	0	0.0	0.0	0.000	A
C-A	881	220			881				
A-B	24	6			24				
A-C	840	210			840				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	405	0.000	0	0.0	0.0	0.000	A
B-A	55	14	208	0.264	57	0.9	0.4	24.160	C
C-AB	0	0	431	0.000	0	0.0	0.0	0.000	A
C-A	719	180			719				
A-B	20	5			20				
A-C	686	171			686				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	447	0.000	0	0.0	0.0	0.000	A
B-A	46	11	260	0.177	47	0.4	0.2	16.918	C
C-AB	0	0	465	0.000	0	0.0	0.0	0.000	A
C-A	602	151			602				
A-B	17	4			17				
A-C	574	144			574				

2023 Early Years , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	862	100.000
B - Bell Ln North		ONE HOUR	✓	33	100.000
C - A12 North East		ONE HOUR	✓	773	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	37	826
	B - Bell Ln North	31	0	2
	C - A12 North East	769	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	8
	B - Bell Ln North	7	0	0
	C - A12 North East	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	10.17	0.0	B	2	3
B-A	0.26	36.18	0.3	E	29	43
C-AB	0.02	4.11	0.0	A	13	19
C-A					696	1044
A-B					34	51
A-C					758	1137

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.42	457	0.004	2	0.0	0.0	7.913	A
B-A	23	6	256	0.092	23	0.0	0.1	15.462	C
C-AB	7	2	888	0.008	7	0.0	0.0	4.085	A

C-A	575	144			575				
A-B	28	7			28				
A-C	622	155			622				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.50	418	0.005	2	0.0	0.0	8.645	A
B-A	28	7	204	0.137	28	0.1	0.2	20.359	C
C-AB	11	3	947	0.012	11	0.0	0.0	3.832	A
C-A	684	171			684				
A-B	33	8			33				
A-C	742	186			742				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.61	357	0.007	2	0.0	0.0	10.149	B
B-A	34	9	134	0.257	34	0.2	0.3	35.725	E
C-AB	20	5	1037	0.019	20	0.0	0.0	3.529	A
C-A	831	208			831				
A-B	40	10			40				
A-C	909	227			909				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.61	356	0.007	2	0.0	0.0	10.175	B
B-A	34	9	134	0.257	34	0.3	0.3	36.177	E
C-AB	20	5	1037	0.019	20	0.0	0.0	3.544	A
C-A	831	208			831				
A-B	40	10			40				
A-C	909	227			909				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.50	418	0.005	2	0.0	0.0	8.658	A
B-A	28	7	204	0.137	29	0.3	0.2	20.569	C
C-AB	11	3	947	0.012	11	0.0	0.0	3.868	A
C-A	683	171			683				
A-B	33	8			33				
A-C	742	186			742				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.42	456	0.004	2	0.0	0.0	7.919	A
B-A	23	6	255	0.092	24	0.2	0.1	15.547	C
C-AB	7	2	888	0.008	7	0.0	0.0	4.106	A
C-A	574	144			574				
A-B	28	7			28				
A-C	622	155			622				

2023 Early Years , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	940	100.000
B - Bell Ln North		ONE HOUR	✓	30	100.000
C - A12 North East		ONE HOUR	✓	801	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	50	889
	B - Bell Ln North	26	0	4
	C - A12 North East	796	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	6
	B - Bell Ln North	4	0	0
	C - A12 North East	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	10.37	0.0	B	4	6
B-A	0.23	38.46	0.3	E	23	35
C-AB	0.03	4.05	0.0	A	18	27
C-A					717	1075
A-B					46	69
A-C					816	1224

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.84	455	0.007	3	0.0	0.0	7.963	A
B-A	19	5	251	0.077	19	0.0	0.1	15.506	C
C-AB	10	3	901	0.011	10	0.0	0.0	4.040	A

C-A	593	148			593				
A-B	38	9			38				
A-C	670	167			670				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	416	0.010	4	0.0	0.0	8.747	A
B-A	23	6	197	0.117	23	0.1	0.1	20.693	C
C-AB	16	4	963	0.016	16	0.0	0.0	3.790	A
C-A	704	176			704				
A-B	45	11			45				
A-C	800	200			800				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	353	0.014	5	0.0	0.0	10.343	B
B-A	28	7	122	0.232	28	0.1	0.3	38.000	E
C-AB	29	7	1058	0.027	29	0.0	0.0	3.489	A
C-A	853	213			853				
A-B	55	14			55				
A-C	979	245			979				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	352	0.014	5	0.0	0.0	10.373	B
B-A	28	7	122	0.232	28	0.3	0.3	38.464	E
C-AB	29	7	1058	0.027	29	0.0	0.0	3.500	A
C-A	853	213			853				
A-B	55	14			55				
A-C	979	245			979				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	415	0.010	4	0.0	0.0	8.769	A
B-A	23	6	197	0.117	24	0.3	0.1	20.880	C
C-AB	16	4	963	0.016	16	0.0	0.0	3.817	A
C-A	704	176			704				
A-B	45	11			45				
A-C	800	200			800				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.84	455	0.007	3	0.0	0.0	7.974	A
B-A	19	5	251	0.077	19	0.1	0.1	15.575	C
C-AB	10	3	901	0.011	10	0.0	0.0	4.055	A
C-A	593	148			593				
A-B	38	9			38				
A-C	670	167			670				

2028 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	354	100.000
B - Bell Ln North		ONE HOUR	✓	21	100.000
C - A12 North East		ONE HOUR	✓	442	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	6	348
	B - Bell Ln North	19	0	2
	C - A12 North East	441	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	9
	B - Bell Ln North	6	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	6.87	0.0	A	2	3
B-A	0.06	11.25	0.1	B	17	26
C-AB	0.00	4.49	0.0	A	2	3
C-A					404	606
A-B					5	8
A-C					319	479

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.44	563	0.003	2	0.0	0.0	6.408	A
B-A	14	4	398	0.035	14	0.0	0.0	9.368	A
C-AB	1	0.37	804	0.002	1	0.0	0.0	4.483	A

C-A	332	83			332				
A-B	4	1			4				
A-C	262	65			262				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.52	548	0.004	2	0.0	0.0	6.592	A
B-A	17	4	374	0.045	17	0.0	0.0	10.077	B
C-AB	2	0.50	835	0.002	2	0.0	0.0	4.312	A
C-A	396	99			396				
A-B	5	1			5				
A-C	313	78			313				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.64	527	0.005	3	0.0	0.0	6.866	A
B-A	21	5	341	0.060	20	0.0	0.1	11.245	B
C-AB	3	0.72	880	0.003	3	0.0	0.0	4.097	A
C-A	484	121			484				
A-B	6	2			6				
A-C	383	96			383				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.64	527	0.005	3	0.0	0.0	6.867	A
B-A	21	5	341	0.060	21	0.1	0.1	11.249	B
C-AB	3	0.72	880	0.003	3	0.0	0.0	4.105	A
C-A	484	121			484				
A-B	6	2			6				
A-C	383	96			383				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.52	548	0.004	2	0.0	0.0	6.596	A
B-A	17	4	374	0.045	17	0.1	0.0	10.082	B
C-AB	2	0.50	835	0.002	2	0.0	0.0	4.333	A
C-A	396	99			396				
A-B	5	1			5				
A-C	313	78			313				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.44	563	0.003	2	0.0	0.0	6.412	A
B-A	14	4	398	0.035	14	0.0	0.0	9.376	A
C-AB	2	0.38	804	0.002	2	0.0	0.0	4.493	A
C-A	332	83			332				
A-B	4	1			4				
A-C	262	65			262				

2028 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	742	100.000
B - Bell Ln North		ONE HOUR	✓	44	100.000
C - A12 North East		ONE HOUR	✓	757	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	23	719
	B - Bell Ln North	43	0	1
	C - A12 North East	752	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	8
	B - Bell Ln North	0	0	0
	C - A12 North East	6	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	9.35	0.0	A	1	2
B-A	0.26	25.94	0.3	D	40	59
C-AB	0.03	4.36	0.0	A	19	28
C-A					676	1014
A-B					21	32
A-C					659	989

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.88	0.22	476	0.002	0.87	0.0	0.0	7.576	A
B-A	33	8	303	0.107	32	0.0	0.1	13.255	B
C-AB	11	3	837	0.013	11	0.0	0.0	4.359	A

C-A	559	140			559				
A-B	18	4			18				
A-C	541	135			541				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.26	441	0.002	1	0.0	0.0	8.173	A
B-A	39	10	254	0.153	39	0.1	0.2	16.685	C
C-AB	17	4	906	0.018	17	0.0	0.0	4.068	A
C-A	664	166			664				
A-B	21	5			21				
A-C	646	162			646				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.32	387	0.003	1	0.0	0.0	9.331	A
B-A	48	12	186	0.255	47	0.2	0.3	25.721	D
C-AB	29	7	1007	0.029	29	0.0	0.0	3.700	A
C-A	804	201			804				
A-B	26	6			26				
A-C	791	198			791				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.32	386	0.003	1	0.0	0.0	9.346	A
B-A	48	12	186	0.255	48	0.3	0.3	25.936	D
C-AB	29	7	1007	0.029	29	0.0	0.0	3.685	A
C-A	804	201			804				
A-B	26	6			26				
A-C	791	198			791				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.26	441	0.002	1	0.0	0.0	8.183	A
B-A	39	10	254	0.153	39	0.3	0.2	16.818	C
C-AB	17	4	906	0.018	17	0.0	0.0	4.013	A
C-A	664	166			664				
A-B	21	5			21				
A-C	646	162			646				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.88	0.22	476	0.002	0.88	0.0	0.0	7.584	A
B-A	33	8	303	0.107	33	0.2	0.1	13.327	B
C-AB	11	3	837	0.013	11	0.0	0.0	4.328	A
C-A	559	140			559				
A-B	18	4			18				
A-C	541	135			541				

2028 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		1.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	754	100.000
B - Bell Ln North		ONE HOUR	✓	64	100.000
C - A12 North East		ONE HOUR	✓	788	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	23	731
	B - Bell Ln North	64	0	0
	C - A12 North East	788	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	8
	B - Bell Ln North	5	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.41	35.97	0.7	E	59	88
C-AB	0.00	0.00	0.0	A	0	0
C-A					723	1084
A-B					21	32
A-C					671	1006

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	467	0.000	0	0.0	0.0	0.000	A
B-A	48	12	283	0.171	48	0.0	0.2	15.220	C
C-AB	0	0	491	0.000	0	0.0	0.0	0.000	A

C-A	593	148			593				
A-B	18	4			18				
A-C	550	138			550				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	431	0.000	0	0.0	0.0	0.000	A
B-A	58	14	236	0.245	57	0.2	0.3	20.098	C
C-AB	0	0	461	0.000	0	0.0	0.0	0.000	A
C-A	708	177			708				
A-B	21	5			21				
A-C	657	164			657				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	375	0.000	0	0.0	0.0	0.000	A
B-A	71	18	170	0.415	69	0.3	0.7	35.103	E
C-AB	0	0	419	0.000	0	0.0	0.0	0.000	A
C-A	867	217			867				
A-B	26	6			26				
A-C	805	201			805				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	374	0.000	0	0.0	0.0	0.000	A
B-A	71	18	170	0.415	71	0.7	0.7	35.971	E
C-AB	0	0	419	0.000	0	0.0	0.0	0.000	A
C-A	867	217			867				
A-B	26	6			26				
A-C	805	201			805				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	430	0.000	0	0.0	0.0	0.000	A
B-A	58	14	236	0.245	59	0.7	0.3	20.516	C
C-AB	0	0	461	0.000	0	0.0	0.0	0.000	A
C-A	708	177			708				
A-B	21	5			21				
A-C	657	164			657				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	467	0.000	0	0.0	0.0	0.000	A
B-A	48	12	283	0.171	49	0.3	0.2	15.387	C
C-AB	0	0	491	0.000	0	0.0	0.0	0.000	A
C-A	593	148			593				
A-B	18	4			18				
A-C	550	138			550				

2028 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	866	100.000
B - Bell Ln North		ONE HOUR	✓	35	100.000
C - A12 North East		ONE HOUR	✓	731	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	39	828
	B - Bell Ln North	33	0	2
	C - A12 North East	727	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	4
	B - Bell Ln North	7	0	0
	C - A12 North East	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	9.90	0.0	A	2	3
B-A	0.24	30.91	0.3	D	30	45
C-AB	0.02	4.16	0.0	A	12	18
C-A					659	988
A-B					35	53
A-C					760	1139

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.44	461	0.004	2	0.0	0.0	7.837	A
B-A	25	6	268	0.092	24	0.0	0.1	14.728	B
C-AB	7	2	875	0.008	7	0.0	0.0	4.149	A

C-A	543	136			543				
A-B	29	7			29				
A-C	623	156			623				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.53	424	0.005	2	0.0	0.0	8.530	A
B-A	29	7	220	0.134	29	0.1	0.2	18.883	C
C-AB	11	3	929	0.012	11	0.0	0.0	3.910	A
C-A	646	162			646				
A-B	35	9			35				
A-C	744	186			744				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.64	367	0.007	3	0.0	0.0	9.886	A
B-A	36	9	152	0.237	36	0.2	0.3	30.631	D
C-AB	19	5	1012	0.018	19	0.0	0.0	3.616	A
C-A	786	197			786				
A-B	43	11			43				
A-C	911	228			911				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.64	366	0.007	3	0.0	0.0	9.902	A
B-A	36	9	152	0.237	36	0.3	0.3	30.915	D
C-AB	19	5	1012	0.018	19	0.0	0.0	3.624	A
C-A	786	197			786				
A-B	43	11			43				
A-C	911	228			911				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.53	424	0.005	2	0.0	0.0	8.543	A
B-A	29	7	220	0.134	30	0.3	0.2	19.038	C
C-AB	11	3	929	0.012	11	0.0	0.0	3.935	A
C-A	646	162			646				
A-B	35	9			35				
A-C	744	186			744				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.44	461	0.004	2	0.0	0.0	7.843	A
B-A	25	6	268	0.092	25	0.2	0.1	14.801	B
C-AB	7	2	875	0.008	7	0.0	0.0	4.163	A
C-A	543	136			543				
A-B	29	7			29				
A-C	623	156			623				

2028 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	949	100.000
B - Bell Ln North		ONE HOUR	✓	32	100.000
C - A12 North East		ONE HOUR	✓	701	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	53	896
	B - Bell Ln North	27	0	5
	C - A12 North East	696	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	3
	B - Bell Ln North	4	0	0
	C - A12 North East	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	10.12	0.0	B	4	6
B-A	0.20	30.09	0.2	D	25	37
C-AB	0.02	4.26	0.0	A	15	23
C-A					628	941
A-B					48	73
A-C					823	1234

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.88	458	0.008	3	0.0	0.0	7.917	A
B-A	20	5	270	0.075	20	0.0	0.1	14.403	B
C-AB	9	2	855	0.011	9	0.0	0.0	4.256	A

C-A	519	130			519				
A-B	40	10			40				
A-C	675	169			675				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	419	0.010	4	0.0	0.0	8.669	A
B-A	24	6	219	0.111	24	0.1	0.1	18.443	C
C-AB	14	3	905	0.015	14	0.0	0.0	4.033	A
C-A	616	154			616				
A-B	47	12			47				
A-C	806	201			806				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	361	0.014	5	0.0	0.0	10.102	B
B-A	30	7	149	0.199	29	0.1	0.2	29.881	D
C-AB	24	6	982	0.024	24	0.0	0.0	3.751	A
C-A	748	187			748				
A-B	58	15			58				
A-C	987	247			987				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	361	0.014	5	0.0	0.0	10.119	B
B-A	30	7	149	0.199	30	0.2	0.2	30.091	D
C-AB	24	6	982	0.024	24	0.0	0.0	3.755	A
C-A	748	187			748				
A-B	58	15			58				
A-C	987	247			987				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	419	0.010	4	0.0	0.0	8.683	A
B-A	24	6	219	0.111	25	0.2	0.1	18.558	C
C-AB	14	3	905	0.015	14	0.0	0.0	4.046	A
C-A	616	154			616				
A-B	47	12			47				
A-C	806	201			806				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.88	458	0.008	4	0.0	0.0	7.925	A
B-A	20	5	270	0.075	20	0.1	0.1	14.456	B
C-AB	9	2	855	0.011	9	0.0	0.0	4.264	A
C-A	518	130			518				
A-B	40	10			40				
A-C	675	169			675				

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	391	100.000
B - Bell Ln North		ONE HOUR	✓	21	100.000
C - A12 North East		ONE HOUR	✓	458	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	6	385
	B - Bell Ln North	19	0	2
	C - A12 North East	457	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	15
	B - Bell Ln North	6	0	0
	C - A12 North East	8	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.10	0.0	A	2	3
B-A	0.06	12.03	0.1	B	17	26
C-AB	0.00	4.52	0.0	A	2	3
C-A					418	628
A-B					5	8
A-C					353	530

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.44	552	0.003	2	0.0	0.0	6.546	A
B-A	14	4	384	0.037	14	0.0	0.0	9.727	A
C-AB	2	0.39	801	0.002	2	0.0	0.0	4.504	A

C-A	344	86			344				
A-B	4	1			4				
A-C	290	72			290				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.52	534	0.004	2	0.0	0.0	6.768	A
B-A	17	4	357	0.047	17	0.0	0.0	10.581	B
C-AB	2	0.52	832	0.003	2	0.0	0.0	4.330	A
C-A	410	103			410				
A-B	5	1			5				
A-C	346	87			346				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.64	509	0.005	3	0.0	0.0	7.102	A
B-A	21	5	320	0.064	20	0.0	0.1	12.028	B
C-AB	3	0.76	877	0.003	3	0.0	0.0	4.110	A
C-A	502	125			502				
A-B	6	2			6				
A-C	424	106			424				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.64	509	0.005	3	0.0	0.0	7.103	A
B-A	21	5	320	0.064	21	0.1	0.1	12.032	B
C-AB	3	0.76	876	0.003	3	0.0	0.0	4.121	A
C-A	502	125			502				
A-B	6	2			6				
A-C	424	106			424				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.52	534	0.004	2	0.0	0.0	6.769	A
B-A	17	4	357	0.047	17	0.1	0.0	10.589	B
C-AB	2	0.52	831	0.003	2	0.0	0.0	4.358	A
C-A	410	103			410				
A-B	5	1			5				
A-C	346	87			346				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.44	551	0.003	2	0.0	0.0	6.550	A
B-A	14	4	384	0.037	14	0.0	0.0	9.739	A
C-AB	2	0.39	801	0.002	2	0.0	0.0	4.519	A
C-A	344	86			344				
A-B	4	1			4				
A-C	290	72			290				

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	800	100.000
B - Bell Ln North		ONE HOUR	✓	44	100.000
C - A12 North East		ONE HOUR	✓	789	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	23	777
	B - Bell Ln North	43	0	1
	C - A12 North East	784	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	17
	B - Bell Ln North	0	0	0
	C - A12 North East	9	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	10.72	0.0	B	1	2
B-A	0.34	38.79	0.5	E	40	59
C-AB	0.03	4.36	0.0	A	22	33
C-A					702	1054
A-B					21	32
A-C					713	1069

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.88	0.22	451	0.002	0.87	0.0	0.0	7.992	A
B-A	33	8	272	0.120	32	0.0	0.1	14.988	B
C-AB	12	3	838	0.014	12	0.0	0.0	4.355	A

C-A	582	146			582				
A-B	18	4			18				
A-C	585	146			585				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.26	410	0.003	1	0.0	0.0	8.792	A
B-A	39	10	216	0.179	38	0.1	0.2	20.192	C
C-AB	19	5	910	0.021	19	0.0	0.0	4.054	A
C-A	691	173			691				
A-B	21	5			21				
A-C	698	175			698				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.32	339	0.004	1	0.0	0.0	10.669	B
B-A	48	12	140	0.339	46	0.2	0.5	37.996	E
C-AB	34	9	1016	0.034	34	0.0	0.0	3.681	A
C-A	834	209			834				
A-B	26	6			26				
A-C	855	214			855				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.32	337	0.004	1	0.0	0.0	10.723	B
B-A	48	12	140	0.339	47	0.5	0.5	38.788	E
C-AB	34	9	1016	0.034	34	0.0	0.0	3.667	A
C-A	834	209			834				
A-B	26	6			26				
A-C	855	214			855				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.26	409	0.003	1	0.0	0.0	8.815	A
B-A	39	10	216	0.179	40	0.5	0.2	20.514	C
C-AB	19	5	910	0.021	19	0.0	0.0	4.010	A
C-A	691	173			691				
A-B	21	5			21				
A-C	698	175			698				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.88	0.22	451	0.002	0.88	0.0	0.0	8.001	A
B-A	33	8	272	0.120	33	0.2	0.1	15.097	C
C-AB	12	3	839	0.014	12	0.0	0.0	4.329	A
C-A	582	146			582				
A-B	18	4			18				
A-C	585	146			585				

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		2.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	831	100.000
B - Bell Ln North		ONE HOUR	✓	64	100.000
C - A12 North East		ONE HOUR	✓	835	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	23	808
	B - Bell Ln North	64	0	0
	C - A12 North East	835	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	16
	B - Bell Ln North	5	0	0
	C - A12 North East	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.60	75.40	1.4	F	59	88
C-AB	0.00	0.00	0.0	A	0	0
C-A					766	1149
A-B					21	32
A-C					741	1112

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	437	0.000	0	0.0	0.0	0.000	A
B-A	48	12	247	0.196	47	0.0	0.2	17.976	C
C-AB	0	0	455	0.000	0	0.0	0.0	0.000	A

C-A	629	157			629				
A-B	18	4			18				
A-C	608	152			608				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	393	0.000	0	0.0	0.0	0.000	A
B-A	58	14	192	0.300	57	0.2	0.4	26.465	D
C-AB	0	0	420	0.000	0	0.0	0.0	0.000	A
C-A	751	188			751				
A-B	21	5			21				
A-C	726	182			726				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	319	0.000	0	0.0	0.0	0.000	A
B-A	71	18	117	0.604	67	0.4	1.3	68.154	F
C-AB	0	0	372	0.000	0	0.0	0.0	0.000	A
C-A	919	230			919				
A-B	26	6			26				
A-C	890	222			890				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	316	0.000	0	0.0	0.0	0.000	A
B-A	71	18	117	0.604	70	1.3	1.4	75.403	F
C-AB	0	0	372	0.000	0	0.0	0.0	0.000	A
C-A	919	230			919				
A-B	26	6			26				
A-C	890	222			890				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	390	0.000	0	0.0	0.0	0.000	A
B-A	58	14	192	0.300	61	1.4	0.4	28.212	D
C-AB	0	0	420	0.000	0	0.0	0.0	0.000	A
C-A	751	188			751				
A-B	21	5			21				
A-C	726	182			726				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	436	0.000	0	0.0	0.0	0.000	A
B-A	48	12	247	0.196	49	0.4	0.2	18.286	C
C-AB	0	0	455	0.000	0	0.0	0.0	0.000	A
C-A	629	157			629				
A-B	18	4			18				
A-C	608	152			608				

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	916	100.000
B - Bell Ln North		ONE HOUR	✓	35	100.000
C - A12 North East		ONE HOUR	✓	814	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	39	878
	B - Bell Ln North	33	0	2
	C - A12 North East	810	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	9
	B - Bell Ln North	7	0	0
	C - A12 North East	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	11.30	0.0	B	2	3
B-A	0.34	51.14	0.5	F	30	45
C-AB	0.02	4.06	0.0	A	15	23
C-A					732	1097
A-B					35	53
A-C					805	1208

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.44	442	0.004	2	0.0	0.0	8.179	A
B-A	25	6	237	0.104	24	0.0	0.1	16.907	C
C-AB	8	2	900	0.009	8	0.0	0.0	4.034	A

C-A	605	151			605				
A-B	29	7			29				
A-C	661	165			661				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.53	400	0.005	2	0.0	0.0	9.057	A
B-A	29	7	182	0.162	29	0.1	0.2	23.526	C
C-AB	13	3	964	0.013	13	0.0	0.0	3.773	A
C-A	719	180			719				
A-B	35	9			35				
A-C	789	197			789				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.64	323	0.008	3	0.0	0.0	11.221	B
B-A	36	9	106	0.340	35	0.2	0.5	49.735	E
C-AB	24	6	1060	0.023	24	0.0	0.0	3.463	A
C-A	872	218			872				
A-B	43	11			43				
A-C	966	242			966				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.64	321	0.008	3	0.0	0.0	11.303	B
B-A	36	9	106	0.340	36	0.5	0.5	51.141	F
C-AB	25	6	1060	0.023	25	0.0	0.0	3.475	A
C-A	872	218			872				
A-B	43	11			43				
A-C	966	242			966				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.53	398	0.005	2	0.0	0.0	9.084	A
B-A	29	7	182	0.162	31	0.5	0.2	23.965	C
C-AB	13	3	963	0.014	13	0.0	0.0	3.809	A
C-A	719	180			719				
A-B	35	9			35				
A-C	789	197			789				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.44	441	0.004	2	0.0	0.0	8.189	A
B-A	25	6	237	0.104	25	0.2	0.1	17.030	C
C-AB	8	2	900	0.009	8	0.0	0.0	4.056	A
C-A	605	151			605				
A-B	29	7			29				
A-C	661	165			661				

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	1001	100.000
B - Bell Ln North		ONE HOUR	✓	32	100.000
C - A12 North East		ONE HOUR	✓	770	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	53	948
	B - Bell Ln North	27	0	5
	C - A12 North East	765	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	7
	B - Bell Ln North	4	0	0
	C - A12 North East	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	11.31	0.0	B	4	6
B-A	0.28	48.07	0.4	E	25	37
C-AB	0.03	4.20	0.0	A	19	28
C-A					687	1031
A-B					48	73
A-C					870	1305

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.88	440	0.008	3	0.0	0.0	8.240	A
B-A	20	5	239	0.085	20	0.0	0.1	16.409	C
C-AB	10	3	871	0.012	10	0.0	0.0	4.180	A

C-A	569	142			569				
A-B	40	10			40				
A-C	714	179			714				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	397	0.011	4	0.0	0.0	9.164	A
B-A	24	6	182	0.133	24	0.1	0.1	22.681	C
C-AB	16	4	929	0.018	16	0.0	0.0	3.933	A
C-A	676	169			676				
A-B	47	12			47				
A-C	853	213			853				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	325	0.016	5	0.0	0.0	11.252	B
B-A	30	7	104	0.284	29	0.1	0.4	47.084	E
C-AB	30	8	1017	0.030	30	0.0	0.0	3.636	A
C-A	817	204			817				
A-B	58	15			58				
A-C	1044	261			1044				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	323	0.016	5	0.0	0.0	11.312	B
B-A	30	7	104	0.284	30	0.4	0.4	48.068	E
C-AB	30	8	1017	0.030	30	0.0	0.0	3.646	A
C-A	817	204			817				
A-B	58	15			58				
A-C	1044	261			1044				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	396	0.011	4	0.0	0.0	9.197	A
B-A	24	6	183	0.133	25	0.4	0.2	22.992	C
C-AB	16	4	929	0.018	16	0.0	0.0	3.965	A
C-A	676	169			676				
A-B	47	12			47				
A-C	853	213			853				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.88	440	0.008	4	0.0	0.0	8.253	A
B-A	20	5	239	0.085	21	0.2	0.1	16.498	C
C-AB	10	3	871	0.012	10	0.0	0.0	4.199	A
C-A	569	142			569				
A-B	40	10			40				
A-C	714	179			714				

2034 Reference Case , 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	369	100.000
B - Bell Ln North		ONE HOUR	✓	22	100.000
C - A12 North East		ONE HOUR	✓	456	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	6	363
	B - Bell Ln North	19	0	2
	C - A12 North East	455	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	9
	B - Bell Ln North	6	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.93	0.0	A	2	3
B-A	0.06	11.52	0.1	B	18	27
C-AB	0.00	4.47	0.0	A	2	3
C-A					417	625
A-B					6	8
A-C					333	500

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.46	560	0.003	2	0.0	0.0	6.447	A
B-A	15	4	393	0.037	14	0.0	0.0	9.490	A
C-AB	2	0.40	809	0.002	2	0.0	0.0	4.458	A

C-A	342	86			342				
A-B	5	1			5				
A-C	273	68			273				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.54	544	0.004	2	0.0	0.0	6.642	A
B-A	17	4	368	0.047	17	0.0	0.0	10.252	B
C-AB	2	0.53	841	0.003	2	0.0	0.0	4.284	A
C-A	408	102			408				
A-B	5	1			5				
A-C	326	82			326				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.67	522	0.005	3	0.0	0.0	6.933	A
B-A	21	5	334	0.064	21	0.0	0.1	11.514	B
C-AB	3	0.77	887	0.003	3	0.0	0.0	4.063	A
C-A	499	125			499				
A-B	7	2			7				
A-C	400	100			400				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.67	522	0.005	3	0.0	0.0	6.933	A
B-A	21	5	334	0.064	21	0.1	0.1	11.518	B
C-AB	3	0.77	887	0.003	3	0.0	0.0	4.071	A
C-A	499	125			499				
A-B	7	2			7				
A-C	400	100			400				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.54	544	0.004	2	0.0	0.0	6.645	A
B-A	17	4	368	0.047	17	0.1	0.1	10.260	B
C-AB	2	0.53	841	0.003	2	0.0	0.0	4.305	A
C-A	408	102			408				
A-B	5	1			5				
A-C	326	82			326				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.46	560	0.003	2	0.0	0.0	6.449	A
B-A	15	4	394	0.037	15	0.1	0.0	9.504	A
C-AB	2	0.40	809	0.002	2	0.0	0.0	4.468	A
C-A	342	86			342				
A-B	5	1			5				
A-C	273	68			273				

2034 Reference Case , 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	795	100.000
B - Bell Ln North		ONE HOUR	✓	46	100.000
C - A12 North East		ONE HOUR	✓	782	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	24	771
	B - Bell Ln North	45	0	1
	C - A12 North East	777	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	8
	B - Bell Ln North	0	0	0
	C - A12 North East	5	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	9.90	0.0	A	1	2
B-A	0.29	30.43	0.4	D	41	62
C-AB	0.03	4.31	0.0	A	21	31
C-A					697	1045
A-B					22	33
A-C					707	1061

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.91	0.23	465	0.002	0.90	0.0	0.0	7.756	A
B-A	34	8	290	0.116	33	0.0	0.1	13.972	B
C-AB	12	3	847	0.014	12	0.0	0.0	4.312	A

C-A	577	144			577				
A-B	18	5			18				
A-C	580	145			580				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.27	428	0.003	1	0.0	0.0	8.439	A
B-A	40	10	239	0.169	40	0.1	0.2	18.084	C
C-AB	18	5	919	0.020	18	0.0	0.0	4.018	A
C-A	685	171			685				
A-B	22	5			22				
A-C	693	173			693				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.33	366	0.004	1	0.0	0.0	9.870	A
B-A	49	12	168	0.294	49	0.2	0.4	30.053	D
C-AB	33	8	1024	0.032	33	0.0	0.0	3.650	A
C-A	829	207			829				
A-B	27	7			27				
A-C	848	212			848				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.33	365	0.004	1	0.0	0.0	9.896	A
B-A	49	12	168	0.294	49	0.4	0.4	30.428	D
C-AB	33	8	1024	0.032	33	0.0	0.0	3.631	A
C-A	829	207			829				
A-B	27	7			27				
A-C	848	212			848				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.27	427	0.003	1	0.0	0.0	8.455	A
B-A	40	10	239	0.169	41	0.4	0.2	18.281	C
C-AB	18	5	919	0.020	18	0.0	0.0	3.963	A
C-A	685	171			685				
A-B	22	5			22				
A-C	693	173			693				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.91	0.23	465	0.002	0.91	0.0	0.0	7.765	A
B-A	34	8	290	0.116	34	0.2	0.1	14.060	B
C-AB	12	3	847	0.014	12	0.0	0.0	4.278	A
C-A	577	144			577				
A-B	18	5			18				
A-C	580	145			580				

2034 Reference Case , 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		1.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	768	100.000
B - Bell Ln North		ONE HOUR	✓	67	100.000
C - A12 North East		ONE HOUR	✓	832	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	24	744
	B - Bell Ln North	67	0	0
	C - A12 North East	832	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	8
	B - Bell Ln North	5	0	0
	C - A12 North East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.46	41.97	0.8	E	61	92
C-AB	0.00	0.00	0.0	A	0	0
C-A					763	1145
A-B					22	33
A-C					683	1024

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	463	0.000	0	0.0	0.0	0.000	A
B-A	50	13	275	0.182	49	0.0	0.2	15.875	C
C-AB	0	0	489	0.000	0	0.0	0.0	0.000	A

C-A	626	157			626				
A-B	18	5			18				
A-C	560	140			560				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	424	0.000	0	0.0	0.0	0.000	A
B-A	60	15	226	0.265	59	0.2	0.3	21.494	C
C-AB	0	0	458	0.000	0	0.0	0.0	0.000	A
C-A	748	187			748				
A-B	22	5			22				
A-C	669	167			669				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	365	0.000	0	0.0	0.0	0.000	A
B-A	73	18	159	0.462	72	0.3	0.8	40.522	E
C-AB	0	0	416	0.000	0	0.0	0.0	0.000	A
C-A	916	229			916				
A-B	27	7			27				
A-C	819	205			819				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	364	0.000	0	0.0	0.0	0.000	A
B-A	73	18	159	0.462	73	0.8	0.8	41.969	E
C-AB	0	0	416	0.000	0	0.0	0.0	0.000	A
C-A	916	229			916				
A-B	27	7			27				
A-C	819	205			819				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	423	0.000	0	0.0	0.0	0.000	A
B-A	60	15	226	0.265	62	0.8	0.4	22.096	C
C-AB	0	0	458	0.000	0	0.0	0.0	0.000	A
C-A	748	187			748				
A-B	22	5			22				
A-C	669	167			669				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	462	0.000	0	0.0	0.0	0.000	A
B-A	50	13	275	0.182	51	0.4	0.2	16.078	C
C-AB	0	0	489	0.000	0	0.0	0.0	0.000	A
C-A	626	157			626				
A-B	18	5			18				
A-C	560	140			560				

2034 Reference Case , 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	937	100.000
B - Bell Ln North		ONE HOUR	✓	36	100.000
C - A12 North East		ONE HOUR	✓	823	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	40	897
	B - Bell Ln North	34	0	2
	C - A12 North East	819	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	3
	B - Bell Ln North	7	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	10.77	0.0	B	2	3
B-A	0.31	42.67	0.4	E	31	47
C-AB	0.02	3.96	0.0	A	15	23
C-A					740	1110
A-B					37	55
A-C					823	1234

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.46	448	0.004	2	0.0	0.0	8.064	A
B-A	26	6	247	0.104	25	0.0	0.1	16.177	C
C-AB	8	2	919	0.009	8	0.0	0.0	3.954	A

C-A	611	153			611				
A-B	30	8			30				
A-C	675	169			675				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.55	408	0.005	2	0.0	0.0	8.880	A
B-A	31	8	195	0.157	30	0.1	0.2	21.883	C
C-AB	13	3	984	0.013	13	0.0	0.0	3.699	A
C-A	727	182			727				
A-B	36	9			36				
A-C	806	202			806				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.67	338	0.008	3	0.0	0.0	10.726	B
B-A	37	9	122	0.308	37	0.2	0.4	41.838	E
C-AB	24	6	1083	0.022	24	0.0	0.0	3.391	A
C-A	882	221			882				
A-B	44	11			44				
A-C	987	247			987				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.67	337	0.008	3	0.0	0.0	10.775	B
B-A	37	9	122	0.308	37	0.4	0.4	42.669	E
C-AB	24	6	1083	0.022	24	0.0	0.0	3.397	A
C-A	882	221			882				
A-B	44	11			44				
A-C	987	247			987				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.55	407	0.005	2	0.0	0.0	8.902	A
B-A	31	8	195	0.157	32	0.4	0.2	22.210	C
C-AB	13	3	984	0.013	13	0.0	0.0	3.720	A
C-A	727	182			727				
A-B	36	9			36				
A-C	806	202			806				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.46	448	0.004	2	0.0	0.0	8.071	A
B-A	26	6	247	0.104	26	0.2	0.1	16.285	C
C-AB	8	2	919	0.009	8	0.0	0.0	3.965	A
C-A	611	153			611				
A-B	30	8			30				
A-C	675	169			675				

2034 Reference Case , 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	1012	100.000
B - Bell Ln North		ONE HOUR	✓	33	100.000
C - A12 North East		ONE HOUR	✓	701	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	55	957
	B - Bell Ln North	28	0	5
	C - A12 North East	696	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	3
	B - Bell Ln North	4	0	0
	C - A12 North East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	10.73	0.0	B	4	7
B-A	0.23	34.82	0.3	D	26	39
C-AB	0.03	4.30	0.0	A	16	25
C-A					627	940
A-B					50	75
A-C					879	1318

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.92	446	0.008	4	0.0	0.0	8.130	A
B-A	21	5	259	0.081	21	0.0	0.1	15.069	C
C-AB	10	2	848	0.011	10	0.0	0.0	4.295	A

C-A	518	130			518				
A-B	41	10			41				
A-C	721	180			721				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	405	0.011	4	0.0	0.0	8.985	A
B-A	25	6	207	0.122	25	0.1	0.1	19.780	C
C-AB	14	4	897	0.016	14	0.0	0.0	4.074	A
C-A	616	154			616				
A-B	49	12			49				
A-C	861	215			861				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	342	0.016	5	0.0	0.0	10.707	B
B-A	31	8	134	0.230	30	0.1	0.3	34.460	D
C-AB	25	6	974	0.026	25	0.0	0.0	3.791	A
C-A	747	187			747				
A-B	60	15			60				
A-C	1054	264			1054				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	341	0.016	5	0.0	0.0	10.733	B
B-A	31	8	134	0.230	31	0.3	0.3	34.820	D
C-AB	25	6	974	0.026	25	0.0	0.0	3.797	A
C-A	747	187			747				
A-B	60	15			60				
A-C	1054	264			1054				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	404	0.011	4	0.0	0.0	9.004	A
B-A	25	6	207	0.122	26	0.3	0.1	19.946	C
C-AB	15	4	897	0.016	15	0.0	0.0	4.084	A
C-A	616	154			616				
A-B	49	12			49				
A-C	861	215			861				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.92	446	0.008	4	0.0	0.0	8.140	A
B-A	21	5	259	0.081	21	0.1	0.1	15.135	C
C-AB	10	2	848	0.011	10	0.0	0.0	4.301	A
C-A	518	130			518				
A-B	41	10			41				
A-C	721	180			721				

2034 Operational Led, 6-7 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	371	100.000
B - Bell Ln North		ONE HOUR	✓	22	100.000
C - A12 North East		ONE HOUR	✓	459	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	6	365
	B - Bell Ln North	19	0	2
	C - A12 North East	458	1	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	8
	B - Bell Ln North	6	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	6.93	0.0	A	2	3
B-A	0.06	11.54	0.1	B	18	27
C-AB	0.00	4.46	0.0	A	2	3
C-A					419	629
A-B					6	8
A-C					335	502

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.46	560	0.003	2	0.0	0.0	6.447	A
B-A	15	4	393	0.037	14	0.0	0.0	9.498	A
C-AB	2	0.40	811	0.002	2	0.0	0.0	4.449	A

C-A	344	86			344				
A-B	5	1			5				
A-C	275	69			275				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.54	544	0.004	2	0.0	0.0	6.641	A
B-A	17	4	368	0.047	17	0.0	0.0	10.264	B
C-AB	2	0.53	843	0.003	2	0.0	0.0	4.274	A
C-A	411	103			411				
A-B	5	1			5				
A-C	328	82			328				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.67	522	0.005	3	0.0	0.0	6.932	A
B-A	21	5	333	0.064	21	0.0	0.1	11.532	B
C-AB	3	0.77	889	0.003	3	0.0	0.0	4.053	A
C-A	503	126			503				
A-B	7	2			7				
A-C	402	100			402				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.67	522	0.005	3	0.0	0.0	6.933	A
B-A	21	5	333	0.064	21	0.1	0.1	11.536	B
C-AB	3	0.77	889	0.003	3	0.0	0.0	4.061	A
C-A	503	126			503				
A-B	7	2			7				
A-C	402	100			402				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.54	544	0.004	2	0.0	0.0	6.645	A
B-A	17	4	368	0.047	17	0.1	0.1	10.270	B
C-AB	2	0.53	843	0.003	2	0.0	0.0	4.295	A
C-A	411	103			411				
A-B	5	1			5				
A-C	328	82			328				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.46	560	0.003	2	0.0	0.0	6.448	A
B-A	15	4	393	0.037	15	0.1	0.0	9.510	A
C-AB	2	0.40	810	0.002	2	0.0	0.0	4.461	A
C-A	344	86			344				
A-B	5	1			5				
A-C	275	69			275				

2034 Operational Led, 7-8 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	819	100.000
B - Bell Ln North		ONE HOUR	✓	46	100.000
C - A12 North East		ONE HOUR	✓	784	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	24	795
	B - Bell Ln North	45	0	1
	C - A12 North East	779	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	5	8
	B - Bell Ln North	0	0	0
	C - A12 North East	5	25	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	10.20	0.0	B	1	2
B-A	0.31	32.82	0.4	D	41	62
C-AB	0.03	4.32	0.0	A	21	32
C-A					698	1048
A-B					22	33
A-C					729	1094

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.91	0.23	459	0.002	0.90	0.0	0.0	7.851	A
B-A	34	8	284	0.119	33	0.0	0.1	14.299	B
C-AB	12	3	845	0.014	12	0.0	0.0	4.322	A

C-A	578	145			578				
A-B	18	5			18				
A-C	598	150			598				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.27	421	0.003	1	0.0	0.0	8.580	A
B-A	40	10	232	0.174	40	0.1	0.2	18.745	C
C-AB	19	5	917	0.020	19	0.0	0.0	4.027	A
C-A	686	172			686				
A-B	22	5			22				
A-C	714	179			714				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.33	356	0.004	1	0.0	0.0	10.162	B
B-A	49	12	159	0.310	48	0.2	0.4	32.340	D
C-AB	33	8	1022	0.033	33	0.0	0.0	3.658	A
C-A	830	208			830				
A-B	27	7			27				
A-C	875	219			875				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.33	354	0.004	1	0.0	0.0	10.196	B
B-A	49	12	159	0.311	49	0.4	0.4	32.821	D
C-AB	33	8	1022	0.033	33	0.0	0.0	3.642	A
C-A	830	208			830				
A-B	27	7			27				
A-C	875	219			875				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	1	0.27	420	0.003	1	0.0	0.0	8.596	A
B-A	40	10	232	0.174	41	0.4	0.2	18.979	C
C-AB	19	5	917	0.020	19	0.0	0.0	3.972	A
C-A	686	172			686				
A-B	22	5			22				
A-C	714	179			714				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0.91	0.23	459	0.002	0.91	0.0	0.0	7.860	A
B-A	34	8	284	0.119	34	0.2	0.1	14.395	B
C-AB	12	3	845	0.014	12	0.0	0.0	4.289	A
C-A	578	145			578				
A-B	18	5			18				
A-C	598	150			598				

2034 Operational Led, 8-9 AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		1.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	776	100.000
B - Bell Ln North		ONE HOUR	✓	67	100.000
C - A12 North East		ONE HOUR	✓	832	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	24	752
	B - Bell Ln North	67	0	0
	C - A12 North East	832	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	8
	B - Bell Ln North	5	0	0
	C - A12 North East	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.47	43.02	0.8	E	61	92
C-AB	0.00	0.00	0.0	A	0	0
C-A					763	1145
A-B					22	33
A-C					690	1035

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	461	0.000	0	0.0	0.0	0.000	A
B-A	50	13	274	0.183	49	0.0	0.2	15.975	C
C-AB	0	0	487	0.000	0	0.0	0.0	0.000	A

C-A	626	157			626				
A-B	18	5			18				
A-C	566	142			566				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	423	0.000	0	0.0	0.0	0.000	A
B-A	60	15	225	0.267	59	0.2	0.4	21.718	C
C-AB	0	0	456	0.000	0	0.0	0.0	0.000	A
C-A	748	187			748				
A-B	22	5			22				
A-C	676	169			676				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	363	0.000	0	0.0	0.0	0.000	A
B-A	73	18	157	0.468	71	0.4	0.8	41.463	E
C-AB	0	0	413	0.000	0	0.0	0.0	0.000	A
C-A	916	229			916				
A-B	27	7			27				
A-C	828	207			828				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	361	0.000	0	0.0	0.0	0.000	A
B-A	73	18	157	0.468	73	0.8	0.8	43.022	E
C-AB	0	0	413	0.000	0	0.0	0.0	0.000	A
C-A	916	229			916				
A-B	27	7			27				
A-C	828	207			828				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	421	0.000	0	0.0	0.0	0.000	A
B-A	60	15	225	0.267	62	0.8	0.4	22.348	C
C-AB	0	0	456	0.000	0	0.0	0.0	0.000	A
C-A	748	187			748				
A-B	22	5			22				
A-C	676	169			676				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	0	0	460	0.000	0	0.0	0.0	0.000	A
B-A	50	13	274	0.183	51	0.4	0.2	16.184	C
C-AB	0	0	487	0.000	0	0.0	0.0	0.000	A
C-A	626	157			626				
A-B	18	5			18				
A-C	566	142			566				

2034 Operational Led, 3-4 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	943	100.000
B - Bell Ln North		ONE HOUR	✓	36	100.000
C - A12 North East		ONE HOUR	✓	828	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	40	903
	B - Bell Ln North	34	0	2
	C - A12 North East	824	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	9	3
	B - Bell Ln North	7	0	0
	C - A12 North East	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	10.89	0.0	B	2	3
B-A	0.32	44.19	0.4	E	31	47
C-AB	0.02	3.96	0.0	A	15	23
C-A					744	1117
A-B					37	55
A-C					828	1243

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.46	447	0.004	2	0.0	0.0	8.089	A
B-A	26	6	245	0.105	25	0.0	0.1	16.322	C
C-AB	8	2	920	0.009	8	0.0	0.0	3.947	A

C-A	615	154			615				
A-B	30	8			30				
A-C	680	170			680				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.55	406	0.005	2	0.0	0.0	8.919	A
B-A	31	8	192	0.159	30	0.1	0.2	22.206	C
C-AB	13	3	986	0.013	13	0.0	0.0	3.691	A
C-A	731	183			731				
A-B	36	9			36				
A-C	812	203			812				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.67	335	0.008	3	0.0	0.0	10.831	B
B-A	37	9	119	0.316	37	0.2	0.4	43.260	E
C-AB	24	6	1086	0.023	24	0.0	0.0	3.383	A
C-A	887	222			887				
A-B	44	11			44				
A-C	994	248			994				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	3	0.67	333	0.008	3	0.0	0.0	10.885	B
B-A	37	9	119	0.316	37	0.4	0.4	44.191	E
C-AB	25	6	1087	0.023	25	0.0	0.0	3.391	A
C-A	887	222			887				
A-B	44	11			44				
A-C	994	248			994				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.55	405	0.005	2	0.0	0.0	8.942	A
B-A	31	8	192	0.159	32	0.4	0.2	22.551	C
C-AB	13	3	986	0.013	13	0.0	0.0	3.713	A
C-A	731	183			731				
A-B	36	9			36				
A-C	812	203			812				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	2	0.46	446	0.004	2	0.0	0.0	8.097	A
B-A	26	6	245	0.105	26	0.2	0.1	16.436	C
C-AB	8	2	920	0.009	8	0.0	0.0	3.960	A
C-A	615	154			615				
A-B	30	8			30				
A-C	680	170			680				

2034 Operational Led, 5-6 PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - A12 North East - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J40	A12 / Bell Lane	T-Junction	Two-way		0.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 South West		ONE HOUR	✓	1018	100.000
B - Bell Ln North		ONE HOUR	✓	33	100.000
C - A12 North East		ONE HOUR	✓	705	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	55	963
	B - Bell Ln North	28	0	5
	C - A12 North East	700	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A12 South West	B - Bell Ln North	C - A12 North East
From	A - A12 South West	0	0	3
	B - Bell Ln North	4	0	0
	C - A12 North East	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	10.81	0.0	B	4	7
B-A	0.23	35.62	0.3	E	26	39
C-AB	0.03	4.29	0.0	A	17	25
C-A					630	945
A-B					50	75
A-C					884	1326

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.92	445	0.008	4	0.0	0.0	8.153	A
B-A	21	5	258	0.082	21	0.0	0.1	15.172	C
C-AB	10	2	849	0.011	10	0.0	0.0	4.288	A

C-A	521	130			521				
A-B	41	10			41				
A-C	725	181			725				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	404	0.011	4	0.0	0.0	9.019	A
B-A	25	6	205	0.123	25	0.1	0.1	19.992	C
C-AB	15	4	899	0.016	15	0.0	0.0	4.066	A
C-A	619	155			619				
A-B	49	12			49				
A-C	866	217			866				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	339	0.016	5	0.0	0.0	10.778	B
B-A	31	8	132	0.234	30	0.1	0.3	35.239	E
C-AB	26	6	976	0.026	25	0.0	0.0	3.783	A
C-A	751	188			751				
A-B	60	15			60				
A-C	1061	265			1061				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	5	1	338	0.016	5	0.0	0.0	10.806	B
B-A	31	8	132	0.234	31	0.3	0.3	35.624	E
C-AB	26	6	976	0.026	26	0.0	0.0	3.785	A
C-A	751	188			751				
A-B	60	15			60				
A-C	1061	265			1061				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	1	403	0.011	4	0.0	0.0	9.041	A
B-A	25	6	205	0.123	26	0.3	0.1	20.164	C
C-AB	15	4	899	0.016	15	0.0	0.0	4.074	A
C-A	619	155			619				
A-B	49	12			49				
A-C	866	217			866				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	4	0.92	445	0.008	4	0.0	0.0	8.162	A
B-A	21	5	258	0.082	21	0.1	0.1	15.238	C
C-AB	10	2	849	0.011	10	0.0	0.0	4.293	A
C-A	521	130			521				
A-B	41	10			41				
A-C	725	181			725				

Junctions 9
PICADY 9 - Priority Intersection Module
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 Report generation date: 13/03/2020 15:19:30

- »Base Year, 6-7 AM
- »Base Year, 7-8 AM
- »Base Year, 8-9 AM
- »Base Year, 3-4 PM
- »Base Year, 5-6 PM
- »2023 Reference Case , 6-7 AM
- »2023 Reference Case , 7-8 AM
- »2023 Reference Case , 8-9 AM
- »2023 Reference Case , 3-4 PM
- »2023 Reference Case , 5-6 PM
- »2023 Early Years , 6-7 AM
- »2023 Early Years , 7-8 AM
- »2023 Early Years , 8-9 AM
- »2023 Early Years , 3-4 PM
- »2023 Early Years , 5-6 PM
- »2028 Reference Case , 6-7 AM
- »2028 Reference Case , 7-8 AM
- »2028 Reference Case , 8-9 AM
- »2028 Reference Case , 3-4 PM
- »2028 Reference Case , 5-6 PM
- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Reference Case , 6-7 AM
- »2034 Reference Case , 7-8 AM
- »2034 Reference Case , 8-9 AM
- »2034 Reference Case , 3-4 PM
- »2034 Reference Case , 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM						
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS		
Base Year																											
Stream B-C		0.1	6.06	0.07	A		0.2	8.12	0.19	A		0.3	8.66	0.21	A		0.2	8.36	0.17	A		0.4	9.72	0.26	A		
Stream B-A	D1	0.0	9.62	0.03	A	D2	0.1	13.71	0.10	B	D3	0.2	18.60	0.16	C	D4	0.2	16.03	0.20	C	D5	0.4	19.14	0.28	C		
Stream C-AB		0.0	5.66	0.02	A		0.2	8.30	0.13	A		0.2	8.67	0.14	A		0.1	8.07	0.13	A		0.2	8.62	0.19	A		
2023 Reference Case																											
Stream B-C		0.1	6.13	0.08	A		0.3	8.40	0.21	A		0.3	9.68	0.25	A		0.3	9.58	0.21	A		0.5	11.04	0.31	B		
Stream B-A	D6	0.0	9.72	0.04	A	D7	0.1	14.28	0.12	B	D8	0.3	22.86	0.20	C	D9	0.3	20.26	0.26	C	D10	0.5	23.98	0.35	C		
Stream C-AB		0.0	5.70	0.03	A		0.2	8.47	0.15	A		0.2	9.41	0.17	A		0.2	8.94	0.15	A		0.3	9.31	0.22	A		
2023 Early Years																											
Stream B-C		0.1	6.13	0.08	A		0.3	8.31	0.21	A		0.3	9.54	0.25	A		0.3	9.57	0.21	A		0.5	11.42	0.32	B		
Stream B-A	D11	0.0	9.72	0.04	A	D12	0.1	14.20	0.12	B	D13	0.2	22.28	0.20	C	D14	0.3	20.43	0.26	C	D15	0.5	25.23	0.36	D		
Stream C-AB		0.0	5.70	0.03	A		0.2	8.40	0.15	A		0.2	9.29	0.16	A		0.2	8.94	0.15	A		0.3	9.55	0.22	A		
2028 Reference Case																											
Stream B-C		0.1	6.19	0.08	A		0.3	8.57	0.23	A		0.3	9.65	0.26	A		0.3	9.64	0.22	A		0.5	11.86	0.34	B		
Stream B-A	D16	0.0	9.26	0.04	A	D17	0.1	13.88	0.12	B	D18	0.2	20.22	0.19	C	D19	0.3	19.56	0.26	C	D20	0.6	25.87	0.38	D		
Stream C-AB		0.0	5.73	0.03	A		0.2	8.60	0.16	A		0.2	9.39	0.17	A		0.2	8.96	0.16	A		0.3	9.73	0.24	A		
2028 Peak Construction																											
Stream B-C		0.1	6.18	0.08	A		0.3	8.57	0.23	A		0.3	9.49	0.25	A		0.3	9.46	0.22	A		0.5	11.93	0.34	B		
Stream B-A	D21	0.0	9.24	0.04	A	D22	0.1	13.91	0.12	B	D23	0.2	19.36	0.19	C	D24	0.3	18.97	0.25	C	D25	0.6	26.57	0.38	D		
Stream C-AB		0.0	5.72	0.03	A		0.2	8.60	0.16	A		0.2	9.26	0.17	A		0.2	8.82	0.16	A		0.3	9.76	0.24	A		
2034 Reference Case																											
Stream B-C		0.1	6.22	0.08	A		0.3	8.83	0.24	A		0.4	10.78	0.29	B		0.3	11.00	0.25	B		0.6	13.86	0.38	B		
Stream B-A	D26	0.0	9.29	0.04	A	D27	0.1	14.63	0.13	B	D28	0.3	24.79	0.23	C	D29	0.5	25.80	0.32	D	D30	0.8	34.87	0.46	D		
Stream C-AB		0.0	5.75	0.03	A		0.2	8.80	0.17	A		0.2	10.22	0.19	B		0.2	9.85	0.18	A		0.3	10.58	0.26	B		
2034 Operational Led																											

Stream B-C		0.1	6.22	0.08	A		0.3	8.85	0.24	A		0.4	10.97	0.29	B		0.3	11.02	0.25	B		0.6	13.75	0.38	B
Stream B-A	D31	0.0	9.29	0.04	A	D32	0.1	14.72	0.13	B	D33	0.3	25.53	0.24	D	D34	0.5	25.98	0.33	D	D35	0.8	34.16	0.45	D
Stream C-AB		0.0	5.75	0.03	A		0.2	8.82	0.17	A		0.2	10.36	0.19	B		0.2	9.87	0.18	A		0.3	10.54	0.26	B

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

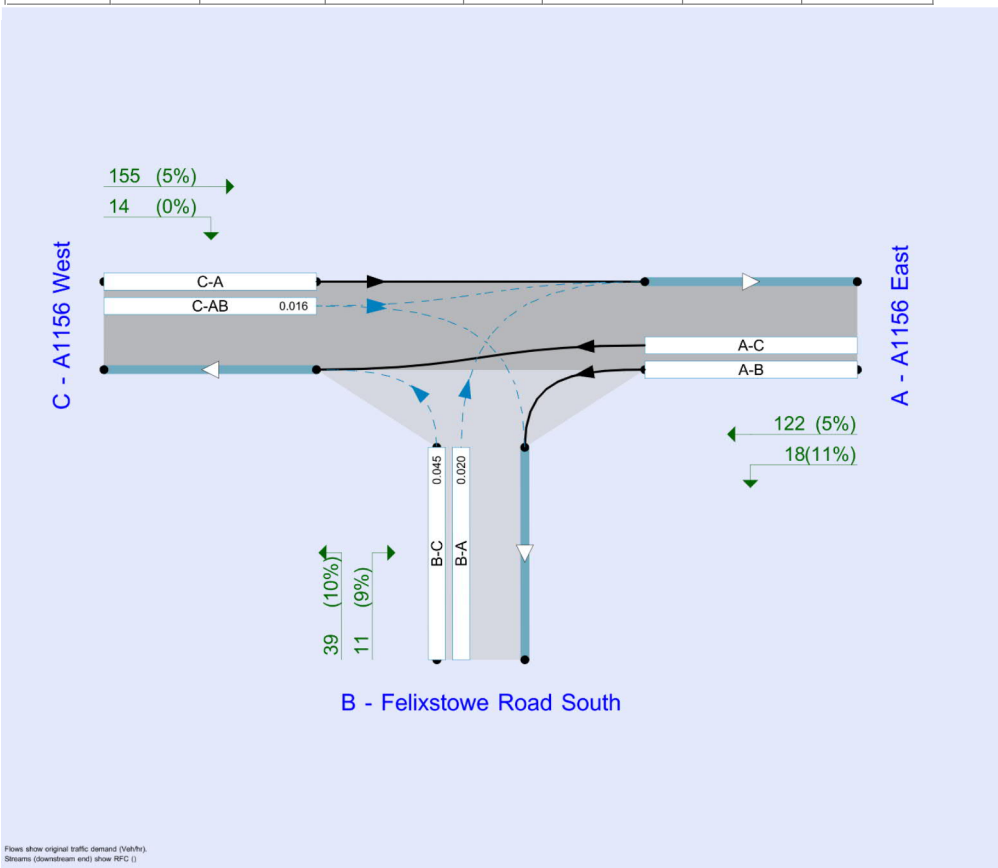
File summary

File Description

Title	A1156 / Felixstowe Road
Location	52.023204°, 1.247082°
Site number	41
Date	14/06/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORPINJV01568
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin



Flows show original traffic demand (Veh/hr).
 Streams (downstream end) show RFC (l)
 The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

Base Year, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		1.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A1156 East		Major
B	Felixstowe Road South		Minor
C	A1156 West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A1156 West	6.05		✓	3.20	91.0	✓	13.00

Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (if relevant) are measured opposite Arm D.

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Felixstowe Road South	One lane plus flare	10.00	8.80	6.20	5.10	4.60	✓	3.00	36	48

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	485	0.088	0.223	0.140	0.318
B-C	751	0.115	0.291	-	-
C-B	695	0.269	0.269	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

Streams may be combined, in which case capacity will be adjusted.

Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base Year	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	140	100.000
B - Felixstowe Road South		ONE HOUR	✓	50	100.000
C - A1156 West		ONE HOUR	✓	169	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	18	122
	B - Felixstowe Road South	11	0	39
	C - A1156 West	155	14	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.92	0.08	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	5
	B - Felixstowe Road South	9	0	10
	C - A1156 West	5	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.049
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.052	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	105	111
	06:00-06:15	126	133
	06:15-06:30	154	163
	06:30-06:45	154	163
	06:45-07:00	126	133
	07:00-07:15	105	111
B - Felixstowe Road South	05:45-06:00	38	41
	06:00-06:15	45	49
	06:15-06:30	55	61
	06:30-06:45	55	61
	06:45-07:00	45	49
	07:00-07:15	38	41
C - A1156 West	05:45-06:00	127	133
	06:00-06:15	152	159
	06:15-06:30	186	195
	06:30-06:45	186	195
	06:45-07:00	152	159
	07:00-07:15	127	133

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.07	6.06	0.1	A	36	54
B-A	0.03	9.62	0.0	A	10	15
C-AB	0.02	5.66	0.0	A	13	19
C-A					142	213
A-B					17	25
A-C					112	168

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	651	0.045	29	0.0	0.0	5.785	A
B-A	8	2	405	0.020	8	0.0	0.0	9.075	A
C-AB	11	3	665	0.016	10	0.0	0.0	5.500	A
C-A	117	29			117				
A-B	14	3			14				
A-C	92	23			92				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	35	9	645	0.054	35	0.0	0.1	5.899	A
B-A	10	2	397	0.025	10	0.0	0.0	9.296	A
C-AB	13	3	659	0.019	13	0.0	0.0	5.567	A
C-A	139	35			139				
A-B	16	4			16				
A-C	110	27			110				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	43	11	637	0.067	43	0.1	0.1	6.059	A
B-A	12	3	386	0.031	12	0.0	0.0	9.616	A
C-AB	15	4	651	0.024	15	0.0	0.0	5.662	A
C-A	171	43			171				
A-B	20	5			20				
A-C	134	34			134				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	43	11	637	0.067	43	0.1	0.1	6.059	A
B-A	12	3	386	0.031	12	0.0	0.0	9.615	A

C-AB	15	4	651	0.024	15	0.0	0.0	5.662	A
C-A	171	43			171				
A-B	20	5			20				
A-C	134	34			134				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	35	9	645	0.054	35	0.1	0.1	5.903	A
B-A	10	2	397	0.025	10	0.0	0.0	9.298	A
C-AB	13	3	659	0.019	13	0.0	0.0	5.567	A
C-A	139	35			139				
A-B	16	4			16				
A-C	110	27			110				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	29	7	651	0.045	29	0.1	0.0	5.790	A
B-A	8	2	405	0.020	8	0.0	0.0	9.077	A
C-AB	11	3	665	0.016	11	0.0	0.0	5.503	A
C-A	117	29			117				
A-B	14	3			14				
A-C	92	23			92				

Base Year, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		1.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base Year	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	447	100.000
B - Felixstowe Road South		ONE HOUR	✓	123	100.000
C - A1156 West		ONE HOUR	✓	386	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	55	392
	B - Felixstowe Road South	27	0	96
	C - A1156 West	325	61	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.12	0.88
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.84	0.16	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	5	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.031
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.046	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	337	347
	07:00-07:15	402	414
	07:15-07:30	492	508
	07:30-07:45	492	508
	07:45-08:00	402	414
	08:00-08:15	337	347
B - Felixstowe Road South	06:45-07:00	93	100
	07:00-07:15	111	120
	07:15-07:30	135	146
	07:30-07:45	135	146
	07:45-08:00	111	120
	08:00-08:15	93	100
C - A1156 West	06:45-07:00	291	307
	07:00-07:15	347	367
	07:15-07:30	425	449
	07:30-07:45	425	449
	07:45-08:00	347	367
	08:00-08:15	291	307

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.19	8.12	0.2	A	88	132
B-A	0.10	13.71	0.1	B	25	37
C-AB	0.13	8.30	0.2	A	56	84
C-A					298	447
A-B					50	76
A-C					360	540

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	72	18	594	0.122	72	0.0	0.1	6.882	A
B-A	20	5	347	0.059	20	0.0	0.1	10.990	B
C-AB	46	11	540	0.085	46	0.0	0.1	7.281	A
C-A	245	61			245				
A-B	41	10			41				
A-C	295	74			295				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	86	22	575	0.150	86	0.1	0.2	7.358	A
B-A	24	6	324	0.075	24	0.1	0.1	11.995	B
C-AB	55	14	523	0.105	55	0.1	0.1	7.678	A
C-A	292	73			292				
A-B	49	12			49				
A-C	352	88			352				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	26	549	0.193	105	0.2	0.2	8.114	A
B-A	30	7	292	0.102	30	0.1	0.1	13.699	B
C-AB	67	17	501	0.134	67	0.1	0.2	8.292	A
C-A	358	89			358				
A-B	61	15			61				
A-C	432	108			432				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	26	549	0.193	106	0.2	0.2	8.124	A
B-A	30	7	292	0.102	30	0.1	0.1	13.713	B
C-AB	67	17	501	0.134	67	0.2	0.2	8.297	A
C-A	358	89			358				
A-B	61	15			61				
A-C	432	108			432				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	86	22	575	0.150	87	0.2	0.2	7.371	A
B-A	24	6	324	0.075	24	0.1	0.1	12.010	B
C-AB	55	14	523	0.105	55	0.2	0.1	7.686	A
C-A	292	73			292				
A-B	49	12			49				
A-C	352	88			352				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	72	18	594	0.122	72	0.2	0.1	6.907	A
B-A	20	5	347	0.059	20	0.1	0.1	11.011	B
C-AB	46	11	540	0.085	46	0.1	0.1	7.295	A
C-A	245	61			245				
A-B	41	10			41				
A-C	295	74			295				

Base Year, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		1.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base Year	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	614	100.000
B - Felixstowe Road South		ONE HOUR	✓	134	100.000
C - A1156 West		ONE HOUR	✓	585	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	82	532
	B - Felixstowe Road South	33	0	101
	C - A1156 West	523	62	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.89	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	3	0	2
	C - A1156 West	5	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.034
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.046	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	462	478
	08:00-08:15	552	571
	08:15-08:30	676	699
	08:30-08:45	676	699
	08:45-09:00	552	571
	09:00-09:15	462	478
B - Felixstowe Road South	07:45-08:00	101	103
	08:00-08:15	120	123
	08:15-08:30	148	151
	08:30-08:45	148	151
	08:45-09:00	120	123
	09:00-09:15	101	103
C - A1156 West	07:45-08:00	440	461
	08:00-08:15	526	550
	08:15-08:30	644	674
	08:30-08:45	644	674
	08:45-09:00	526	550
	09:00-09:15	440	461

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	8.66	0.3	A	93	139
B-A	0.16	18.60	0.2	C	30	45
C-AB	0.14	8.67	0.2	A	57	85
C-A					480	720
A-B					75	113
A-C					488	732

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	76	19	594	0.128	75	0.0	0.1	6.930	A
B-A	25	6	308	0.081	24	0.0	0.1	12.700	B
C-AB	47	12	540	0.086	46	0.0	0.1	7.283	A
C-A	394	98			394				
A-B	62	15			62				
A-C	401	100			401				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	566	0.160	91	0.1	0.2	7.564	A
B-A	30	7	275	0.108	30	0.1	0.1	14.659	B
C-AB	56	14	517	0.108	56	0.1	0.1	7.809	A
C-A	470	118			470				
A-B	74	18			74				
A-C	478	120			478				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	111	28	527	0.211	111	0.2	0.3	8.645	A
B-A	36	9	230	0.158	36	0.1	0.2	18.550	C
C-AB	68	17	484	0.141	68	0.1	0.2	8.659	A
C-A	576	144			576				
A-B	90	23			90				
A-C	586	146			586				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	111	28	527	0.211	111	0.3	0.3	8.662	A
B-A	36	9	230	0.158	36	0.2	0.2	18.597	C
C-AB	68	17	484	0.141	68	0.2	0.2	8.666	A
C-A	576	144			576				
A-B	90	23			90				
A-C	586	146			586				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	566	0.160	91	0.3	0.2	7.583	A
B-A	30	7	275	0.108	30	0.2	0.1	14.703	B
C-AB	56	14	517	0.108	56	0.2	0.1	7.818	A
C-A	470	118			470				
A-B	74	18			74				
A-C	478	120			478				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	76	19	594	0.128	76	0.2	0.1	6.956	A
B-A	25	6	308	0.081	25	0.1	0.1	12.741	B
C-AB	47	12	540	0.086	47	0.1	0.1	7.295	A
C-A	394	98			394				
A-B	62	15			62				
A-C	401	100			401				

Base Year, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		1.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base Year	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	483	100.000
B - Felixstowe Road South		ONE HOUR	✓	132	100.000
C - A1156 West		ONE HOUR	✓	450	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	27	456
	B - Felixstowe Road South	50	0	82
	C - A1156 West	391	59	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.06	0.94
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	4
	B - Felixstowe Road South	6	0	4
	C - A1156 West	4	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.039
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.043	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	364	379
	15:00-15:15	434	453
	15:15-15:30	532	555
	15:30-15:45	532	555
	15:45-16:00	434	453
	16:00-16:15	364	379
B - Felixstowe Road South	14:45-15:00	99	104
	15:00-15:15	119	124
	15:15-15:30	145	152
	15:30-15:45	145	152
	15:45-16:00	119	124
	16:00-16:15	99	104
C - A1156 West	14:45-15:00	339	355
	15:00-15:15	405	423
	15:15-15:30	495	519
	15:30-15:45	495	519
	15:45-16:00	405	423
	16:00-16:15	339	355

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.17	8.36	0.2	A	75	113
B-A	0.20	16.03	0.2	C	46	69
C-AB	0.13	8.07	0.1	A	54	81
C-A					359	538
A-B					25	37
A-C					418	628

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	15	578	0.107	61	0.0	0.1	6.967	A
B-A	38	9	344	0.109	37	0.0	0.1	11.734	B
C-AB	44	11	555	0.080	44	0.0	0.1	7.037	A
C-A	294	74			294				
A-B	20	5			20				
A-C	343	86			343				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	74	18	554	0.133	74	0.1	0.2	7.490	A
B-A	45	11	317	0.142	45	0.1	0.2	13.219	B
C-AB	53	13	537	0.099	53	0.1	0.1	7.441	A
C-A	352	88			352				
A-B	24	6			24				
A-C	410	102			410				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	90	23	521	0.173	90	0.2	0.2	8.350	A
B-A	55	14	280	0.197	55	0.2	0.2	15.990	C
C-AB	65	16	511	0.127	65	0.1	0.1	8.063	A
C-A	430	108			430				
A-B	30	7			30				
A-C	502	126			502				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	90	23	521	0.173	90	0.2	0.2	8.363	A
B-A	55	14	280	0.197	55	0.2	0.2	16.031	C
C-AB	65	16	511	0.127	65	0.1	0.1	8.068	A
C-A	430	108			430				
A-B	30	7			30				
A-C	502	126			502				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	74	18	554	0.133	74	0.2	0.2	7.507	A
B-A	45	11	317	0.142	45	0.2	0.2	13.261	B
C-AB	53	13	537	0.099	53	0.1	0.1	7.448	A
C-A	352	88			352				
A-B	24	6			24				
A-C	410	102			410				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	62	15	577	0.107	62	0.2	0.1	6.992	A
B-A	38	9	344	0.109	38	0.2	0.1	11.765	B
C-AB	44	11	555	0.080	45	0.1	0.1	7.051	A
C-A	294	74			294				
A-B	20	5			20				
A-C	343	86			343				

Base Year, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Base Year	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	558	100.000
B - Felixstowe Road South		ONE HOUR	✓	186	100.000
C - A1156 West		ONE HOUR	✓	513	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	33	525
	B - Felixstowe Road South	65	0	121
	C - A1156 West	424	89	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.06	0.94
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.013
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.012	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	420	427
	17:00-17:15	502	510
	17:15-17:30	614	624
	17:30-17:45	614	624
	17:45-18:00	502	510
	18:00-18:15	420	427
B - Felixstowe Road South	16:45-17:00	140	143
	17:00-17:15	167	171
	17:15-17:30	205	209
	17:30-17:45	205	209
	17:45-18:00	167	171
	18:00-18:15	140	143
C - A1156 West	16:45-17:00	386	391
	17:00-17:15	461	467
	17:15-17:30	565	573
	17:30-17:45	565	573
	17:45-18:00	461	467
	18:00-18:15	386	391

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.26	9.72	0.4	A	111	167
B-A	0.28	19.14	0.4	C	60	89
C-AB	0.19	8.62	0.2	A	82	123
C-A					389	584
A-B					30	45
A-C					482	723

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	573	0.159	90	0.0	0.2	7.449	A
B-A	49	12	335	0.146	48	0.0	0.2	12.512	B
C-AB	67	17	567	0.118	66	0.0	0.1	7.178	A
C-A	319	80			319				
A-B	25	6			25				
A-C	395	99			395				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	27	545	0.200	109	0.2	0.2	8.248	A
B-A	58	15	304	0.192	58	0.2	0.2	14.652	B
C-AB	80	20	546	0.147	80	0.1	0.2	7.726	A
C-A	381	95			381				
A-B	30	7			30				
A-C	472	118			472				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	504	0.264	133	0.2	0.4	9.679	A
B-A	72	18	260	0.276	71	0.2	0.4	19.028	C
C-AB	98	24	516	0.190	98	0.2	0.2	8.610	A
C-A	467	117			467				
A-B	36	9			36				
A-C	578	145			578				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	133	33	504	0.264	133	0.4	0.4	9.716	A
B-A	72	18	260	0.276	72	0.4	0.4	19.136	C
C-AB	98	24	516	0.190	98	0.2	0.2	8.620	A
C-A	467	117			467				
A-B	36	9			36				
A-C	578	145			578				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	109	27	544	0.200	109	0.4	0.3	8.285	A
B-A	58	15	304	0.192	59	0.4	0.2	14.748	B
C-AB	80	20	546	0.147	80	0.2	0.2	7.740	A
C-A	381	95			381				
A-B	30	7			30				
A-C	472	118			472				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	91	23	572	0.159	91	0.3	0.2	7.491	A
B-A	49	12	335	0.146	49	0.2	0.2	12.596	B
C-AB	67	17	567	0.118	67	0.2	0.1	7.200	A
C-A	319	80			319				
A-B	25	6			25				
A-C	395	99			395				

2023 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2023 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	147	100.000
B - Felixstowe Road South		ONE HOUR	✓	56	100.000
C - A1156 West		ONE HOUR	✓	177	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	20	127
	B - Felixstowe Road South	12	0	43
	C - A1156 West	162	16	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.91	0.09	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	5
	B - Felixstowe Road South	9	0	10
	C - A1156 West	5	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.045
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.048	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	111	117
	06:00-06:15	132	139
	06:15-06:30	162	171
	06:30-06:45	162	171
	06:45-07:00	132	139
	07:00-07:15	111	117
B - Felixstowe Road South	05:45-06:00	42	46
	06:00-06:15	50	55
	06:15-06:30	61	67
	06:30-06:45	61	67
	06:45-07:00	50	55
	07:00-07:15	42	46
C - A1156 West	05:45-06:00	133	139
	06:00-06:15	159	166
	06:15-06:30	195	204
	06:30-06:45	195	204
	06:45-07:00	159	166
	07:00-07:15	133	139

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	6.13	0.1	A	40	60
B-A	0.04	9.72	0.0	A	11	17
C-AB	0.03	5.70	0.0	A	14	21
C-A					148	223
A-B					18	28
A-C					117	175

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	650	0.050	32	0.0	0.1	5.830	A
B-A	9	2	403	0.023	9	0.0	0.0	9.138	A
C-AB	12	3	663	0.018	12	0.0	0.0	5.522	A
C-A	122	30			122				
A-B	15	4			15				
A-C	96	24			96				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	39	10	643	0.061	39	0.1	0.1	5.955	A
B-A	11	3	395	0.028	11	0.0	0.0	9.375	A
C-AB	14	3	657	0.021	14	0.0	0.0	5.594	A
C-A	145	36			145				
A-B	18	4			18				
A-C	114	29			114				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	48	12	635	0.075	48	0.1	0.1	6.131	A
B-A	13	3	384	0.035	13	0.0	0.0	9.721	A
C-AB	17	4	649	0.026	17	0.0	0.0	5.696	A
C-A	178	45			178				
A-B	22	6			22				
A-C	140	35			140				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	48	12	635	0.075	48	0.1	0.1	6.132	A
B-A	13	3	384	0.035	13	0.0	0.0	9.720	A
C-AB	17	4	649	0.026	17	0.0	0.0	5.696	A
C-A	178	45			178				
A-B	22	6			22				
A-C	140	35			140				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	39	10	643	0.061	39	0.1	0.1	5.957	A
B-A	11	3	395	0.028	11	0.0	0.0	9.378	A
C-AB	14	3	657	0.021	14	0.0	0.0	5.594	A
C-A	145	36			145				
A-B	18	4			18				
A-C	114	29			114				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	650	0.050	33	0.1	0.1	5.837	A
B-A	9	2	403	0.023	9	0.0	0.0	9.143	A
C-AB	12	3	663	0.018	12	0.0	0.0	5.525	A
C-A	122	30			122				
A-B	15	4			15				
A-C	96	24			96				

2023 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		1.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2023 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	453	100.000
B - Felixstowe Road South		ONE HOUR	✓	137	100.000
C - A1156 West		ONE HOUR	✓	421	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	61	391
	B - Felixstowe Road South	30	0	107
	C - A1156 West	353	68	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.84	0.16	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	4	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.032
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.039	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	341	352
	07:00-07:15	407	420
	07:15-07:30	498	514
	07:30-07:45	498	514
	07:45-08:00	407	420
	08:00-08:15	341	352
B - Felixstowe Road South	06:45-07:00	103	111
	07:00-07:15	123	133
	07:15-07:30	150	163
	07:30-07:45	150	163
	07:45-08:00	123	133
	08:00-08:15	103	111
C - A1156 West	06:45-07:00	317	333
	07:00-07:15	378	398
	07:15-07:30	463	487
	07:30-07:45	463	487
	07:45-08:00	378	398
	08:00-08:15	317	333

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	8.40	0.3	A	98	147
B-A	0.12	14.28	0.1	B	28	41
C-AB	0.15	8.47	0.2	A	62	93
C-A					324	486
A-B					56	84
A-C					359	539

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	80	20	593	0.135	80	0.0	0.2	7.008	A
B-A	23	6	343	0.066	22	0.0	0.1	11.232	B
C-AB	51	13	539	0.095	51	0.0	0.1	7.370	A
C-A	266	66			266				
A-B	46	11			46				
A-C	295	74			295				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	573	0.167	96	0.2	0.2	7.536	A
B-A	27	7	318	0.085	27	0.1	0.1	12.343	B
C-AB	61	15	522	0.117	61	0.1	0.1	7.801	A
C-A	318	79			318				
A-B	55	14			55				
A-C	352	88			352				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	117	29	546	0.215	117	0.2	0.3	8.384	A
B-A	33	8	285	0.116	33	0.1	0.1	14.264	B
C-AB	75	19	499	0.149	74	0.1	0.2	8.467	A
C-A	389	97			389				
A-B	67	17			67				
A-C	431	108			431				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	117	29	546	0.215	117	0.3	0.3	8.396	A
B-A	33	8	285	0.116	33	0.1	0.1	14.283	B
C-AB	75	19	499	0.149	75	0.2	0.2	8.474	A
C-A	389	97			389				
A-B	67	17			67				
A-C	431	108			431				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	573	0.167	96	0.3	0.2	7.551	A
B-A	27	7	318	0.085	27	0.1	0.1	12.364	B
C-AB	61	15	522	0.117	61	0.2	0.1	7.812	A
C-A	318	79			318				
A-B	55	14			55				
A-C	352	88			352				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	80	20	592	0.135	80	0.2	0.2	7.037	A
B-A	23	6	342	0.066	23	0.1	0.1	11.260	B
C-AB	51	13	539	0.095	51	0.1	0.1	7.385	A
C-A	266	66			266				
A-B	46	11			46				
A-C	295	74			295				

2023 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		1.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2023 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	706	100.000
B - Felixstowe Road South		ONE HOUR	✓	149	100.000
C - A1156 West		ONE HOUR	✓	654	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	91	615
	B - Felixstowe Road South	37	0	112
	C - A1156 West	586	69	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.89	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	3	0	2
	C - A1156 West	4	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.026
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.039	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	531	546
	08:00-08:15	634	652
	08:15-08:30	777	798
	08:30-08:45	777	798
	08:45-09:00	634	652
	09:00-09:15	531	546
B - Felixstowe Road South	07:45-08:00	112	115
	08:00-08:15	134	137
	08:15-08:30	164	167
	08:30-08:45	164	167
	08:45-09:00	134	137
	09:00-09:15	112	115
C - A1156 West	07:45-08:00	493	513
	08:00-08:15	588	612
	08:15-08:30	721	750
	08:30-08:45	721	750
	08:45-09:00	588	612
	09:00-09:15	493	513

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	9.68	0.3	A	103	154
B-A	0.20	22.86	0.3	C	34	50
C-AB	0.17	9.41	0.2	A	63	95
C-A					537	806
A-B					84	125
A-C					564	846

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	84	21	575	0.147	84	0.0	0.2	7.324	A
B-A	28	7	286	0.097	27	0.0	0.1	13.902	B
C-AB	52	13	523	0.099	51	0.0	0.1	7.628	A
C-A	441	110			441				
A-B	69	17			69				
A-C	463	116			463				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	542	0.186	101	0.2	0.2	8.148	A
B-A	33	8	249	0.132	33	0.1	0.1	16.649	C
C-AB	62	15	496	0.125	62	0.1	0.1	8.291	A
C-A	526	132			526				
A-B	82	20			82				
A-C	553	138			553				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	496	0.249	123	0.2	0.3	9.651	A
B-A	40	10	198	0.204	40	0.1	0.2	22.757	C
C-AB	76	19	458	0.165	76	0.1	0.2	9.403	A
C-A	645	161			645				
A-B	100	25			100				
A-C	677	169			677				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	495	0.249	123	0.3	0.3	9.683	A
B-A	40	10	198	0.204	40	0.2	0.3	22.860	C
C-AB	76	19	458	0.165	76	0.2	0.2	9.411	A
C-A	645	161			645				
A-B	100	25			100				
A-C	677	169			677				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	542	0.186	101	0.3	0.2	8.183	A
B-A	33	8	249	0.132	33	0.3	0.2	16.731	C
C-AB	62	15	496	0.125	62	0.2	0.1	8.305	A
C-A	526	132			526				
A-B	82	20			82				
A-C	553	138			553				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	84	21	574	0.147	85	0.2	0.2	7.364	A
B-A	28	7	286	0.097	28	0.2	0.1	13.968	B
C-AB	52	13	523	0.099	52	0.1	0.1	7.644	A
C-A	441	110			441				
A-B	69	17			69				
A-C	463	116			463				

2023 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2023 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	619	100.000
B - Felixstowe Road South		ONE HOUR	✓	147	100.000
C - A1156 West		ONE HOUR	✓	501	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	30	589
	B - Felixstowe Road South	56	0	91
	C - A1156 West	436	66	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	2
	B - Felixstowe Road South	6	0	4
	C - A1156 West	4	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.022
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.035	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	466	478
	15:00-15:15	556	571
	15:15-15:30	681	699
	15:30-15:45	681	699
	15:45-16:00	556	571
	16:00-16:15	466	478
B - Felixstowe Road South	14:45-15:00	111	116
	15:00-15:15	132	138
	15:15-15:30	162	169
	15:30-15:45	162	169
	15:45-16:00	132	138
	16:00-16:15	111	116
C - A1156 West	14:45-15:00	377	392
	15:00-15:15	451	469
	15:15-15:30	552	574
	15:30-15:45	552	574
	15:45-16:00	451	469
	16:00-16:15	377	392

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	9.58	0.3	A	84	126
B-A	0.26	20.26	0.3	C	51	77
C-AB	0.15	8.94	0.2	A	60	90
C-A					400	600
A-B					28	41
A-C					540	811

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	69	17	549	0.125	68	0.0	0.1	7.481	A
B-A	42	10	316	0.132	41	0.0	0.2	13.072	B
C-AB	49	12	530	0.093	49	0.0	0.1	7.471	A
C-A	328	82			328				
A-B	23	6			23				
A-C	443	111			443				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	82	21	519	0.158	82	0.1	0.2	8.226	A
B-A	50	13	284	0.176	50	0.2	0.2	15.372	C
C-AB	59	15	507	0.116	59	0.1	0.1	8.031	A
C-A	392	98			392				
A-B	27	7			27				
A-C	529	132			529				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	100	25	477	0.211	100	0.2	0.3	9.550	A
B-A	61	15	239	0.256	61	0.2	0.3	20.156	C
C-AB	72	18	475	0.152	72	0.1	0.2	8.936	A
C-A	480	120			480				
A-B	33	8			33				
A-C	648	162			648				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	100	25	476	0.211	100	0.3	0.3	9.576	A
B-A	61	15	239	0.256	61	0.3	0.3	20.260	C
C-AB	72	18	475	0.152	72	0.2	0.2	8.943	A
C-A	480	120			480				
A-B	33	8			33				
A-C	648	162			648				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	82	21	519	0.158	82	0.3	0.2	8.258	A
B-A	50	13	284	0.176	51	0.3	0.2	15.461	C
C-AB	59	15	507	0.116	59	0.2	0.1	8.042	A
C-A	392	98			392				
A-B	27	7			27				
A-C	529	132			529				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	69	17	548	0.125	69	0.2	0.1	7.514	A
B-A	42	10	316	0.132	42	0.2	0.2	13.149	B
C-AB	49	12	530	0.093	50	0.1	0.1	7.489	A
C-A	328	82			328				
A-B	23	6			23				
A-C	443	111			443				

2023 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2023 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	629	100.000
B - Felixstowe Road South		ONE HOUR	✓	207	100.000
C - A1156 West		ONE HOUR	✓	581	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A1156 East	B - Felixstowe Road South	C - A1156 West
A - A1156 East	0	37	593
B - Felixstowe Road South	72	0	135
C - A1156 West	482	99	0

Proportions

From	To		
	A - A1156 East	B - Felixstowe Road South	C - A1156 West
A - A1156 East	0.00	0.06	0.94
B - Felixstowe Road South	0.35	0.00	0.65
C - A1156 West	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A1156 East	B - Felixstowe Road South	C - A1156 West
A - A1156 East	0	6	1
B - Felixstowe Road South	2	0	2
C - A1156 West	1	2	0

Average PCU Per Veh

From	To		
	A - A1156 East	B - Felixstowe Road South	C - A1156 West
A - A1156 East	1.000	1.061	1.008
B - Felixstowe Road South	1.015	1.000	1.025
C - A1156 West	1.010	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	474	479
	17:00-17:15	566	572
	17:15-17:30	693	700
	17:30-17:45	693	700
	17:45-18:00	566	572
	18:00-18:15	474	479
B - Felixstowe Road South	16:45-17:00	156	159
	17:00-17:15	186	190
	17:15-17:30	228	233
	17:30-17:45	228	233
	17:45-18:00	186	190
	18:00-18:15	156	159
C - A1156 West	16:45-17:00	437	443
	17:00-17:15	522	529
	17:15-17:30	640	647
	17:30-17:45	640	647
	17:45-18:00	522	529
	18:00-18:15	437	443

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.31	11.04	0.5	B	124	185
B-A	0.35	23.98	0.5	C	66	100
C-AB	0.22	9.31	0.3	A	91	136
C-A					442	663
A-B					34	51
A-C					544	816

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	556	0.182	100	0.0	0.2	7.892	A
B-A	54	14	315	0.173	54	0.0	0.2	13.731	B
C-AB	75	19	554	0.135	74	0.0	0.2	7.494	A
C-A	363	91			363				
A-B	28	7			28				
A-C	446	112			446				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	121	30	523	0.231	121	0.2	0.3	8.943	A
B-A	65	16	279	0.233	65	0.2	0.3	16.747	C
C-AB	89	22	529	0.168	89	0.2	0.2	8.169	A
C-A	433	108			433				
A-B	33	8			33				
A-C	533	133			533				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	475	0.312	148	0.3	0.4	10.980	B
B-A	80	20	230	0.347	79	0.3	0.5	23.726	C
C-AB	109	27	496	0.220	109	0.2	0.3	9.299	A
C-A	531	133			531				
A-B	40	10			40				
A-C	653	163			653				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	474	0.313	148	0.4	0.5	11.043	B
B-A	80	20	230	0.347	80	0.5	0.5	23.982	C
C-AB	109	27	496	0.220	109	0.3	0.3	9.313	A
C-A	531	133			531				
A-B	40	10			40				
A-C	653	163			653				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	121	30	522	0.232	122	0.5	0.3	9.000	A
B-A	65	16	279	0.233	66	0.5	0.3	16.930	C
C-AB	89	22	529	0.168	89	0.3	0.2	8.187	A
C-A	433	108			433				
A-B	33	8			33				
A-C	533	133			533				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	555	0.183	102	0.3	0.2	7.949	A
B-A	54	14	315	0.173	55	0.3	0.2	13.858	B
C-AB	75	19	554	0.135	75	0.2	0.2	7.517	A
C-A	363	91			363				
A-B	28	7			28				
A-C	446	112			446				

2023 Early Years , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2023 Early Years	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	147	100.000
B - Felixstowe Road South		ONE HOUR	✓	56	100.000
C - A1156 West		ONE HOUR	✓	178	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	20	127
	B - Felixstowe Road South	12	0	43
	C - A1156 West	163	16	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.91	0.09	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	5
	B - Felixstowe Road South	9	0	10
	C - A1156 West	5	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.045
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.047	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	111	117
	06:00-06:15	132	139
	06:15-06:30	162	171
	06:30-06:45	162	171
	06:45-07:00	132	139
	07:00-07:15	111	117
B - Felixstowe Road South	05:45-06:00	42	46
	06:00-06:15	50	55
	06:15-06:30	61	67
	06:30-06:45	61	67
	06:45-07:00	50	55
	07:00-07:15	42	46
C - A1156 West	05:45-06:00	134	140
	06:00-06:15	160	167
	06:15-06:30	196	205
	06:30-06:45	196	205
	06:45-07:00	160	167
	07:00-07:15	134	140

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	6.13	0.1	A	40	60
B-A	0.04	9.72	0.0	A	11	17
C-AB	0.03	5.70	0.0	A	14	21
C-A					149	224
A-B					18	28
A-C					117	175

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	650	0.050	32	0.0	0.1	5.830	A
B-A	9	2	403	0.023	9	0.0	0.0	9.141	A
C-AB	12	3	663	0.018	12	0.0	0.0	5.522	A
C-A	122	31			122				
A-B	15	4			15				
A-C	96	24			96				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	39	10	643	0.061	39	0.1	0.1	5.955	A
B-A	11	3	395	0.028	11	0.0	0.0	9.378	A
C-AB	14	3	657	0.021	14	0.0	0.0	5.594	A
C-A	146	37			146				
A-B	18	4			18				
A-C	114	29			114				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	48	12	635	0.075	48	0.1	0.1	6.131	A
B-A	13	3	384	0.035	13	0.0	0.0	9.724	A
C-AB	17	4	649	0.026	17	0.0	0.0	5.696	A
C-A	179	45			179				
A-B	22	6			22				
A-C	140	35			140				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	48	12	635	0.075	48	0.1	0.1	6.132	A
B-A	13	3	384	0.035	13	0.0	0.0	9.724	A
C-AB	17	4	649	0.026	17	0.0	0.0	5.696	A
C-A	179	45			179				
A-B	22	6			22				
A-C	140	35			140				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	39	10	643	0.061	39	0.1	0.1	5.959	A
B-A	11	3	395	0.028	11	0.0	0.0	9.379	A
C-AB	14	3	657	0.021	14	0.0	0.0	5.594	A
C-A	146	37			146				
A-B	18	4			18				
A-C	114	29			114				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	33	8	650	0.050	33	0.1	0.1	5.837	A
B-A	9	2	403	0.023	9	0.0	0.0	9.143	A
C-AB	12	3	663	0.018	12	0.0	0.0	5.525	A
C-A	122	31			122				
A-B	15	4			15				
A-C	96	24			96				

2023 Early Years , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		1.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2023 Early Years	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	439	100.000
B - Felixstowe Road South		ONE HOUR	✓	137	100.000
C - A1156 West		ONE HOUR	✓	434	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	61	377
	B - Felixstowe Road South	30	0	107
	C - A1156 West	366	68	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.84	0.16	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	4	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.031
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.038	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	330	341
	07:00-07:15	394	407
	07:15-07:30	483	498
	07:30-07:45	483	498
	07:45-08:00	394	407
	08:00-08:15	330	341
B - Felixstowe Road South	06:45-07:00	103	111
	07:00-07:15	123	133
	07:15-07:30	150	163
	07:30-07:45	150	163
	07:45-08:00	123	133
	08:00-08:15	103	111
C - A1156 West	06:45-07:00	327	343
	07:00-07:15	390	410
	07:15-07:30	478	502
	07:30-07:45	478	502
	07:45-08:00	390	410
	08:00-08:15	327	343

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	8.31	0.3	A	98	147
B-A	0.12	14.20	0.1	B	28	41
C-AB	0.15	8.40	0.2	A	62	93
C-A					336	504
A-B					56	84
A-C					346	520

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	80	20	596	0.135	80	0.0	0.2	6.968	A
B-A	23	6	344	0.066	22	0.0	0.1	11.196	B
C-AB	51	13	541	0.094	51	0.0	0.1	7.331	A
C-A	276	69			276				
A-B	46	11			46				
A-C	284	71			284				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	577	0.166	96	0.2	0.2	7.482	A
B-A	27	7	320	0.084	27	0.1	0.1	12.291	B
C-AB	61	15	525	0.116	61	0.1	0.1	7.748	A
C-A	329	82			329				
A-B	55	14			55				
A-C	339	85			339				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	117	29	550	0.213	117	0.2	0.3	8.301	A
B-A	33	8	287	0.115	33	0.1	0.1	14.179	B
C-AB	75	19	503	0.148	74	0.1	0.2	8.390	A
C-A	403	101			403				
A-B	67	17			67				
A-C	416	104			416				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	117	29	550	0.213	117	0.3	0.3	8.314	A
B-A	33	8	287	0.115	33	0.1	0.1	14.197	B
C-AB	75	19	503	0.148	75	0.2	0.2	8.397	A
C-A	403	101			403				
A-B	67	17			67				
A-C	416	104			416				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	96	24	577	0.166	96	0.3	0.2	7.499	A
B-A	27	7	320	0.084	27	0.1	0.1	12.313	B
C-AB	61	15	525	0.116	61	0.2	0.1	7.758	A
C-A	329	82			329				
A-B	55	14			55				
A-C	339	85			339				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	80	20	595	0.135	80	0.2	0.2	6.997	A
B-A	23	6	344	0.066	23	0.1	0.1	11.221	B
C-AB	51	13	541	0.094	51	0.1	0.1	7.348	A
C-A	276	69			276				
A-B	46	11			46				
A-C	284	71			284				

2023 Early Years , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		1.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2023 Early Years	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	689	100.000
B - Felixstowe Road South		ONE HOUR	✓	149	100.000
C - A1156 West		ONE HOUR	✓	654	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	91	598
	B - Felixstowe Road South	37	0	112
	C - A1156 West	586	69	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.89	0.11	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	3	0	2
	C - A1156 West	4	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.027
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.039	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	518	533
	08:00-08:15	619	636
	08:15-08:30	758	779
	08:30-08:45	758	779
	08:45-09:00	619	636
	09:00-09:15	518	533
B - Felixstowe Road South	07:45-08:00	112	115
	08:00-08:15	134	137
	08:15-08:30	164	167
	08:30-08:45	164	167
	08:45-09:00	134	137
	09:00-09:15	112	115
C - A1156 West	07:45-08:00	493	513
	08:00-08:15	588	612
	08:15-08:30	721	750
	08:30-08:45	721	750
	08:45-09:00	588	612
	09:00-09:15	493	513

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	9.54	0.3	A	103	154
B-A	0.20	22.28	0.2	C	34	50
C-AB	0.16	9.29	0.2	A	63	95
C-A					537	806
A-B					84	125
A-C					548	823

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	84	21	578	0.146	84	0.0	0.2	7.273	A
B-A	28	7	289	0.096	27	0.0	0.1	13.733	B
C-AB	52	13	526	0.098	51	0.0	0.1	7.575	A
C-A	441	110			441				
A-B	69	17			69				
A-C	450	112			450				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	547	0.184	101	0.2	0.2	8.067	A
B-A	33	8	252	0.131	33	0.1	0.1	16.396	C
C-AB	62	15	500	0.124	62	0.1	0.1	8.216	A
C-A	526	132			526				
A-B	82	20			82				
A-C	537	134			537				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	501	0.246	123	0.2	0.3	9.510	A
B-A	40	10	202	0.200	40	0.1	0.2	22.183	C
C-AB	76	19	463	0.164	76	0.1	0.2	9.285	A
C-A	645	161			645				
A-B	100	25			100				
A-C	658	164			658				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	501	0.247	123	0.3	0.3	9.539	A
B-A	40	10	202	0.200	40	0.2	0.2	22.281	C
C-AB	76	19	463	0.164	76	0.2	0.2	9.294	A
C-A	645	161			645				
A-B	100	25			100				
A-C	658	164			658				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	546	0.185	101	0.3	0.2	8.102	A
B-A	33	8	252	0.131	33	0.2	0.2	16.473	C
C-AB	62	15	500	0.124	62	0.2	0.1	8.231	A
C-A	526	132			526				
A-B	82	20			82				
A-C	537	134			537				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	84	21	578	0.146	85	0.2	0.2	7.306	A
B-A	28	7	289	0.096	28	0.2	0.1	13.815	B
C-AB	52	13	526	0.098	52	0.1	0.1	7.594	A
C-A	441	110			441				
A-B	69	17			69				
A-C	450	112			450				

2023 Early Years , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2023 Early Years	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	618	100.000
B - Felixstowe Road South		ONE HOUR	✓	147	100.000
C - A1156 West		ONE HOUR	✓	512	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	30	588
	B - Felixstowe Road South	56	0	91
	C - A1156 West	447	66	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	2
	B - Felixstowe Road South	6	0	4
	C - A1156 West	3	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.022
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.035	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	465	477
	15:00-15:15	555	570
	15:15-15:30	680	698
	15:30-15:45	680	698
	15:45-16:00	555	570
	16:00-16:15	465	477
B - Felixstowe Road South	14:45-15:00	111	116
	15:00-15:15	132	138
	15:15-15:30	162	169
	15:30-15:45	162	169
	15:45-16:00	132	138
	16:00-16:15	111	116
C - A1156 West	14:45-15:00	386	401
	15:00-15:15	461	478
	15:15-15:30	564	586
	15:30-15:45	564	586
	15:45-16:00	461	478
	16:00-16:15	386	401

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.21	9.57	0.3	A	84	126
B-A	0.26	20.43	0.3	C	51	77
C-AB	0.15	8.94	0.2	A	60	90
C-A					410	615
A-B					28	41
A-C					539	809

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	69	17	549	0.125	68	0.0	0.1	7.478	A
B-A	42	10	315	0.133	41	0.0	0.2	13.115	B
C-AB	49	12	531	0.093	49	0.0	0.1	7.468	A
C-A	336	84			336				
A-B	23	6			23				
A-C	443	111			443				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	82	21	519	0.158	82	0.1	0.2	8.223	A
B-A	50	13	283	0.177	50	0.2	0.2	15.449	C
C-AB	59	15	507	0.116	59	0.1	0.1	8.026	A
C-A	402	100			402				
A-B	27	7			27				
A-C	528	132			528				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	100	25	477	0.211	100	0.2	0.3	9.548	A
B-A	61	15	237	0.258	61	0.2	0.3	20.319	C
C-AB	72	18	475	0.152	72	0.1	0.2	8.930	A
C-A	492	123			492				
A-B	33	8			33				
A-C	647	162			647				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	100	25	476	0.211	100	0.3	0.3	9.574	A
B-A	61	15	237	0.258	61	0.3	0.3	20.426	C
C-AB	72	18	475	0.152	72	0.2	0.2	8.937	A
C-A	492	123			492				
A-B	33	8			33				
A-C	647	162			647				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	82	21	519	0.158	82	0.3	0.2	8.254	A
B-A	50	13	283	0.177	51	0.3	0.2	15.540	C
C-AB	59	15	507	0.116	59	0.2	0.1	8.038	A
C-A	402	100			402				
A-B	27	7			27				
A-C	528	132			528				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	69	17	548	0.125	69	0.2	0.1	7.509	A
B-A	42	10	315	0.133	42	0.2	0.2	13.196	B
C-AB	49	12	531	0.093	50	0.1	0.1	7.486	A
C-A	336	84			336				
A-B	23	6			23				
A-C	443	111			443				

2023 Early Years , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		3.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2023 Early Years	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	661	100.000
B - Felixstowe Road South		ONE HOUR	✓	207	100.000
C - A1156 West		ONE HOUR	✓	576	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	37	625
	B - Felixstowe Road South	72	0	135
	C - A1156 West	477	99	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.06	0.94
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.008
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.010	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	498	503
	17:00-17:15	595	601
	17:15-17:30	728	736
	17:30-17:45	728	736
	17:45-18:00	595	601
	18:00-18:15	498	503
B - Felixstowe Road South	16:45-17:00	156	159
	17:00-17:15	186	190
	17:15-17:30	228	233
	17:30-17:45	228	233
	17:45-18:00	186	190
	18:00-18:15	156	159
C - A1156 West	16:45-17:00	434	439
	17:00-17:15	518	524
	17:15-17:30	634	642
	17:30-17:45	634	642
	17:45-18:00	518	524
	18:00-18:15	434	439

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.32	11.42	0.5	B	124	185
B-A	0.36	25.23	0.5	D	66	100
C-AB	0.22	9.55	0.3	A	91	136
C-A					438	657
A-B					34	51
A-C					573	860

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	549	0.185	100	0.0	0.2	8.010	A
B-A	54	14	310	0.176	54	0.0	0.2	14.000	B
C-AB	75	19	547	0.136	74	0.0	0.2	7.595	A
C-A	359	90			359				
A-B	28	7			28				
A-C	470	118			470				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	121	30	515	0.235	121	0.2	0.3	9.123	A
B-A	65	16	273	0.238	65	0.2	0.3	17.228	C
C-AB	89	22	522	0.171	89	0.2	0.2	8.314	A
C-A	429	107			429				
A-B	33	8			33				
A-C	562	140			562				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	464	0.319	148	0.3	0.5	11.346	B
B-A	80	20	222	0.358	79	0.3	0.5	24.928	C
C-AB	109	27	486	0.224	109	0.2	0.3	9.528	A
C-A	525	131			525				
A-B	40	10			40				
A-C	688	172			688				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	148	37	463	0.320	148	0.5	0.5	11.420	B
B-A	80	20	222	0.358	80	0.5	0.5	25.228	D
C-AB	109	27	486	0.224	109	0.3	0.3	9.545	A
C-A	525	131			525				
A-B	40	10			40				
A-C	688	172			688				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	121	30	514	0.236	122	0.5	0.3	9.192	A
B-A	65	16	273	0.238	66	0.5	0.3	17.436	C
C-AB	89	22	522	0.171	89	0.3	0.2	8.333	A
C-A	429	107			429				
A-B	33	8			33				
A-C	562	140			562				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	548	0.185	102	0.3	0.2	8.073	A
B-A	54	14	310	0.176	55	0.3	0.2	14.139	B
C-AB	75	19	547	0.136	75	0.2	0.2	7.620	A
C-A	359	90			359				
A-B	28	7			28				
A-C	470	118			470				

2028 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	159	100.000
B - Felixstowe Road South		ONE HOUR	✓	58	100.000
C - A1156 West		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	21	138
	B - Felixstowe Road South	13	0	46
	C - A1156 West	9	16	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.35	0.65	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	4
	B - Felixstowe Road South	9	0	10
	C - A1156 West	89	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.036
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.888	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	120	125
	06:00-06:15	143	150
	06:15-06:30	175	183
	06:30-06:45	175	183
	06:45-07:00	143	150
	07:00-07:15	120	125
B - Felixstowe Road South	05:45-06:00	44	48
	06:00-06:15	52	58
	06:15-06:30	64	71
	06:30-06:45	64	71
	06:45-07:00	52	58
	07:00-07:15	44	48
C - A1156 West	05:45-06:00	19	25
	06:00-06:15	22	29
	06:15-06:30	28	36
	06:30-06:45	28	36
	06:45-07:00	22	29
	07:00-07:15	19	25

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	6.19	0.1	A	42	63
B-A	0.04	9.26	0.0	A	12	18
C-AB	0.03	5.73	0.0	A	15	22
C-A					8	12
A-B					19	29
A-C					127	190

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	9	648	0.053	34	0.0	0.1	5.866	A
B-A	10	2	416	0.023	10	0.0	0.0	8.857	A
C-AB	12	3	661	0.019	12	0.0	0.0	5.547	A
C-A	7	2			7				
A-B	16	4			16				
A-C	104	26			104				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	641	0.064	41	0.1	0.1	6.000	A
B-A	12	3	410	0.028	12	0.0	0.0	9.024	A
C-AB	15	4	655	0.022	15	0.0	0.0	5.624	A
C-A	8	2			8				
A-B	19	5			19				
A-C	124	31			124				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	13	632	0.079	50	0.1	0.1	6.189	A
B-A	14	4	403	0.035	14	0.0	0.0	9.263	A
C-AB	18	4	646	0.028	18	0.0	0.0	5.735	A
C-A	10	2			10				
A-B	23	6			23				
A-C	152	38			152				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	13	632	0.079	50	0.1	0.1	6.190	A
B-A	14	4	403	0.035	14	0.0	0.0	9.263	A
C-AB	18	4	646	0.028	18	0.0	0.0	5.735	A
C-A	10	2			10				
A-B	23	6			23				
A-C	152	38			152				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	641	0.064	41	0.1	0.1	6.004	A
B-A	12	3	410	0.028	12	0.0	0.0	9.025	A
C-AB	15	4	655	0.022	15	0.0	0.0	5.627	A
C-A	8	2			8				
A-B	19	5			19				
A-C	124	31			124				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	9	647	0.053	34	0.1	0.1	5.871	A
B-A	10	2	416	0.023	10	0.0	0.0	8.860	A
C-AB	12	3	661	0.019	12	0.0	0.0	5.547	A
C-A	7	2			7				
A-B	16	4			16				
A-C	104	26			104				

2028 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D17	2028 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	463	100.000
B - Felixstowe Road South		ONE HOUR	✓	144	100.000
C - A1156 West		ONE HOUR	✓	341	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	64	398
	B - Felixstowe Road South	32	0	112
	C - A1156 West	270	71	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.79	0.21	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	5	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.030
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.051	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	348	359
	07:00-07:15	416	429
	07:15-07:30	509	525
	07:30-07:45	509	525
	07:45-08:00	416	429
	08:00-08:15	348	359
B - Felixstowe Road South	06:45-07:00	108	117
	07:00-07:15	129	140
	07:15-07:30	158	171
	07:30-07:45	158	171
	07:45-08:00	129	140
	08:00-08:15	108	117
C - A1156 West	06:45-07:00	257	274
	07:00-07:15	307	327
	07:15-07:30	376	400
	07:30-07:45	376	400
	07:45-08:00	307	327
	08:00-08:15	257	274

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.23	8.57	0.3	A	103	154
B-A	0.12	13.88	0.1	B	29	43
C-AB	0.16	8.60	0.2	A	65	98
C-A					248	372
A-B					59	88
A-C					366	548

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	84	21	591	0.143	84	0.0	0.2	7.091	A
B-A	24	6	349	0.068	23	0.0	0.1	11.056	B
C-AB	54	13	537	0.100	53	0.0	0.1	7.437	A
C-A	203	51			203				
A-B	48	12			48				
A-C	300	75			300				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	571	0.176	101	0.2	0.2	7.646	A
B-A	28	7	326	0.087	28	0.1	0.1	12.091	B
C-AB	64	16	520	0.123	64	0.1	0.1	7.891	A
C-A	243	61			243				
A-B	58	14			58				
A-C	358	90			358				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	544	0.227	123	0.2	0.3	8.552	A
B-A	35	9	294	0.118	35	0.1	0.1	13.856	B
C-AB	78	20	497	0.158	78	0.1	0.2	8.597	A
C-A	298	74			298				
A-B	71	18			71				
A-C	439	110			439				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	544	0.227	123	0.3	0.3	8.566	A
B-A	35	9	294	0.118	35	0.1	0.1	13.876	B
C-AB	78	20	497	0.158	78	0.2	0.2	8.604	A
C-A	298	74			298				
A-B	71	18			71				
A-C	439	110			439				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	571	0.176	101	0.3	0.2	7.668	A
B-A	28	7	326	0.087	28	0.1	0.1	12.114	B
C-AB	64	16	520	0.123	64	0.2	0.1	7.902	A
C-A	243	61			243				
A-B	58	14			58				
A-C	358	90			358				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	84	21	590	0.143	85	0.2	0.2	7.117	A
B-A	24	6	349	0.068	24	0.1	0.1	11.084	B
C-AB	54	13	537	0.100	54	0.1	0.1	7.456	A
C-A	203	51			203				
A-B	48	12			48				
A-C	300	75			300				

2028 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		1.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D18	2028 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	688	100.000
B - Felixstowe Road South		ONE HOUR	✓	156	100.000
C - A1156 West		ONE HOUR	✓	531	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - A1156 East	B - Felixstowe Road South	C - A1156 West
A - A1156 East	0	96	593
B - Felixstowe Road South	39	0	118
C - A1156 West	459	72	0

Proportions

From	To		
	A - A1156 East	B - Felixstowe Road South	C - A1156 West
A - A1156 East	0.00	0.14	0.86
B - Felixstowe Road South	0.25	0.00	0.75
C - A1156 West	0.86	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - A1156 East	B - Felixstowe Road South	C - A1156 West
A - A1156 East	0	4	3
B - Felixstowe Road South	3	0	2
C - A1156 West	5	5	0

Average PCU Per Veh

From	To		
	A - A1156 East	B - Felixstowe Road South	C - A1156 West
A - A1156 East	1.000	1.037	1.027
B - Felixstowe Road South	1.030	1.000	1.020
C - A1156 West	1.051	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	518	533
	08:00-08:15	619	636
	08:15-08:30	758	779
	08:30-08:45	758	779
	08:45-09:00	619	636
B - Felixstowe Road South	09:00-09:15	518	533
	07:45-08:00	118	120
	08:00-08:15	141	144
	08:15-08:30	172	176
	08:30-08:45	172	176
C - A1156 West	08:45-09:00	141	144
	09:00-09:15	118	120
	07:45-08:00	400	420
	08:00-08:15	477	501
	08:15-08:30	585	614
C - A1156 West	08:30-08:45	585	614
	08:45-09:00	477	501
	09:00-09:15	400	420

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.26	9.65	0.3	A	108	162
B-A	0.19	20.22	0.2	C	35	53
C-AB	0.17	9.39	0.2	A	66	100
C-A					421	631
A-B					88	132
A-C					544	816

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	579	0.153	88	0.0	0.2	7.325	A
B-A	29	7	301	0.096	29	0.0	0.1	13.183	B
C-AB	54	14	526	0.103	54	0.0	0.1	7.617	A
C-A	345	86			345				
A-B	72	18			72				
A-C	446	112			446				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	26	548	0.194	106	0.2	0.2	8.143	A
B-A	35	9	267	0.129	34	0.1	0.1	15.447	C
C-AB	65	16	500	0.130	65	0.1	0.1	8.275	A
C-A	412	103			412				
A-B	86	22			86				
A-C	533	133			533				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	32	503	0.258	129	0.2	0.3	9.618	A
B-A	42	11	220	0.192	42	0.1	0.2	20.132	C
C-AB	80	20	463	0.172	79	0.1	0.2	9.375	A
C-A	505	126			505				
A-B	105	26			105				
A-C	652	163			652				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	32	503	0.258	130	0.3	0.3	9.647	A
B-A	42	11	220	0.192	42	0.2	0.2	20.215	C
C-AB	80	20	463	0.172	80	0.2	0.2	9.386	A
C-A	505	126			505				
A-B	105	26			105				
A-C	652	163			652				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	26	547	0.194	106	0.3	0.2	8.176	A
B-A	35	9	267	0.129	35	0.2	0.2	15.512	C
C-AB	65	16	500	0.130	65	0.2	0.2	8.288	A
C-A	412	103			412				
A-B	86	22			86				
A-C	533	133			533				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	578	0.153	89	0.2	0.2	7.362	A
B-A	29	7	301	0.096	29	0.2	0.1	13.239	B
C-AB	54	14	526	0.103	55	0.2	0.1	7.636	A
C-A	345	86			345				
A-B	72	18			72				
A-C	446	112			446				

2028 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2028 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	608	100.000
B - Felixstowe Road South		ONE HOUR	✓	155	100.000
C - A1156 West		ONE HOUR	✓	453	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	32	577
	B - Felixstowe Road South	59	0	96
	C - A1156 West	384	69	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.85	0.15	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	2
	B - Felixstowe Road South	6	0	4
	C - A1156 West	4	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.021
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.042	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	458	470
	15:00-15:15	547	561
	15:15-15:30	670	687
	15:30-15:45	670	687
	15:45-16:00	547	561
	16:00-16:15	458	470
B - Felixstowe Road South	14:45-15:00	116	122
	15:00-15:15	139	145
	15:15-15:30	170	178
	15:30-15:45	170	178
	15:45-16:00	139	145
	16:00-16:15	116	122
C - A1156 West	14:45-15:00	341	356
	15:00-15:15	407	426
	15:15-15:30	498	521
	15:30-15:45	498	521
	15:45-16:00	407	426
	16:00-16:15	341	356

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.22	9.64	0.3	A	88	132
B-A	0.26	19.56	0.3	C	54	81
C-AB	0.16	8.96	0.2	A	63	95
C-A					352	528
A-B					29	44
A-C					529	794

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	72	18	551	0.131	72	0.0	0.1	7.505	A
B-A	44	11	323	0.137	43	0.0	0.2	12.865	B
C-AB	52	13	532	0.098	52	0.0	0.1	7.479	A
C-A	289	72			289				
A-B	24	6			24				
A-C	434	109			434				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	86	22	521	0.166	86	0.1	0.2	8.266	A
B-A	53	13	292	0.181	52	0.2	0.2	15.041	C
C-AB	62	16	510	0.122	62	0.1	0.1	8.042	A
C-A	345	86			345				
A-B	28	7			28				
A-C	519	130			519				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	26	480	0.220	105	0.2	0.3	9.609	A
B-A	64	16	248	0.260	64	0.2	0.3	19.470	C
C-AB	76	19	478	0.159	76	0.1	0.2	8.951	A
C-A	422	106			422				
A-B	35	9			35				
A-C	635	159			635				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	26	479	0.221	106	0.3	0.3	9.637	A
B-A	64	16	248	0.260	64	0.3	0.3	19.564	C
C-AB	76	19	478	0.159	76	0.2	0.2	8.960	A
C-A	422	106			422				
A-B	35	9			35				
A-C	635	159			635				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	86	22	521	0.166	87	0.3	0.2	8.297	A
B-A	53	13	292	0.181	53	0.3	0.2	15.127	C
C-AB	62	16	510	0.122	62	0.2	0.1	8.054	A
C-A	345	86			345				
A-B	28	7			28				
A-C	519	130			519				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	72	18	550	0.131	72	0.2	0.2	7.541	A
B-A	44	11	323	0.137	44	0.2	0.2	12.943	B
C-AB	52	13	532	0.098	52	0.1	0.1	7.498	A
C-A	289	72			289				
A-B	24	6			24				
A-C	434	109			434				

2028 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		3.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2028 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	666	100.000
B - Felixstowe Road South		ONE HOUR	✓	218	100.000
C - A1156 West		ONE HOUR	✓	557	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	39	628
	B - Felixstowe Road South	76	0	142
	C - A1156 West	453	104	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.06	0.94
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.81	0.19	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.008
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.012	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	502	507
	17:00-17:15	599	606
	17:15-17:30	734	742
	17:30-17:45	734	742
	17:45-18:00	599	606
	18:00-18:15	502	507
B - Felixstowe Road South	16:45-17:00	164	168
	17:00-17:15	196	200
	17:15-17:30	240	245
	17:30-17:45	240	245
	17:45-18:00	196	200
	18:00-18:15	164	168
C - A1156 West	16:45-17:00	419	425
	17:00-17:15	501	508
	17:15-17:30	613	622
	17:30-17:45	613	622
	17:45-18:00	501	508
	18:00-18:15	419	425

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.34	11.86	0.5	B	130	195
B-A	0.38	25.87	0.6	D	70	105
C-AB	0.24	9.73	0.3	A	96	143
C-A					416	623
A-B					35	53
A-C					576	864

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	107	27	547	0.195	106	0.0	0.2	8.144	A
B-A	57	14	310	0.185	56	0.0	0.2	14.120	B
C-AB	78	20	546	0.144	78	0.0	0.2	7.674	A
C-A	341	85			341				
A-B	29	7			29				
A-C	473	118			473				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	127	32	512	0.249	127	0.2	0.3	9.334	A
B-A	68	17	274	0.250	68	0.2	0.3	17.456	C
C-AB	94	23	520	0.180	93	0.2	0.2	8.428	A
C-A	407	102			407				
A-B	35	9			35				
A-C	564	141			564				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	156	39	460	0.339	155	0.3	0.5	11.782	B
B-A	84	21	223	0.376	83	0.3	0.6	25.535	D
C-AB	115	29	485	0.237	114	0.2	0.3	9.712	A
C-A	499	125			499				
A-B	43	11			43				
A-C	691	173			691				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	156	39	459	0.340	156	0.5	0.5	11.861	B
B-A	84	21	223	0.376	84	0.6	0.6	25.874	D
C-AB	115	29	485	0.237	115	0.3	0.3	9.732	A
C-A	499	125			499				
A-B	43	11			43				
A-C	691	173			691				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	127	32	511	0.249	128	0.5	0.3	9.414	A
B-A	68	17	274	0.250	69	0.6	0.3	17.693	C
C-AB	94	23	520	0.180	94	0.3	0.2	8.451	A
C-A	407	102			407				
A-B	35	9			35				
A-C	564	141			564				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	107	27	546	0.195	107	0.3	0.2	8.210	A
B-A	57	14	310	0.185	58	0.3	0.2	14.270	B
C-AB	78	20	546	0.144	79	0.2	0.2	7.702	A
C-A	341	85			341				
A-B	29	7			29				
A-C	473	118			473				

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	155	100.000
B - Felixstowe Road South		ONE HOUR	✓	58	100.000
C - A1156 West		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	21	134
	B - Felixstowe Road South	13	0	46
	C - A1156 West	9	16	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.35	0.65	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	4
	B - Felixstowe Road South	9	0	10
	C - A1156 West	89	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.039
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.888	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	117	122
	06:00-06:15	139	146
	06:15-06:30	171	179
	06:30-06:45	171	179
	06:45-07:00	139	146
	07:00-07:15	117	122
B - Felixstowe Road South	05:45-06:00	44	48
	06:00-06:15	52	58
	06:15-06:30	64	71
	06:30-06:45	64	71
	06:45-07:00	52	58
	07:00-07:15	44	48
C - A1156 West	05:45-06:00	19	25
	06:00-06:15	22	29
	06:15-06:30	28	36
	06:30-06:45	28	36
	06:45-07:00	22	29
	07:00-07:15	19	25

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	6.18	0.1	A	42	63
B-A	0.04	9.24	0.0	A	12	18
C-AB	0.03	5.72	0.0	A	15	22
C-A					8	12
A-B					19	29
A-C					123	185

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	9	648	0.053	34	0.0	0.1	5.859	A
B-A	10	2	417	0.023	10	0.0	0.0	8.844	A
C-AB	12	3	662	0.019	12	0.0	0.0	5.540	A
C-A	7	2			7				
A-B	16	4			16				
A-C	101	25			101				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	642	0.064	41	0.1	0.1	5.991	A
B-A	12	3	411	0.028	12	0.0	0.0	9.009	A
C-AB	15	4	656	0.022	15	0.0	0.0	5.616	A
C-A	8	2			8				
A-B	19	5			19				
A-C	121	30			121				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	13	633	0.079	50	0.1	0.1	6.177	A
B-A	14	4	404	0.035	14	0.0	0.0	9.243	A
C-AB	18	4	647	0.028	18	0.0	0.0	5.724	A
C-A	10	2			10				
A-B	23	6			23				
A-C	148	37			148				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	50	13	633	0.079	50	0.1	0.1	6.178	A
B-A	14	4	404	0.035	14	0.0	0.0	9.242	A
C-AB	18	4	647	0.028	18	0.0	0.0	5.724	A
C-A	10	2			10				
A-B	23	6			23				
A-C	148	37			148				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	41	10	642	0.064	41	0.1	0.1	5.993	A
B-A	12	3	411	0.028	12	0.0	0.0	9.009	A
C-AB	15	4	656	0.022	15	0.0	0.0	5.616	A
C-A	8	2			8				
A-B	19	5			19				
A-C	121	30			121				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	34	9	648	0.053	34	0.1	0.1	5.866	A
B-A	10	2	417	0.023	10	0.0	0.0	8.847	A
C-AB	12	3	662	0.019	12	0.0	0.0	5.540	A
C-A	7	2			7				
A-B	16	4			16				
A-C	101	25			101				

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	463	100.000
B - Felixstowe Road South		ONE HOUR	✓	144	100.000
C - A1156 West		ONE HOUR	✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	64	398
	B - Felixstowe Road South	32	0	112
	C - A1156 West	274	71	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.79	0.21	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	5	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.031
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.051	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	348	359
	07:00-07:15	416	429
	07:15-07:30	509	525
	07:30-07:45	509	525
	07:45-08:00	416	429
	08:00-08:15	348	359
B - Felixstowe Road South	06:45-07:00	108	117
	07:00-07:15	129	140
	07:15-07:30	158	171
	07:30-07:45	158	171
	07:45-08:00	129	140
	08:00-08:15	108	117
C - A1156 West	06:45-07:00	260	277
	07:00-07:15	311	330
	07:15-07:30	380	405
	07:30-07:45	380	405
	07:45-08:00	311	330
	08:00-08:15	260	277

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.23	8.57	0.3	A	103	154
B-A	0.12	13.91	0.1	B	29	43
C-AB	0.16	8.60	0.2	A	65	98
C-A					252	377
A-B					59	88
A-C					366	548

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	84	21	591	0.143	84	0.0	0.2	7.091	A
B-A	24	6	348	0.068	23	0.0	0.1	11.071	B
C-AB	54	13	537	0.100	53	0.0	0.1	7.438	A
C-A	206	52			206				
A-B	48	12			48				
A-C	300	75			300				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	571	0.176	101	0.2	0.2	7.647	A
B-A	28	7	325	0.087	28	0.1	0.1	12.112	B
C-AB	64	16	520	0.123	64	0.1	0.1	7.892	A
C-A	247	62			247				
A-B	58	14			58				
A-C	358	90			358				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	544	0.227	123	0.2	0.3	8.554	A
B-A	35	9	294	0.118	35	0.1	0.1	13.891	B
C-AB	78	20	497	0.158	78	0.1	0.2	8.598	A
C-A	302	75			302				
A-B	71	18			71				
A-C	439	110			439				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	123	31	543	0.227	123	0.3	0.3	8.568	A
B-A	35	9	293	0.118	35	0.1	0.1	13.910	B
C-AB	78	20	497	0.158	78	0.2	0.2	8.605	A
C-A	302	75			302				
A-B	71	18			71				
A-C	439	110			439				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	101	25	571	0.176	101	0.3	0.2	7.669	A
B-A	28	7	325	0.087	28	0.1	0.1	12.135	B
C-AB	64	16	520	0.123	64	0.2	0.1	7.901	A
C-A	247	62			247				
A-B	58	14			58				
A-C	358	90			358				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	84	21	590	0.143	85	0.2	0.2	7.121	A
B-A	24	6	348	0.068	24	0.1	0.1	11.097	B
C-AB	54	13	537	0.100	54	0.1	0.1	7.456	A
C-A	206	52			206				
A-B	48	12			48				
A-C	300	75			300				

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		1.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	670	100.000
B - Felixstowe Road South		ONE HOUR	✓	156	100.000
C - A1156 West		ONE HOUR	✓	508	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	96	575
	B - Felixstowe Road South	39	0	118
	C - A1156 West	436	72	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.86	0.14	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	3	0	2
	C - A1156 West	5	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.028
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.053	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	505	519
	08:00-08:15	603	620
	08:15-08:30	738	759
	08:30-08:45	738	759
	08:45-09:00	603	620
	09:00-09:15	505	519
B - Felixstowe Road South	07:45-08:00	118	120
	08:00-08:15	141	144
	08:15-08:30	172	176
	08:30-08:45	172	176
	08:45-09:00	141	144
	09:00-09:15	118	120
C - A1156 West	07:45-08:00	382	402
	08:00-08:15	457	480
	08:15-08:30	559	588
	08:30-08:45	559	588
	08:45-09:00	457	480
	09:00-09:15	382	402

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	9.49	0.3	A	108	162
B-A	0.19	19.36	0.2	C	35	53
C-AB	0.17	9.26	0.2	A	66	100
C-A					400	600
A-B					88	132
A-C					527	791

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	583	0.152	88	0.0	0.2	7.266	A
B-A	29	7	307	0.095	29	0.0	0.1	12.930	B
C-AB	54	14	530	0.103	54	0.0	0.1	7.561	A
C-A	328	82			328				
A-B	72	18			72				
A-C	433	108			433				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	26	552	0.192	106	0.2	0.2	8.055	A
B-A	35	9	274	0.126	34	0.1	0.1	15.034	C
C-AB	65	16	504	0.129	65	0.1	0.1	8.197	A
C-A	392	98			392				
A-B	86	22			86				
A-C	517	129			517				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	32	509	0.255	129	0.2	0.3	9.459	A
B-A	42	11	228	0.186	42	0.1	0.2	19.299	C
C-AB	80	20	468	0.170	79	0.1	0.2	9.256	A
C-A	480	120			480				
A-B	105	26			105				
A-C	633	158			633				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	130	32	509	0.255	130	0.3	0.3	9.487	A
B-A	42	11	228	0.186	42	0.2	0.2	19.360	C
C-AB	80	20	468	0.170	80	0.2	0.2	9.264	A
C-A	480	120			480				
A-B	105	26			105				
A-C	633	158			633				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	26	552	0.192	106	0.3	0.2	8.086	A
B-A	35	9	274	0.126	35	0.2	0.1	15.093	C
C-AB	65	16	504	0.129	65	0.2	0.1	8.211	A
C-A	392	98			392				
A-B	86	22			86				
A-C	517	129			517				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	89	22	582	0.152	89	0.2	0.2	7.304	A
B-A	29	7	307	0.095	29	0.1	0.1	12.985	B
C-AB	54	14	530	0.103	55	0.1	0.1	7.577	A
C-A	328	82			328				
A-B	72	18			72				
A-C	433	108			433				

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	586	100.000
B - Felixstowe Road South		ONE HOUR	✓	155	100.000
C - A1156 West		ONE HOUR	✓	451	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	32	555
	B - Felixstowe Road South	59	0	96
	C - A1156 West	382	69	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.85	0.15	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	2
	B - Felixstowe Road South	6	0	4
	C - A1156 West	4	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.021
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.042	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	442	453
	15:00-15:15	527	541
	15:15-15:30	646	663
	15:30-15:45	646	663
	15:45-16:00	527	541
	16:00-16:15	442	453
B - Felixstowe Road South	14:45-15:00	116	122
	15:00-15:15	139	145
	15:15-15:30	170	178
	15:30-15:45	170	178
	15:45-16:00	139	145
	16:00-16:15	116	122
C - A1156 West	14:45-15:00	339	355
	15:00-15:15	405	424
	15:15-15:30	496	519
	15:30-15:45	496	519
	15:45-16:00	405	424
	16:00-16:15	339	355

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.22	9.46	0.3	A	88	132
B-A	0.25	18.97	0.3	C	54	81
C-AB	0.16	8.82	0.2	A	63	95
C-A					350	525
A-B					29	44
A-C					509	764

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	72	18	555	0.130	72	0.0	0.1	7.434	A
B-A	44	11	327	0.135	43	0.0	0.2	12.687	B
C-AB	52	13	537	0.097	52	0.0	0.1	7.413	A
C-A	287	72			287				
A-B	24	6			24				
A-C	418	104			418				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	86	22	527	0.164	86	0.1	0.2	8.162	A
B-A	53	13	296	0.178	52	0.2	0.2	14.749	B
C-AB	62	16	515	0.121	62	0.1	0.1	7.951	A
C-A	343	86			343				
A-B	28	7			28				
A-C	499	125			499				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	26	487	0.217	105	0.2	0.3	9.433	A
B-A	64	16	254	0.254	64	0.2	0.3	18.879	C
C-AB	76	19	484	0.157	76	0.1	0.2	8.816	A
C-A	420	105			420				
A-B	35	9			35				
A-C	611	153			611				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	106	26	486	0.217	106	0.3	0.3	9.458	A
B-A	64	16	254	0.254	64	0.3	0.3	18.972	C
C-AB	76	19	484	0.157	76	0.2	0.2	8.823	A
C-A	420	105			420				
A-B	35	9			35				
A-C	611	153			611				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	86	22	526	0.164	87	0.3	0.2	8.191	A
B-A	53	13	296	0.178	53	0.3	0.2	14.832	B
C-AB	62	16	515	0.121	62	0.2	0.1	7.961	A
C-A	343	86			343				
A-B	28	7			28				
A-C	499	125			499				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	72	18	555	0.130	72	0.2	0.2	7.471	A
B-A	44	11	327	0.135	44	0.2	0.2	12.761	B
C-AB	52	13	537	0.097	52	0.1	0.1	7.429	A
C-A	287	72			287				
A-B	24	6			24				
A-C	418	104			418				

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		3.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D25	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	669	100.000
B - Felixstowe Road South		ONE HOUR	✓	218	100.000
C - A1156 West		ONE HOUR	✓	575	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	39	631
	B - Felixstowe Road South	76	0	142
	C - A1156 West	471	104	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.06	0.94
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.82	0.18	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.008
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.011	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	504	510
	17:00-17:15	602	609
	17:15-17:30	737	745
	17:30-17:45	737	745
	17:45-18:00	602	609
	18:00-18:15	504	510
B - Felixstowe Road South	16:45-17:00	164	168
	17:00-17:15	196	200
	17:15-17:30	240	245
	17:30-17:45	240	245
	17:45-18:00	196	200
	18:00-18:15	164	168
C - A1156 West	16:45-17:00	433	439
	17:00-17:15	517	524
	17:15-17:30	633	642
	17:30-17:45	633	642
	17:45-18:00	517	524
	18:00-18:15	433	439

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.34	11.93	0.5	B	130	195
B-A	0.38	26.57	0.6	D	70	105
C-AB	0.24	9.76	0.3	A	96	143
C-A					432	648
A-B					35	53
A-C					579	868

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	107	27	546	0.195	106	0.0	0.2	8.156	A
B-A	57	14	308	0.186	56	0.0	0.2	14.261	B
C-AB	78	20	546	0.144	78	0.0	0.2	7.683	A
C-A	355	89			355				
A-B	29	7			29				
A-C	475	119			475				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	127	32	511	0.249	127	0.2	0.3	9.361	A
B-A	68	17	271	0.253	68	0.2	0.3	17.712	C
C-AB	94	23	520	0.180	93	0.2	0.2	8.442	A
C-A	423	106			423				
A-B	35	9			35				
A-C	567	142			567				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	156	39	459	0.340	155	0.3	0.5	11.842	B
B-A	84	21	219	0.382	83	0.3	0.6	26.192	D
C-AB	115	29	484	0.237	114	0.2	0.3	9.735	A
C-A	519	130			519				
A-B	43	11			43				
A-C	694	174			694				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	156	39	458	0.341	156	0.5	0.5	11.935	B
B-A	84	21	219	0.382	84	0.6	0.6	26.568	D
C-AB	115	29	484	0.237	115	0.3	0.3	9.755	A
C-A	519	130			519				
A-B	43	11			43				
A-C	694	174			694				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	127	32	510	0.250	128	0.5	0.3	9.444	A
B-A	68	17	271	0.253	69	0.6	0.3	17.961	C
C-AB	94	23	520	0.180	94	0.3	0.2	8.464	A
C-A	423	106			423				
A-B	35	9			35				
A-C	567	142			567				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	107	27	545	0.196	107	0.3	0.2	8.226	A
B-A	57	14	308	0.186	58	0.3	0.2	14.414	B
C-AB	78	20	546	0.144	79	0.2	0.2	7.713	A
C-A	355	89			355				
A-B	29	7			29				
A-C	475	119			475				

2034 Reference Case , 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D26	2034 Reference Case	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	161	100.000
B - Felixstowe Road South		ONE HOUR	✓	61	100.000
C - A1156 West		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	22	139
	B - Felixstowe Road South	13	0	47
	C - A1156 West	8	17	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.31	0.69	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	5
	B - Felixstowe Road South	9	0	10
	C - A1156 West	87	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.049
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.873	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	121	128
	06:00-06:15	145	153
	06:15-06:30	177	187
	06:30-06:45	177	187
	06:45-07:00	145	153
	07:00-07:15	121	128
B - Felixstowe Road South	05:45-06:00	46	50
	06:00-06:15	54	60
	06:15-06:30	67	73
	06:30-06:45	67	73
	06:45-07:00	54	60
	07:00-07:15	46	50
C - A1156 West	05:45-06:00	19	24
	06:00-06:15	22	28
	06:15-06:30	27	34
	06:30-06:45	27	34
	06:45-07:00	22	28
	07:00-07:15	19	24

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	6.22	0.1	A	43	65
B-A	0.04	9.29	0.0	A	12	18
C-AB	0.03	5.75	0.0	A	16	23
C-A					7	11
A-B					20	30
A-C					128	192

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	647	0.055	35	0.0	0.1	5.886	A
B-A	10	3	416	0.024	10	0.0	0.0	8.874	A
C-AB	13	3	660	0.019	13	0.0	0.0	5.557	A
C-A	6	1			6				
A-B	16	4			16				
A-C	105	26			105				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	11	640	0.066	42	0.1	0.1	6.024	A
B-A	12	3	410	0.029	12	0.0	0.0	9.046	A
C-AB	15	4	654	0.023	15	0.0	0.0	5.637	A
C-A	7	2			7				
A-B	20	5			20				
A-C	125	31			125				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	52	13	631	0.082	52	0.1	0.1	6.221	A
B-A	15	4	402	0.036	15	0.0	0.0	9.290	A
C-AB	19	5	645	0.029	19	0.0	0.0	5.751	A
C-A	8	2			8				
A-B	24	6			24				
A-C	153	38			153				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	52	13	631	0.082	52	0.1	0.1	6.221	A
B-A	15	4	402	0.036	15	0.0	0.0	9.290	A
C-AB	19	5	645	0.029	19	0.0	0.0	5.751	A
C-A	8	2			8				
A-B	24	6			24				
A-C	153	38			153				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	11	640	0.066	43	0.1	0.1	6.026	A
B-A	12	3	410	0.029	12	0.0	0.0	9.046	A
C-AB	15	4	654	0.023	15	0.0	0.0	5.637	A
C-A	7	2			7				
A-B	20	5			20				
A-C	125	31			125				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	647	0.055	36	0.1	0.1	5.893	A
B-A	10	3	416	0.024	10	0.0	0.0	8.879	A
C-AB	13	3	660	0.019	13	0.0	0.0	5.557	A
C-A	6	1			6				
A-B	16	4			16				
A-C	105	26			105				

2034 Reference Case , 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D27	2034 Reference Case	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	488	100.000
B - Felixstowe Road South		ONE HOUR	✓	149	100.000
C - A1156 West		ONE HOUR	✓	383	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	67	421
	B - Felixstowe Road South	33	0	116
	C - A1156 West	309	74	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.81	0.19	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	4	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.026
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.042	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	367	378
	07:00-07:15	439	451
	07:15-07:30	537	552
	07:30-07:45	537	552
	07:45-08:00	439	451
	08:00-08:15	367	378
B - Felixstowe Road South	06:45-07:00	112	121
	07:00-07:15	134	145
	07:15-07:30	164	177
	07:30-07:45	164	177
	07:45-08:00	134	145
	08:00-08:15	112	121
C - A1156 West	06:45-07:00	288	304
	07:00-07:15	344	364
	07:15-07:30	422	445
	07:30-07:45	422	445
	07:45-08:00	344	364
	08:00-08:15	288	304

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.24	8.83	0.3	A	107	160
B-A	0.13	14.63	0.1	B	30	45
C-AB	0.17	8.80	0.2	A	68	102
C-A					284	426
A-B					61	92
A-C					387	580

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	88	22	586	0.149	87	0.0	0.2	7.207	A
B-A	25	6	341	0.072	24	0.0	0.1	11.374	B
C-AB	56	14	532	0.104	55	0.0	0.1	7.538	A
C-A	233	58			233				
A-B	50	13			50				
A-C	317	79			317				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	104	26	565	0.185	104	0.2	0.2	7.814	A
B-A	29	7	316	0.093	29	0.1	0.1	12.553	B
C-AB	66	17	515	0.129	66	0.1	0.1	8.027	A
C-A	278	69			278				
A-B	60	15			60				
A-C	379	95			379				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	128	32	536	0.239	128	0.2	0.3	8.814	A
B-A	36	9	282	0.128	36	0.1	0.1	14.611	B
C-AB	81	20	490	0.166	81	0.1	0.2	8.794	A
C-A	340	85			340				
A-B	73	18			73				
A-C	464	116			464				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	128	32	536	0.239	128	0.3	0.3	8.831	A
B-A	36	9	282	0.128	36	0.1	0.1	14.633	B
C-AB	81	20	490	0.166	81	0.2	0.2	8.803	A
C-A	340	85			340				
A-B	73	18			73				
A-C	464	116			464				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	104	26	565	0.185	105	0.3	0.2	7.837	A
B-A	29	7	316	0.093	30	0.1	0.1	12.577	B
C-AB	66	17	515	0.129	67	0.2	0.1	8.037	A
C-A	278	69			278				
A-B	60	15			60				
A-C	379	95			379				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	88	22	585	0.150	88	0.2	0.2	7.238	A
B-A	25	6	340	0.072	25	0.1	0.1	11.407	B
C-AB	56	14	532	0.104	56	0.1	0.1	7.557	A
C-A	233	58			233				
A-B	50	13			50				
A-C	317	79			317				

2034 Reference Case , 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D28	2034 Reference Case	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	789	100.000
B - Felixstowe Road South		ONE HOUR	✓	162	100.000
C - A1156 West		ONE HOUR	✓	580	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	99	690
	B - Felixstowe Road South	40	0	122
	C - A1156 West	505	75	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.13	0.87
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	2
	B - Felixstowe Road South	3	0	2
	C - A1156 West	4	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.022
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.042	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	594	608
	08:00-08:15	709	726
	08:15-08:30	869	890
	08:30-08:45	869	890
	08:45-09:00	709	726
	09:00-09:15	594	608
B - Felixstowe Road South	07:45-08:00	122	125
	08:00-08:15	146	149
	08:15-08:30	179	183
	08:30-08:45	179	183
	08:45-09:00	146	149
	09:00-09:15	122	125
C - A1156 West	07:45-08:00	436	455
	08:00-08:15	521	543
	08:15-08:30	638	666
	08:30-08:45	638	666
	08:45-09:00	521	543
	09:00-09:15	436	455

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.29	10.78	0.4	B	112	168
B-A	0.23	24.79	0.3	C	37	55
C-AB	0.19	10.22	0.2	B	69	103
C-A					463	695
A-B					91	137
A-C					633	949

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	92	23	557	0.165	91	0.0	0.2	7.720	A
B-A	30	8	280	0.107	30	0.0	0.1	14.357	B
C-AB	57	14	507	0.111	56	0.0	0.1	7.975	A
C-A	380	95			380				
A-B	75	19			75				
A-C	519	130			519				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	521	0.211	110	0.2	0.3	8.751	A
B-A	36	9	242	0.149	36	0.1	0.2	17.444	C
C-AB	67	17	477	0.142	67	0.1	0.2	8.794	A
C-A	454	113			454				
A-B	89	22			89				
A-C	620	155			620				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	135	34	469	0.287	134	0.3	0.4	10.734	B
B-A	44	11	189	0.233	44	0.2	0.3	24.629	C
C-AB	83	21	435	0.190	82	0.2	0.2	10.197	B
C-A	556	139			556				
A-B	109	27			109				
A-C	759	190			759				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	135	34	468	0.287	135	0.4	0.4	10.784	B
B-A	44	11	189	0.233	44	0.3	0.3	24.786	C
C-AB	83	21	435	0.190	83	0.2	0.2	10.220	B
C-A	556	139			556				
A-B	109	27			109				
A-C	759	190			759				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	520	0.211	110	0.4	0.3	8.800	A
B-A	36	9	242	0.148	36	0.3	0.2	17.557	C
C-AB	67	17	477	0.142	68	0.2	0.2	8.810	A
C-A	454	113			454				
A-B	89	22			89				
A-C	620	155			620				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	92	23	556	0.166	92	0.3	0.2	7.769	A
B-A	30	8	280	0.107	30	0.2	0.1	14.435	B
C-AB	57	14	507	0.111	57	0.2	0.1	7.997	A
C-A	380	95			380				
A-B	75	19			75				
A-C	519	130			519				

2034 Reference Case , 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D29	2034 Reference Case	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	728	100.000
B - Felixstowe Road South		ONE HOUR	✓	161	100.000
C - A1156 West		ONE HOUR	✓	532	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	33	695
	B - Felixstowe Road South	61	0	100
	C - A1156 West	461	72	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	2
	B - Felixstowe Road South	6	0	4
	C - A1156 West	3	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.020
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.031	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	548	561
	15:00-15:15	654	670
	15:15-15:30	801	821
	15:30-15:45	801	821
	15:45-16:00	654	670
	16:00-16:15	548	561
B - Felixstowe Road South	14:45-15:00	121	126
	15:00-15:15	144	151
	15:15-15:30	177	185
	15:30-15:45	177	185
	15:45-16:00	144	151
	16:00-16:15	121	126
C - A1156 West	14:45-15:00	401	415
	15:00-15:15	479	496
	15:15-15:30	586	607
	15:30-15:45	586	607
	15:45-16:00	479	496
	16:00-16:15	401	415

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	11.00	0.3	B	92	137
B-A	0.32	25.80	0.5	D	56	84
C-AB	0.18	9.85	0.2	A	66	99
C-A					423	634
A-B					30	45
A-C					638	956

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	19	525	0.143	74	0.0	0.2	7.984	A
B-A	46	11	294	0.156	45	0.0	0.2	14.419	B
C-AB	54	14	510	0.106	54	0.0	0.1	7.886	A
C-A	347	87			347				
A-B	25	6			25				
A-C	523	131			523				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	90	22	490	0.183	89	0.2	0.2	8.993	A
B-A	55	14	257	0.213	54	0.2	0.3	17.711	C
C-AB	65	16	482	0.134	64	0.1	0.2	8.614	A
C-A	414	104			414				
A-B	30	7			30				
A-C	625	156			625				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	438	0.251	109	0.2	0.3	10.942	B
B-A	67	17	206	0.325	66	0.3	0.5	25.535	D
C-AB	79	20	444	0.178	79	0.2	0.2	9.843	A
C-A	507	127			507				
A-B	36	9			36				
A-C	765	191			765				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	437	0.251	110	0.3	0.3	10.995	B
B-A	67	17	206	0.324	67	0.5	0.5	25.796	D
C-AB	79	20	444	0.178	79	0.2	0.2	9.855	A
C-A	507	127			507				
A-B	36	9			36				
A-C	765	191			765				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	90	22	489	0.184	90	0.3	0.2	9.044	A
B-A	55	14	257	0.212	55	0.5	0.3	17.896	C
C-AB	65	16	482	0.134	65	0.2	0.2	8.628	A
C-A	414	104			414				
A-B	30	7			30				
A-C	625	156			625				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	19	524	0.143	75	0.2	0.2	8.032	A
B-A	46	11	294	0.156	46	0.3	0.2	14.540	B
C-AB	54	14	510	0.106	54	0.2	0.1	7.907	A
C-A	347	87			347				
A-B	25	6			25				
A-C	523	131			523				

2034 Reference Case , 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		3.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D30	2034 Reference Case	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	753	100.000
B - Felixstowe Road South		ONE HOUR	✓	226	100.000
C - A1156 West		ONE HOUR	✓	620	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	40	713
	B - Felixstowe Road South	79	0	147
	C - A1156 West	512	108	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.008
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.008	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	567	573
	17:00-17:15	677	684
	17:15-17:30	829	838
	17:30-17:45	829	838
	17:45-18:00	677	684
	18:00-18:15	567	573
B - Felixstowe Road South	16:45-17:00	170	174
	17:00-17:15	203	208
	17:15-17:30	249	254
	17:30-17:45	249	254
	17:45-18:00	203	208
	18:00-18:15	170	174
C - A1156 West	16:45-17:00	467	472
	17:00-17:15	558	564
	17:15-17:30	683	690
	17:30-17:45	683	690
	17:45-18:00	558	564
	18:00-18:15	467	472

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.38	13.86	0.6	B	135	203
B-A	0.46	34.87	0.8	D	73	109
C-AB	0.26	10.58	0.3	B	99	149
C-A					470	705
A-B					37	55
A-C					654	981

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	111	28	527	0.210	110	0.0	0.3	8.608	A
B-A	60	15	288	0.206	59	0.0	0.3	15.598	C
C-AB	81	20	529	0.154	81	0.0	0.2	8.018	A
C-A	385	96			385				
A-B	30	8			30				
A-C	537	134			537				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	132	33	487	0.272	132	0.3	0.4	10.120	B
B-A	71	18	247	0.287	71	0.3	0.4	20.305	C
C-AB	97	24	500	0.195	97	0.2	0.2	8.932	A
C-A	460	115			460				
A-B	36	9			36				
A-C	641	160			641				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	162	41	424	0.383	161	0.4	0.6	13.666	B
B-A	87	22	190	0.458	85	0.4	0.8	33.928	D
C-AB	119	30	459	0.259	119	0.2	0.3	10.554	B
C-A	564	141			564				
A-B	44	11			44				
A-C	785	196			785				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	162	41	422	0.384	162	0.6	0.6	13.857	B
B-A	87	22	190	0.458	87	0.8	0.8	34.874	D
C-AB	119	30	459	0.259	119	0.3	0.3	10.579	B
C-A	564	141			564				
A-B	44	11			44				
A-C	785	196			785				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	132	33	485	0.273	133	0.6	0.4	10.253	B
B-A	71	18	247	0.287	73	0.8	0.4	20.786	C
C-AB	97	24	500	0.195	98	0.3	0.2	8.961	A
C-A	460	115			460				
A-B	36	9			36				
A-C	641	160			641				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	111	28	526	0.211	111	0.4	0.3	8.698	A
B-A	60	15	288	0.206	60	0.4	0.3	15.820	C
C-AB	81	20	529	0.154	82	0.2	0.2	8.053	A
C-A	385	96			385				
A-B	30	8			30				
A-C	537	134			537				

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D31	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	161	100.000
B - Felixstowe Road South		ONE HOUR	✓	61	100.000
C - A1156 West		ONE HOUR	✓	25	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	22	139
	B - Felixstowe Road South	13	0	47
	C - A1156 West	8	17	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.31	0.69	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	5
	B - Felixstowe Road South	9	0	10
	C - A1156 West	87	0	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.049
	B - Felixstowe Road South	1.091	1.000	1.103
	C - A1156 West	1.873	1.000	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	05:45-06:00	121	128
	06:00-06:15	145	153
	06:15-06:30	177	187
	06:30-06:45	177	187
	06:45-07:00	145	153
	07:00-07:15	121	128
B - Felixstowe Road South	05:45-06:00	46	50
	06:00-06:15	54	60
	06:15-06:30	67	73
	06:30-06:45	67	73
	06:45-07:00	54	60
	07:00-07:15	46	50
C - A1156 West	05:45-06:00	19	24
	06:00-06:15	22	28
	06:15-06:30	27	34
	06:30-06:45	27	34
	06:45-07:00	22	28
	07:00-07:15	19	24

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.08	6.22	0.1	A	43	65
B-A	0.04	9.29	0.0	A	12	18
C-AB	0.03	5.75	0.0	A	16	23
C-A					7	11
A-B					20	30
A-C					128	192

Main Results for each time segment

05:45 - 06:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	647	0.055	35	0.0	0.1	5.886	A
B-A	10	3	416	0.024	10	0.0	0.0	8.874	A
C-AB	13	3	660	0.019	13	0.0	0.0	5.557	A
C-A	6	1			6				
A-B	16	4			16				
A-C	105	26			105				

06:00 - 06:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	11	640	0.066	42	0.1	0.1	6.024	A
B-A	12	3	410	0.029	12	0.0	0.0	9.046	A
C-AB	15	4	654	0.023	15	0.0	0.0	5.637	A
C-A	7	2			7				
A-B	20	5			20				
A-C	125	31			125				

06:15 - 06:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	52	13	631	0.082	52	0.1	0.1	6.221	A
B-A	15	4	402	0.036	15	0.0	0.0	9.290	A
C-AB	19	5	645	0.029	19	0.0	0.0	5.751	A
C-A	8	2			8				
A-B	24	6			24				
A-C	153	38			153				

06:30 - 06:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	52	13	631	0.082	52	0.1	0.1	6.221	A
B-A	15	4	402	0.036	15	0.0	0.0	9.290	A
C-AB	19	5	645	0.029	19	0.0	0.0	5.751	A
C-A	8	2			8				
A-B	24	6			24				
A-C	153	38			153				

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	42	11	640	0.066	43	0.1	0.1	6.026	A
B-A	12	3	410	0.029	12	0.0	0.0	9.046	A
C-AB	15	4	654	0.023	15	0.0	0.0	5.637	A
C-A	7	2			7				
A-B	20	5			20				
A-C	125	31			125				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	36	9	647	0.055	36	0.1	0.1	5.893	A
B-A	10	3	416	0.024	10	0.0	0.0	8.879	A
C-AB	13	3	660	0.019	13	0.0	0.0	5.557	A
C-A	6	1			6				
A-B	16	4			16				
A-C	105	26			105				

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D32	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	491	100.000
B - Felixstowe Road South		ONE HOUR	✓	149	100.000
C - A1156 West		ONE HOUR	✓	388	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	67	424
	B - Felixstowe Road South	33	0	116
	C - A1156 West	314	74	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.14	0.86
	B - Felixstowe Road South	0.22	0.00	0.78
	C - A1156 West	0.81	0.19	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	3
	B - Felixstowe Road South	4	0	9
	C - A1156 West	4	11	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.036	1.026
	B - Felixstowe Road South	1.037	1.000	1.094
	C - A1156 West	1.041	1.115	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	06:45-07:00	370	380
	07:00-07:15	441	454
	07:15-07:30	541	556
	07:30-07:45	541	556
	07:45-08:00	441	454
	08:00-08:15	370	380
B - Felixstowe Road South	06:45-07:00	112	121
	07:00-07:15	134	145
	07:15-07:30	164	177
	07:30-07:45	164	177
	07:45-08:00	134	145
	08:00-08:15	112	121
C - A1156 West	06:45-07:00	292	308
	07:00-07:15	349	368
	07:15-07:30	427	451
	07:30-07:45	427	451
	07:45-08:00	349	368
	08:00-08:15	292	308

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.24	8.85	0.3	A	107	160
B-A	0.13	14.72	0.1	B	30	45
C-AB	0.17	8.82	0.2	A	68	102
C-A					288	432
A-B					61	92
A-C					390	584

Main Results for each time segment

06:45 - 07:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	88	22	585	0.150	87	0.0	0.2	7.216	A
B-A	25	6	340	0.072	24	0.0	0.1	11.410	B
C-AB	56	14	532	0.105	55	0.0	0.1	7.547	A
C-A	237	59			237				
A-B	50	13			50				
A-C	320	80			320				

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	104	26	564	0.185	104	0.2	0.2	7.827	A
B-A	29	7	315	0.093	29	0.1	0.1	12.606	B
C-AB	66	17	514	0.129	66	0.1	0.1	8.039	A
C-A	282	71			282				
A-B	60	15			60				
A-C	382	95			382				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	128	32	535	0.239	128	0.2	0.3	8.835	A
B-A	36	9	281	0.128	36	0.1	0.1	14.698	B
C-AB	81	20	489	0.166	81	0.1	0.2	8.812	A
C-A	346	86			346				
A-B	73	18			73				
A-C	467	117			467				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	128	32	535	0.239	128	0.3	0.3	8.852	A
B-A	36	9	281	0.128	36	0.1	0.1	14.721	B
C-AB	81	20	489	0.166	81	0.2	0.2	8.820	A
C-A	346	86			346				
A-B	73	18			73				
A-C	467	117			467				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	104	26	564	0.185	105	0.3	0.2	7.850	A
B-A	29	7	315	0.093	30	0.1	0.1	12.632	B
C-AB	66	17	514	0.129	67	0.2	0.1	8.049	A
C-A	282	71			282				
A-B	60	15			60				
A-C	382	95			382				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	88	22	585	0.150	88	0.2	0.2	7.250	A
B-A	25	6	339	0.073	25	0.1	0.1	11.441	B
C-AB	56	14	532	0.105	56	0.1	0.1	7.563	A
C-A	237	59			237				
A-B	50	13			50				
A-C	320	80			320				

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D33	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	805	100.000
B - Felixstowe Road South		ONE HOUR	✓	162	100.000
C - A1156 West		ONE HOUR	✓	581	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	99	706
	B - Felixstowe Road South	40	0	122
	C - A1156 West	506	75	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.12	0.88
	B - Felixstowe Road South	0.25	0.00	0.75
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	4	2
	B - Felixstowe Road South	3	0	2
	C - A1156 West	4	5	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.037	1.022
	B - Felixstowe Road South	1.030	1.000	1.020
	C - A1156 West	1.043	1.048	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	07:45-08:00	606	621
	08:00-08:15	724	741
	08:15-08:30	886	908
	08:30-08:45	886	908
	08:45-09:00	724	741
	09:00-09:15	606	621
B - Felixstowe Road South	07:45-08:00	122	125
	08:00-08:15	146	149
	08:15-08:30	179	183
	08:30-08:45	179	183
	08:45-09:00	146	149
	09:00-09:15	122	125
C - A1156 West	07:45-08:00	437	456
	08:00-08:15	522	545
	08:15-08:30	639	667
	08:30-08:45	639	667
	08:45-09:00	522	545
	09:00-09:15	437	456

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.29	10.97	0.4	B	112	168
B-A	0.24	25.53	0.3	D	37	55
C-AB	0.19	10.36	0.2	B	69	103
C-A					464	696
A-B					91	137
A-C					647	971

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	92	23	553	0.166	91	0.0	0.2	7.780	A
B-A	30	8	277	0.109	30	0.0	0.1	14.522	B
C-AB	57	14	504	0.112	56	0.0	0.1	8.031	A
C-A	381	95			381				
A-B	75	19			75				
A-C	531	133			531				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	517	0.213	110	0.2	0.3	8.842	A
B-A	36	9	238	0.151	36	0.1	0.2	17.739	C
C-AB	67	17	473	0.143	67	0.1	0.2	8.869	A
C-A	455	114			455				
A-B	89	22			89				
A-C	634	159			634				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	135	34	463	0.291	134	0.3	0.4	10.912	B
B-A	44	11	185	0.238	43	0.2	0.3	25.353	D
C-AB	83	21	430	0.192	82	0.2	0.2	10.340	B
C-A	557	139			557				
A-B	109	27			109				
A-C	777	194			777				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	135	34	463	0.291	135	0.4	0.4	10.966	B
B-A	44	11	185	0.238	44	0.3	0.3	25.528	D
C-AB	83	21	430	0.192	83	0.2	0.2	10.357	B
C-A	557	139			557				
A-B	109	27			109				
A-C	777	194			777				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	516	0.213	110	0.4	0.3	8.894	A
B-A	36	9	238	0.151	36	0.3	0.2	17.862	C
C-AB	67	17	473	0.143	68	0.2	0.2	8.891	A
C-A	455	114			455				
A-B	89	22			89				
A-C	634	159			634				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	92	23	553	0.167	92	0.3	0.2	7.829	A
B-A	30	8	277	0.109	30	0.2	0.1	14.604	B
C-AB	57	14	504	0.112	57	0.2	0.1	8.054	A
C-A	381	95			381				
A-B	75	19			75				
A-C	531	133			531				

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		2.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D34	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	730	100.000
B - Felixstowe Road South		ONE HOUR	✓	161	100.000
C - A1156 West		ONE HOUR	✓	535	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	33	697
	B - Felixstowe Road South	61	0	100
	C - A1156 West	464	72	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.38	0.00	0.62
	C - A1156 West	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	11	2
	B - Felixstowe Road South	6	0	4
	C - A1156 West	3	7	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.111	1.020
	B - Felixstowe Road South	1.060	1.000	1.037
	C - A1156 West	1.031	1.068	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	14:45-15:00	549	563
	15:00-15:15	656	672
	15:15-15:30	803	823
	15:30-15:45	803	823
	15:45-16:00	656	672
	16:00-16:15	549	563
B - Felixstowe Road South	14:45-15:00	121	126
	15:00-15:15	144	151
	15:15-15:30	177	185
	15:30-15:45	177	185
	15:45-16:00	144	151
	16:00-16:15	121	126
C - A1156 West	14:45-15:00	403	417
	15:00-15:15	481	498
	15:15-15:30	589	611
	15:30-15:45	589	611
	15:45-16:00	481	498
	16:00-16:15	403	417

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.25	11.02	0.3	B	92	137
B-A	0.33	25.98	0.5	D	56	84
C-AB	0.18	9.87	0.2	A	66	99
C-A					425	638
A-B					30	45
A-C					639	959

Main Results for each time segment

14:45 - 15:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	19	524	0.143	74	0.0	0.2	7.992	A
B-A	46	11	293	0.156	45	0.0	0.2	14.458	B
C-AB	54	14	509	0.106	54	0.0	0.1	7.893	A
C-A	349	87			349				
A-B	25	6			25				
A-C	525	131			525				

15:00 - 15:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	90	22	489	0.183	89	0.2	0.2	9.007	A
B-A	55	14	256	0.213	54	0.2	0.3	17.782	C
C-AB	65	16	482	0.134	64	0.1	0.2	8.623	A
C-A	417	104			417				
A-B	30	7			30				
A-C	626	157			626				

15:15 - 15:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	437	0.251	109	0.2	0.3	10.968	B
B-A	67	17	205	0.326	66	0.3	0.5	25.711	D
C-AB	79	20	444	0.178	79	0.2	0.2	9.859	A
C-A	510	128			510				
A-B	36	9			36				
A-C	767	192			767				

15:30 - 15:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	110	27	436	0.252	110	0.3	0.3	11.022	B
B-A	67	17	205	0.326	67	0.5	0.5	25.980	D
C-AB	79	20	444	0.178	79	0.2	0.2	9.870	A
C-A	510	128			510				
A-B	36	9			36				
A-C	767	192			767				

15:45 - 16:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	90	22	488	0.184	90	0.3	0.2	9.059	A
B-A	55	14	257	0.213	55	0.5	0.3	17.967	C
C-AB	65	16	482	0.134	65	0.2	0.2	8.640	A
C-A	417	104			417				
A-B	30	7			30				
A-C	626	157			626				

16:00 - 16:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	75	19	523	0.143	75	0.2	0.2	8.040	A
B-A	46	11	293	0.156	46	0.3	0.2	14.580	B
C-AB	54	14	509	0.106	54	0.2	0.1	7.915	A
C-A	349	87			349				
A-B	25	6			25				
A-C	525	131			525				

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
J41	A1156 / Felixstowe Road	T-Junction	Two-way		3.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D35	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A1156 East		ONE HOUR	✓	749	100.000
B - Felixstowe Road South		ONE HOUR	✓	226	100.000
C - A1156 West		ONE HOUR	✓	613	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	40	709
	B - Felixstowe Road South	79	0	147
	C - A1156 West	505	108	0

Proportions

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0.00	0.05	0.95
	B - Felixstowe Road South	0.35	0.00	0.65
	C - A1156 West	0.82	0.18	0.00

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	0	6	1
	B - Felixstowe Road South	2	0	2
	C - A1156 West	1	2	0

Average PCU Per Veh

		To		
		A - A1156 East	B - Felixstowe Road South	C - A1156 West
From	A - A1156 East	1.000	1.061	1.008
	B - Felixstowe Road South	1.015	1.000	1.025
	C - A1156 West	1.008	1.022	1.000

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (Veh/hr)	Demand in PCU (PCU/hr)
A - A1156 East	16:45-17:00	564	570
	17:00-17:15	673	681
	17:15-17:30	824	833
	17:30-17:45	824	833
	17:45-18:00	673	681
	18:00-18:15	564	570
B - Felixstowe Road South	16:45-17:00	170	174
	17:00-17:15	203	208
	17:15-17:30	249	254
	17:30-17:45	249	254
	17:45-18:00	203	208
	18:00-18:15	170	174
C - A1156 West	16:45-17:00	462	467
	17:00-17:15	551	557
	17:15-17:30	675	682
	17:30-17:45	675	682
	17:45-18:00	551	557
	18:00-18:15	462	467

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.38	13.75	0.6	B	135	203
B-A	0.45	34.16	0.8	D	73	109
C-AB	0.26	10.54	0.3	B	99	149
C-A					463	695
A-B					37	55
A-C					650	975

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	111	28	528	0.210	110	0.0	0.3	8.589	A
B-A	60	15	290	0.205	59	0.0	0.3	15.500	C
C-AB	81	20	530	0.154	81	0.0	0.2	8.003	A
C-A	380	95			380				
A-B	30	8			30				
A-C	534	133			534				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	132	33	488	0.271	132	0.3	0.4	10.086	B
B-A	71	18	249	0.285	71	0.3	0.4	20.106	C
C-AB	97	24	501	0.194	97	0.2	0.2	8.910	A
C-A	454	113			454				
A-B	36	9			36				
A-C	637	159			637				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	162	41	426	0.381	161	0.4	0.6	13.565	B
B-A	87	22	192	0.453	85	0.4	0.8	33.279	D
C-AB	119	30	461	0.259	119	0.2	0.3	10.518	B
C-A	556	139			556				
A-B	44	11			44				
A-C	780	195			780				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	162	41	424	0.382	162	0.6	0.6	13.748	B
B-A	87	22	192	0.453	87	0.8	0.8	34.161	D
C-AB	119	30	461	0.259	119	0.3	0.3	10.543	B
C-A	556	139			556				
A-B	44	11			44				
A-C	780	195			780				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	132	33	487	0.272	133	0.6	0.4	10.216	B
B-A	71	18	249	0.285	73	0.8	0.4	20.570	C
C-AB	97	24	501	0.194	98	0.3	0.2	8.940	A
C-A	454	113			454				
A-B	36	9			36				
A-C	637	159			637				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	111	28	527	0.210	111	0.4	0.3	8.678	A
B-A	60	15	290	0.205	60	0.4	0.3	15.718	C
C-AB	81	20	530	0.154	82	0.2	0.2	8.037	A
C-A	380	95			380				
A-B	30	8			30				
A-C	534	133			534				

Junctions 9	
ARCADY 9 - Roundabout Module	
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Report generation date: 16/03/2020 13:38:46

- »2028 Peak Construction, 6-7 AM
- »2028 Peak Construction, 7-8 AM
- »2028 Peak Construction, 8-9 AM
- »2028 Peak Construction, 3-4 PM
- »2028 Peak Construction, 5-6 PM
- »2034 Operational Led, 6-7 AM
- »2034 Operational Led, 7-8 AM
- »2034 Operational Led, 8-9 AM
- »2034 Operational Led, 3-4 PM
- »2034 Operational Led, 5-6 PM

Summary of junction performance

	6-7 AM					7-8 AM					8-9 AM					3-4 PM					5-6 PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
2028 Peak Construction																									
A - A12 East	D1	0.0	3.56	0.01	A	D2	0.0	4.96	0.02	A	D3	0.0	5.13	0.03	A	D4	0.0	5.04	0.01	A	D5	0.0	5.25	0.01	A
B - A12 West		0.3	2.93	0.25	A		1.2	5.02	0.55	A		1.3	5.22	0.57	A		1.4	5.11	0.58	A		1.6	5.25	0.61	A
C - Tinker Brook South-West		0.0	0.00	0.00	A		0.0	4.09	0.01	A		0.0	4.14	0.01	A		0.0	4.14	0.01	A		0.0	0.00	0.00	A
D - Bypass South-East		0.7	4.74	0.41	A		2.3	9.44	0.70	A		2.4	9.64	0.71	A		2.4	9.80	0.71	A		1.7	7.53	0.63	A
2034 Operational Led																									
A - A12 East	D6	0.0	3.44	0.01	A	D7	0.0	4.71	0.02	A	D8	0.0	4.88	0.03	A	D9	0.0	4.82	0.01	A	D10	0.0	5.14	0.01	A
B - A12 West		0.3	2.61	0.21	A		1.0	4.22	0.51	A		1.1	4.41	0.53	A		1.2	4.37	0.54	A		1.5	4.84	0.59	A
C - Tinker Brook South-West		0.0	0.00	0.00	A		0.0	4.06	0.01	A		0.0	4.11	0.01	A		0.0	4.12	0.01	A		0.0	0.00	0.00	A
D - Bypass South-East		0.7	4.71	0.40	A		2.2	9.05	0.69	A		2.3	9.31	0.70	A		2.4	9.56	0.71	A		1.3	6.36	0.56	A

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

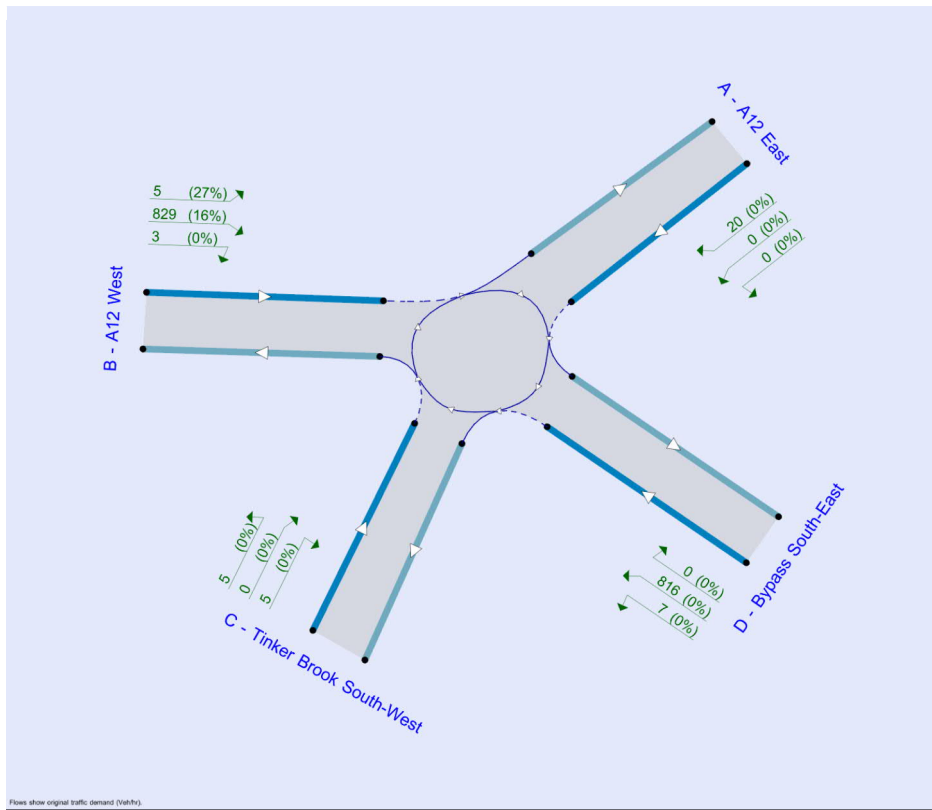
File summary

File Description

Title	A12 / Tinker Brook
Location	52.185676°, 1.440916°
Site number	45
Date	22/08/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORPINJV01568
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin



Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D2	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D3	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D4	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D5	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓
D6	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓
D7	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓
D8	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓
D9	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓
D10	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2028 Peak Construction, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J45	A12 / Tinker Brook	Standard Roundabout		A, D, C, B	3.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	A12 East	
B	A12 West	
C	Tinker Brook South-West	
D	Bypass South-East	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - A12 East	3.70	4.00	10.0	27.7	60.0	24.0	
B - A12 West	3.60	7.40	17.1	52.4	60.0	20.0	
C - Tinker Brook South-West	3.30	4.50	13.2	20.4	60.0	15.0	
D - Bypass South-East	3.70	4.00	10.0	34.0	60.0	14.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - A12 East	0.487	1245
B - A12 West	0.605	1878
C - Tinker Brook South-West	0.510	1349
D - Bypass South-East	0.506	1293

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Peak Construction	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 East		ONE HOUR	✓	7	100.000
B - A12 West		ONE HOUR	✓	371	100.000
C - Tinker Brook South-West		ONE HOUR	✓	2	100.000
D - Bypass South-East		ONE HOUR	✓	470	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	7	0	0
	B - A12 West	3	0	2	366
	C - Tinker Brook South-West	0	0	0	2
	D - Bypass South-East	0	468	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	0	0	0
	B - A12 West	45	0	0	15
	C - Tinker Brook South-West	0	0	0	50
	D - Bypass South-East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 East	0.01	3.56	0.0	A	7	10
B - A12 West	0.25	2.93	0.3	A	340	510
C - Tinker Brook South-West	0.00	0.00	0.0	A	0	0
D - Bypass South-East	0.41	4.74	0.7	A	431	647

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	6	1	276	1091	0.005	6	2	0.0	0.0	3.315	A
B - A12 West	279	70	0	1635	0.171	278	356	0.0	0.2	2.651	A
C - Tinker Brook South-West	0	0	356	777	0.000	0	3	0.0	0.0	0.000	A
D - Bypass South-East	354	88	7	1278	0.277	352	275	0.0	0.4	3.881	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	7	2	331	1061	0.006	7	2	0.0	0.0	3.414	A
B - A12 West	333	83	0	1635	0.204	333	427	0.2	0.3	2.764	A
C - Tinker Brook South-West	0	0	427	753	0.000	0	4	0.0	0.0	0.000	A
D - Bypass South-East	422	106	8	1278	0.331	422	329	0.4	0.5	4.205	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	8	2	405	1019	0.008	8	3	0.0	0.0	3.559	A
B - A12 West	408	102	0	1635	0.249	408	522	0.3	0.3	2.932	A
C - Tinker Brook South-West	0	0	522	720	0.000	0	4	0.0	0.0	0.000	A
D - Bypass South-East	517	129	10	1277	0.405	516	403	0.5	0.7	4.730	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	8	2	405	1019	0.008	8	3	0.0	0.0	3.560	A
B - A12 West	408	102	0	1635	0.249	408	523	0.3	0.3	2.932	A
C - Tinker Brook South-West	0	0	523	720	0.000	0	4	0.0	0.0	0.000	A
D - Bypass South-East	517	129	10	1277	0.405	517	403	0.7	0.7	4.740	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	7	2	331	1060	0.006	7	2	0.0	0.0	3.415	A
B - A12 West	333	83	0	1635	0.204	333	428	0.3	0.3	2.767	A
C - Tinker Brook South-West	0	0	428	753	0.000	0	4	0.0	0.0	0.000	A
D - Bypass South-East	422	106	9	1278	0.331	423	329	0.7	0.5	4.217	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	6	1	277	1091	0.005	6	2	0.0	0.0	3.319	A
B - A12 West	279	70	0	1635	0.171	279	358	0.3	0.2	2.656	A
C - Tinker Brook South-West	0	0	358	777	0.000	0	3	0.0	0.0	0.000	A
D - Bypass South-East	354	88	7	1278	0.277	354	276	0.5	0.4	3.897	A

2028 Peak Construction, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J45	A12 / Tinker Brook	Standard Roundabout		A, D, C, B	7.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028 Peak Construction	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 East		ONE HOUR	✓	15	100.000
B - A12 West		ONE HOUR	✓	800	100.000
C - Tinker Brook South-West		ONE HOUR	✓	6	100.000
D - Bypass South-East		ONE HOUR	✓	803	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	15	0	0
	B - A12 West	4	0	1	795
	C - Tinker Brook South-West	0	2	0	4
	D - Bypass South-East	0	799	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	0	0	0
	B - A12 West	29	0	100	17
	C - Tinker Brook South-West	0	0	0	0
	D - Bypass South-East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 East	0.02	4.96	0.0	A	14	21
B - A12 West	0.55	5.02	1.2	A	735	1102
C - Tinker Brook South-West	0.01	4.09	0.0	A	5	8
D - Bypass South-East	0.70	9.44	2.3	A	737	1106

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	12	3	600	903	0.013	11	3	0.0	0.0	4.038	A
B - A12 West	603	151	3	1599	0.377	600	611	0.0	0.6	3.595	A
C - Tinker Brook South-West	4	1	610	1034	0.004	4	4	0.0	0.0	3.495	A
D - Bypass South-East	605	151	12	1268	0.477	601	599	0.0	0.9	5.366	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	14	3	718	835	0.017	14	4	0.0	0.0	4.381	A

B - A12 West	720	180	3	1599	0.450	719	733	0.6	0.8	4.088	A
C - Tinker Brook South-West	5	1	731	971	0.005	5	4	0.0	0.0	3.725	A
D - Bypass South-East	722	181	15	1267	0.570	721	717	0.9	1.3	6.566	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	17	4	879	743	0.023	17	5	0.0	0.0	4.954	A
B - A12 West	881	220	4	1598	0.551	880	896	0.8	1.2	4.999	A
C - Tinker Brook South-West	6	2	893	887	0.007	6	5	0.0	0.0	4.086	A
D - Bypass South-East	884	221	18	1265	0.699	881	878	1.3	2.2	9.265	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	17	4	880	743	0.023	17	5	0.0	0.0	4.960	A
B - A12 West	881	220	4	1598	0.551	881	899	1.2	1.2	5.020	A
C - Tinker Brook South-West	6	2	897	885	0.007	6	6	0.0	0.0	4.094	A
D - Bypass South-East	884	221	18	1265	0.699	884	879	2.2	2.3	9.437	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	14	3	720	834	0.017	14	4	0.0	0.0	4.391	A
B - A12 West	720	180	3	1599	0.450	721	738	1.2	0.8	4.109	A
C - Tinker Brook South-West	5	1	736	969	0.005	5	5	0.0	0.0	3.738	A
D - Bypass South-East	722	181	15	1267	0.570	726	719	2.3	1.3	6.698	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	12	3	603	901	0.013	12	3	0.0	0.0	4.046	A
B - A12 West	603	151	3	1599	0.377	603	617	0.8	0.6	3.621	A
C - Tinker Brook South-West	4	1	615	1031	0.004	4	4	0.0	0.0	3.507	A
D - Bypass South-East	605	151	12	1268	0.477	606	602	1.3	0.9	5.454	A

2028 Peak Construction, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J45	A12 / Tinker Brook	Standard Roundabout		A, D, C, B	7.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028 Peak Construction	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 East		ONE HOUR	✓	20	100.000
B - A12 West		ONE HOUR	✓	837	100.000
C - Tinker Brook South-West		ONE HOUR	✓	9	100.000
D - Bypass South-East		ONE HOUR	✓	823	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	20	0	0
	B - A12 West	5	0	3	829
	C - Tinker Brook South-West	0	5	0	5
	D - Bypass South-East	0	816	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	0	0	0
	B - A12 West	27	0	0	16
	C - Tinker Brook South-West	0	0	0	0
	D - Bypass South-East	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 East	0.03	5.13	0.0	A	18	27
B - A12 West	0.57	5.22	1.3	A	768	1152
C - Tinker Brook South-West	0.01	4.14	0.0	A	9	13
D - Bypass South-East	0.71	9.64	2.4	A	755	1133

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	15	4	627	890	0.017	15	4	0.0	0.0	4.113	A
B - A12 West	630	158	4	1612	0.391	628	629	0.0	0.6	3.647	A
C - Tinker Brook South-West	7	2	626	1030	0.007	7	7	0.0	0.0	3.518	A
D - Bypass South-East	620	155	17	1283	0.483	616	625	0.0	0.9	5.368	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	18	4	751	820	0.022	18	4	0.0	0.0	4.488	A

B - A12 West	752	188	4	1612	0.467	751	754	0.6	0.9	4.180	A
C - Tinker Brook South-West	8	2	750	967	0.009	8	9	0.0	0.0	3.756	A
D - Bypass South-East	740	185	21	1281	0.577	738	749	0.9	1.3	6.606	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	22	5	920	725	0.030	22	5	0.0	0.0	5.122	A
B - A12 West	922	230	5	1611	0.572	920	921	0.9	1.3	5.191	A
C - Tinker Brook South-West	10	3	916	881	0.012	10	11	0.0	0.0	4.131	A
D - Bypass South-East	906	227	25	1279	0.708	902	916	1.3	2.3	9.451	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	22	5	921	724	0.030	22	5	0.0	0.0	5.129	A
B - A12 West	922	230	5	1611	0.572	921	925	1.3	1.3	5.217	A
C - Tinker Brook South-West	10	3	920	879	0.012	10	11	0.0	0.0	4.141	A
D - Bypass South-East	906	227	25	1279	0.708	906	918	2.3	2.4	9.640	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	18	4	754	818	0.022	18	4	0.0	0.0	4.499	A
B - A12 West	752	188	4	1612	0.467	754	760	1.3	0.9	4.207	A
C - Tinker Brook South-West	8	2	755	964	0.009	8	9	0.0	0.0	3.767	A
D - Bypass South-East	740	185	21	1281	0.577	744	751	2.4	1.4	6.746	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	15	4	631	888	0.017	15	4	0.0	0.0	4.123	A
B - A12 West	630	158	4	1612	0.391	631	635	0.9	0.6	3.674	A
C - Tinker Brook South-West	7	2	631	1027	0.007	7	8	0.0	0.0	3.528	A
D - Bypass South-East	620	155	17	1283	0.483	621	629	1.4	0.9	5.457	A

2028 Peak Construction, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J45	A12 / Tinker Brook	Standard Roundabout		A, D, C, B	7.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028 Peak Construction	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 East		ONE HOUR	✓	7	100.000
B - A12 West		ONE HOUR	✓	886	100.000
C - Tinker Brook South-West		ONE HOUR	✓	11	100.000
D - Bypass South-East		ONE HOUR	✓	830	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	7	0	0
	B - A12 West	16	0	3	867
	C - Tinker Brook South-West	0	6	0	5
	D - Bypass South-East	0	823	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	0	0	0
	B - A12 West	8	0	0	12
	C - Tinker Brook South-West	0	0	0	0
	D - Bypass South-East	0	0	29	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 East	0.01	5.04	0.0	A	7	10
B - A12 West	0.58	5.11	1.4	A	813	1220
C - Tinker Brook South-West	0.01	4.14	0.0	A	10	15
D - Bypass South-East	0.71	9.80	2.4	A	761	1142

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	6	1	656	889	0.006	6	12	0.0	0.0	4.076	A
B - A12 West	667	167	4	1680	0.397	664	626	0.0	0.7	3.535	A
C - Tinker Brook South-West	8	2	621	1032	0.008	8	7	0.0	0.0	3.515	A
D - Bypass South-East	625	156	8	1282	0.487	621	653	0.0	0.9	5.414	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	7	2	785	818	0.008	7	15	0.0	0.0	4.435	A

B - A12 West	797	199	4	1680	0.474	796	750	0.7	0.9	4.066	A
C - Tinker Brook South-West	9	2	745	968	0.010	9	9	0.0	0.0	3.752	A
D - Bypass South-East	746	186	9	1281	0.582	744	782	0.9	1.4	6.680	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	8	2	961	723	0.011	8	18	0.0	0.0	5.037	A
B - A12 West	976	244	5	1679	0.581	974	916	0.9	1.4	5.087	A
C - Tinker Brook South-West	12	3	910	884	0.013	12	11	0.0	0.0	4.126	A
D - Bypass South-East	913	228	11	1280	0.713	909	957	1.4	2.4	9.597	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	8	2	963	722	0.011	8	18	0.0	0.0	5.044	A
B - A12 West	976	244	5	1679	0.581	975	920	1.4	1.4	5.113	A
C - Tinker Brook South-West	12	3	914	882	0.013	12	11	0.0	0.0	4.136	A
D - Bypass South-East	913	228	11	1280	0.714	913	959	2.4	2.4	9.798	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	7	2	788	817	0.008	7	15	0.0	0.0	4.445	A
B - A12 West	797	199	4	1680	0.474	798	756	1.4	0.9	4.093	A
C - Tinker Brook South-West	9	2	750	965	0.010	9	9	0.0	0.0	3.764	A
D - Bypass South-East	746	186	9	1281	0.582	750	785	2.4	1.4	6.828	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	6	1	659	887	0.006	6	12	0.0	0.0	4.085	A
B - A12 West	667	167	4	1680	0.397	668	631	0.9	0.7	3.561	A
C - Tinker Brook South-West	8	2	627	1029	0.008	8	8	0.0	0.0	3.528	A
D - Bypass South-East	625	156	8	1282	0.487	626	657	1.4	1.0	5.507	A

2028 Peak Construction, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J45	A12 / Tinker Brook	Standard Roundabout		A, D, C, B	6.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2028 Peak Construction	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 East		ONE HOUR	✓	8	100.000
B - A12 West		ONE HOUR	✓	975	100.000
C - Tinker Brook South-West		ONE HOUR	✓	5	100.000
D - Bypass South-East		ONE HOUR	✓	737	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	8	0	0
	B - A12 West	14	0	0	962
	C - Tinker Brook South-West	0	0	0	5
	D - Bypass South-East	0	731	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	0	0	0
	B - A12 West	10	0	0	7
	C - Tinker Brook South-West	0	0	0	0
	D - Bypass South-East	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 East	0.01	5.25	0.0	A	7	11
B - A12 West	0.61	5.25	1.6	A	895	1342
C - Tinker Brook South-West	0.00	0.00	0.0	A	0	0
D - Bypass South-East	0.63	7.53	1.7	A	676	1014

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	6	1	721	870	0.007	6	10	0.0	0.0	4.164	A
B - A12 West	734	184	0	1759	0.417	731	553	0.0	0.7	3.493	A
C - Tinker Brook South-West	0	0	553	1067	0.000	0	4	0.0	0.0	0.000	A
D - Bypass South-East	555	139	6	1290	0.430	552	721	0.0	0.7	4.856	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	7	2	863	796	0.009	7	12	0.0	0.0	4.561	A

B - A12 West	877	219	0	1759	0.498	876	663	0.7	1.0	4.071	A
C - Tinker Brook South-West	0	0	663	1011	0.000	0	5	0.0	0.0	0.000	A
D - Bypass South-East	662	166	7	1289	0.514	661	863	0.7	1.0	5.719	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	9	2	1057	696	0.012	9	15	0.0	0.0	5.238	A
B - A12 West	1074	268	0	1759	0.610	1072	811	1.0	1.5	5.221	A
C - Tinker Brook South-West	0	0	811	936	0.000	0	7	0.0	0.0	0.000	A
D - Bypass South-East	811	203	9	1289	0.629	809	1057	1.0	1.7	7.461	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	9	2	1059	695	0.012	9	15	0.0	0.0	5.247	A
B - A12 West	1074	268	0	1759	0.610	1074	813	1.5	1.6	5.254	A
C - Tinker Brook South-West	0	0	813	935	0.000	0	7	0.0	0.0	0.000	A
D - Bypass South-East	811	203	9	1289	0.629	811	1059	1.7	1.7	7.534	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	7	2	867	795	0.009	7	12	0.0	0.0	4.571	A
B - A12 West	877	219	0	1759	0.498	879	666	1.6	1.0	4.101	A
C - Tinker Brook South-West	0	0	666	1009	0.000	0	5	0.0	0.0	0.000	A
D - Bypass South-East	662	166	7	1289	0.514	665	867	1.7	1.1	5.786	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	6	1	725	868	0.007	6	10	0.0	0.0	4.174	A
B - A12 West	734	184	0	1759	0.417	735	557	1.0	0.7	3.520	A
C - Tinker Brook South-West	0	0	557	1065	0.000	0	5	0.0	0.0	0.000	A
D - Bypass South-East	555	139	6	1290	0.430	556	725	1.1	0.8	4.913	A

2034 Operational Led, 6-7 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J45	A12 / Tinker Brook	Standard Roundabout		A, D, C, B	3.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2034 Operational Led	6-7 AM	ONE HOUR	05:45	07:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 East		ONE HOUR	✓	6	100.000
B - A12 West		ONE HOUR	✓	343	100.000
C - Tinker Brook South-West		ONE HOUR	✓	2	100.000
D - Bypass South-East		ONE HOUR	✓	467	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	6	0	0
	B - A12 West	3	0	2	338
	C - Tinker Brook South-West	0	0	0	2
	D - Bypass South-East	0	465	2	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	0	0	0
	B - A12 West	45	0	0	7
	C - Tinker Brook South-West	0	0	0	50
	D - Bypass South-East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 East	0.01	3.44	0.0	A	5	8
B - A12 West	0.21	2.61	0.3	A	315	472
C - Tinker Brook South-West	0.00	0.00	0.0	A	0	0
D - Bypass South-East	0.40	4.71	0.7	A	428	642

Main Results for each time segment

05:45 - 06:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	4	1	255	1113	0.004	4	2	0.0	0.0	3.246	A
B - A12 West	258	65	0	1759	0.147	257	353	0.0	0.2	2.396	A
C - Tinker Brook South-West	0	0	353	779	0.000	0	3	0.0	0.0	0.000	A
D - Bypass South-East	351	88	6	1279	0.275	350	254	0.0	0.4	3.868	A

06:00 - 06:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	5	1	306	1087	0.005	5	2	0.0	0.0	3.326	A

B - A12 West	308	77	0	1759	0.175	308	422	0.2	0.2	2.481	A
C - Tinker Brook South-West	0	0	422	755	0.000	0	4	0.0	0.0	0.000	A
D - Bypass South-East	420	105	7	1278	0.328	419	304	0.4	0.5	4.188	A

06:15 - 06:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	6	2	374	1051	0.006	6	3	0.0	0.0	3.443	A
B - A12 West	377	94	0	1759	0.215	377	517	0.2	0.3	2.605	A
C - Tinker Brook South-West	0	0	517	722	0.000	0	4	0.0	0.0	0.000	A
D - Bypass South-East	514	128	8	1278	0.402	513	372	0.5	0.7	4.706	A

06:30 - 06:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	6	2	375	1051	0.006	6	3	0.0	0.0	3.444	A
B - A12 West	377	94	0	1759	0.215	377	518	0.3	0.3	2.605	A
C - Tinker Brook South-West	0	0	518	722	0.000	0	4	0.0	0.0	0.000	A
D - Bypass South-East	514	128	8	1278	0.402	514	372	0.7	0.7	4.713	A

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	5	1	306	1087	0.005	5	2	0.0	0.0	3.330	A
B - A12 West	308	77	0	1759	0.175	308	423	0.3	0.2	2.482	A
C - Tinker Brook South-West	0	0	423	754	0.000	0	4	0.0	0.0	0.000	A
D - Bypass South-East	420	105	7	1278	0.328	420	304	0.7	0.5	4.200	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	4	1	256	1112	0.004	4	2	0.0	0.0	3.250	A
B - A12 West	258	65	0	1759	0.147	258	354	0.2	0.2	2.401	A
C - Tinker Brook South-West	0	0	354	778	0.000	0	3	0.0	0.0	0.000	A
D - Bypass South-East	351	88	6	1279	0.275	352	255	0.5	0.4	3.884	A

2034 Operational Led, 7-8 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J45	A12 / Tinker Brook	Standard Roundabout		A, D, C, B	6.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2034 Operational Led	7-8 AM	ONE HOUR	06:45	08:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 East		ONE HOUR	✓	14	100.000
B - A12 West		ONE HOUR	✓	810	100.000
C - Tinker Brook South-West		ONE HOUR	✓	6	100.000
D - Bypass South-East		ONE HOUR	✓	789	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	14	0	0
	B - A12 West	4	0	1	805
	C - Tinker Brook South-West	0	2	0	4
	D - Bypass South-East	0	785	4	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	0	0	0
	B - A12 West	29	0	100	7
	C - Tinker Brook South-West	0	0	0	0
	D - Bypass South-East	0	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 East	0.02	4.71	0.0	A	13	20
B - A12 West	0.51	4.22	1.0	A	744	1115
C - Tinker Brook South-West	0.01	4.06	0.0	A	6	8
D - Bypass South-East	0.69	9.05	2.2	A	724	1086

Main Results for each time segment

06:45 - 07:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	11	3	607	928	0.012	11	3	0.0	0.0	3.925	A
B - A12 West	610	153	3	1746	0.349	608	600	0.0	0.5	3.158	A
C - Tinker Brook South-West	5	1	598	1040	0.004	5	4	0.0	0.0	3.475	A
D - Bypass South-East	594	148	11	1268	0.468	590	607	0.0	0.9	5.283	A

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	13	3	727	865	0.015	13	4	0.0	0.0	4.223	A

B - A12 West	728	182	3	1746	0.417	728	719	0.5	0.7	3.535	A
C - Tinker Brook South-West	5	1	717	979	0.006	5	4	0.0	0.0	3.698	A
D - Bypass South-East	709	177	14	1267	0.560	708	726	0.9	1.3	6.412	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	16	4	890	780	0.020	16	5	0.0	0.0	4.710	A
B - A12 West	892	223	4	1745	0.511	891	879	0.7	1.0	4.208	A
C - Tinker Brook South-West	7	2	876	896	0.007	7	5	0.0	0.0	4.047	A
D - Bypass South-East	868	217	17	1266	0.686	865	889	1.3	2.1	8.904	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	16	4	891	779	0.020	16	5	0.0	0.0	4.714	A
B - A12 West	892	223	4	1745	0.511	892	882	1.0	1.0	4.220	A
C - Tinker Brook South-West	7	2	880	894	0.007	7	6	0.0	0.0	4.055	A
D - Bypass South-East	868	217	17	1266	0.686	868	890	2.1	2.2	9.051	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	13	3	729	864	0.015	13	4	0.0	0.0	4.230	A
B - A12 West	728	182	3	1746	0.417	730	724	1.0	0.7	3.550	A
C - Tinker Brook South-West	5	1	722	976	0.006	5	5	0.0	0.0	3.708	A
D - Bypass South-East	709	177	14	1267	0.560	712	728	2.2	1.3	6.530	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	11	3	610	926	0.012	11	3	0.0	0.0	3.932	A
B - A12 West	610	153	3	1746	0.349	611	605	0.7	0.5	3.172	A
C - Tinker Brook South-West	5	1	603	1037	0.004	5	4	0.0	0.0	3.484	A
D - Bypass South-East	594	148	12	1268	0.468	595	609	1.3	0.9	5.363	A

2034 Operational Led, 8-9 AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J45	A12 / Tinker Brook	Standard Roundabout		A, D, C, B	6.69	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2034 Operational Led	8-9 AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 East		ONE HOUR	✓	21	100.000
B - A12 West		ONE HOUR	✓	841	100.000
C - Tinker Brook South-West		ONE HOUR	✓	10	100.000
D - Bypass South-East		ONE HOUR	✓	810	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	21	0	0
	B - A12 West	5	0	3	833
	C - Tinker Brook South-West	0	5	0	5
	D - Bypass South-East	0	803	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	0	0	0
	B - A12 West	26	0	0	8
	C - Tinker Brook South-West	0	0	0	0
	D - Bypass South-East	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 East	0.03	4.88	0.0	A	20	29
B - A12 West	0.53	4.41	1.1	A	772	1157
C - Tinker Brook South-West	0.01	4.11	0.0	A	9	13
D - Bypass South-East	0.70	9.31	2.3	A	743	1115

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	16	4	631	915	0.018	16	4	0.0	0.0	4.003	A
B - A12 West	633	158	4	1743	0.363	631	621	0.0	0.6	3.229	A
C - Tinker Brook South-West	7	2	617	1034	0.007	7	7	0.0	0.0	3.504	A
D - Bypass South-East	610	152	18	1282	0.476	606	628	0.0	0.9	5.298	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	19	5	755	850	0.023	19	5	0.0	0.0	4.332	A

B - A12 West	756	189	4	1743	0.434	755	744	0.6	0.8	3.642	A
C - Tinker Brook South-West	9	2	740	972	0.009	9	9	0.0	0.0	3.737	A
D - Bypass South-East	728	182	22	1281	0.569	727	752	0.9	1.3	6.479	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	23	6	924	761	0.031	23	6	0.0	0.0	4.877	A
B - A12 West	926	231	5	1742	0.531	924	909	0.8	1.1	4.394	A
C - Tinker Brook South-West	11	3	904	888	0.012	11	11	0.0	0.0	4.104	A
D - Bypass South-East	892	223	27	1278	0.698	888	921	1.3	2.2	9.144	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	23	6	926	761	0.031	23	6	0.0	0.0	4.882	A
B - A12 West	926	231	5	1742	0.531	926	913	1.1	1.1	4.410	A
C - Tinker Brook South-West	11	3	908	886	0.012	11	11	0.0	0.0	4.112	A
D - Bypass South-East	892	223	27	1278	0.698	892	922	2.2	2.3	9.310	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	19	5	757	849	0.023	19	5	0.0	0.0	4.338	A
B - A12 West	756	189	4	1743	0.434	757	749	1.1	0.8	3.658	A
C - Tinker Brook South-West	9	2	745	969	0.009	9	9	0.0	0.0	3.750	A
D - Bypass South-East	728	182	22	1281	0.569	732	754	2.3	1.3	6.606	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	16	4	634	914	0.018	16	4	0.0	0.0	4.010	A
B - A12 West	633	158	4	1743	0.363	634	626	0.8	0.6	3.247	A
C - Tinker Brook South-West	7	2	622	1032	0.007	7	8	0.0	0.0	3.516	A
D - Bypass South-East	610	152	18	1282	0.476	612	631	1.3	0.9	5.382	A

2034 Operational Led, 3-4 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J45	A12 / Tinker Brook	Standard Roundabout		A, D, C, B	6.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2034 Operational Led	3-4 PM	ONE HOUR	14:45	16:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 East		ONE HOUR	✓	8	100.000
B - A12 West		ONE HOUR	✓	892	100.000
C - Tinker Brook South-West		ONE HOUR	✓	11	100.000
D - Bypass South-East		ONE HOUR	✓	821	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	8	0	0
	B - A12 West	17	0	3	872
	C - Tinker Brook South-West	0	6	0	5
	D - Bypass South-East	0	814	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	0	0	0
	B - A12 West	8	0	0	4
	C - Tinker Brook South-West	0	0	0	0
	D - Bypass South-East	0	0	29	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 East	0.01	4.82	0.0	A	7	11
B - A12 West	0.54	4.37	1.2	A	819	1228
C - Tinker Brook South-West	0.01	4.12	0.0	A	10	15
D - Bypass South-East	0.71	9.56	2.4	A	753	1130

Main Results for each time segment

14:45 - 15:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	6	2	660	912	0.007	6	13	0.0	0.0	3.975	A
B - A12 West	672	168	4	1806	0.372	669	620	0.0	0.6	3.160	A
C - Tinker Brook South-West	8	2	615	1035	0.008	8	7	0.0	0.0	3.506	A
D - Bypass South-East	618	154	8	1281	0.482	614	658	0.0	0.9	5.368	A

15:00 - 15:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	7	2	790	846	0.009	7	15	0.0	0.0	4.292	A

B - A12 West	802	201	4	1806	0.444	801	743	0.6	0.8	3.580	A
C - Tinker Brook South-West	10	2	737	972	0.010	10	9	0.0	0.0	3.740	A
D - Bypass South-East	738	184	10	1281	0.576	736	788	0.9	1.3	6.593	A

15:15 - 15:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	9	2	967	756	0.012	9	19	0.0	0.0	4.816	A
B - A12 West	982	246	5	1805	0.544	981	908	0.8	1.2	4.359	A
C - Tinker Brook South-West	12	3	901	888	0.014	12	11	0.0	0.0	4.108	A
D - Bypass South-East	904	226	12	1279	0.706	900	964	1.3	2.3	9.380	A

15:30 - 15:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	9	2	969	756	0.012	9	19	0.0	0.0	4.821	A
B - A12 West	982	246	5	1805	0.544	982	911	1.2	1.2	4.374	A
C - Tinker Brook South-West	12	3	905	886	0.014	12	11	0.0	0.0	4.117	A
D - Bypass South-East	904	226	12	1279	0.706	903	966	2.3	2.4	9.564	A

15:45 - 16:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	7	2	793	845	0.009	7	15	0.0	0.0	4.299	A
B - A12 West	802	201	4	1806	0.444	804	748	1.2	0.8	3.599	A
C - Tinker Brook South-West	10	2	743	969	0.010	10	9	0.0	0.0	3.751	A
D - Bypass South-East	738	184	10	1281	0.576	742	790	2.4	1.4	6.728	A

16:00 - 16:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	6	2	663	910	0.007	6	13	0.0	0.0	3.984	A
B - A12 West	672	168	4	1806	0.372	673	625	0.8	0.6	3.177	A
C - Tinker Brook South-West	8	2	620	1032	0.008	8	8	0.0	0.0	3.516	A
D - Bypass South-East	618	154	8	1281	0.482	620	661	1.4	0.9	5.454	A

2034 Operational Led, 5-6 PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
J45	A12 / Tinker Brook	Standard Roundabout		A, D, C, B	5.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2034 Operational Led	5-6 PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - A12 East		ONE HOUR	✓	9	100.000
B - A12 West		ONE HOUR	✓	987	100.000
C - Tinker Brook South-West		ONE HOUR	✓	5	100.000
D - Bypass South-East		ONE HOUR	✓	656	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	9	0	0
	B - A12 West	14	0	0	974
	C - Tinker Brook South-West	0	0	0	5
	D - Bypass South-East	0	650	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - A12 East	B - A12 West	C - Tinker Brook South-West	D - Bypass South-East
From	A - A12 East	0	0	0	0
	B - A12 West	10	0	0	2
	C - Tinker Brook South-West	0	0	0	0
	D - Bypass South-East	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
A - A12 East	0.01	5.14	0.0	A	8	12
B - A12 West	0.59	4.84	1.5	A	906	1359
C - Tinker Brook South-West	0.00	0.00	0.0	A	0	0
D - Bypass South-East	0.56	6.36	1.3	A	602	903

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	6	2	730	881	0.007	6	10	0.0	0.0	4.117	A
B - A12 West	743	186	0	1831	0.406	741	493	0.0	0.7	3.293	A
C - Tinker Brook South-West	0	0	493	1098	0.000	0	4	0.0	0.0	0.000	A
D - Bypass South-East	494	123	6	1290	0.383	491	730	0.0	0.6	4.496	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	8	2	874	809	0.009	8	12	0.0	0.0	4.493	A

B - A12 West	887	222	0	1831	0.485	886	591	0.7	0.9	3.809	A
C - Tinker Brook South-West	0	0	591	1048	0.000	0	5	0.0	0.0	0.000	A
D - Bypass South-East	590	147	8	1289	0.457	589	874	0.6	0.8	5.134	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	9	2	1070	711	0.013	9	15	0.0	0.0	5.129	A
B - A12 West	1087	272	0	1831	0.594	1085	723	0.9	1.4	4.812	A
C - Tinker Brook South-West	0	0	723	980	0.000	0	7	0.0	0.0	0.000	A
D - Bypass South-East	722	181	9	1288	0.561	721	1070	0.8	1.3	6.322	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	9	2	1072	710	0.013	9	15	0.0	0.0	5.137	A
B - A12 West	1087	272	0	1831	0.594	1087	725	1.4	1.5	4.839	A
C - Tinker Brook South-West	0	0	725	980	0.000	0	7	0.0	0.0	0.000	A
D - Bypass South-East	722	181	9	1288	0.561	722	1072	1.3	1.3	6.359	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	8	2	877	807	0.009	8	12	0.0	0.0	4.501	A
B - A12 West	887	222	0	1831	0.485	890	594	1.5	0.9	3.834	A
C - Tinker Brook South-West	0	0	594	1047	0.000	0	5	0.0	0.0	0.000	A
D - Bypass South-East	590	147	8	1289	0.457	591	877	1.3	0.9	5.171	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
A - A12 East	6	2	734	879	0.007	6	10	0.0	0.0	4.127	A
B - A12 West	743	186	0	1831	0.406	744	497	0.9	0.7	3.315	A
C - Tinker Brook South-West	0	0	497	1096	0.000	0	5	0.0	0.0	0.000	A
D - Bypass South-East	494	123	6	1290	0.383	495	734	0.9	0.6	4.533	A

APPENDIX 10A: STAGE 1 ROAD SAFETY AUDITS AND DESIGNERS' RESPONSE

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- Sizewell C Theberton Bypass: Stage 1 Road Safety Audit
 - Appendix A: Document List
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- Sizewell C Yoxford Roundabout: Stage 1 Road Safety Audit
 - Appendix A: Document List
 - Appendix B: Problem Location Plan

Scheme	Identified Problem	Location	Problem Summary	Recommendation	Designers Response
Sizewell Link Road	Alignment Problem 1	Location: A – Various along the SLR including the section between chainages 4400 & 5400.	<p>Risk of reduced forward visibility for drivers on the SLR.</p> <p>The proposed SLR is to be constructed using a number of cuttings, where the carriageway will have high embankments on either side. These embankments are likely to reduce forward visibility for drivers using the SLR which may increase the risk of shunt type collisions should vehicles be queuing or stationary ahead.</p>	It is recommended that stopping sight distances are maximised, especially so on approach to junctions where there is an increased risk of slowing or stationary traffic.	<p>The SLR alignment was originally designed for 85kph and 160m forward visibility splay. Thus, the design is compliant to this latter. However, further checks will be required following the RRRAP assessment and the introduction of VRS. Depending on the barriers' height and location (which is also related to the depth of the swale next to the carriageway), it is possible that local widenings will be required to achieve the forward visibility.</p> <p>The current design is based on Lidar data and OS Mapping. At the next stage of detailed design, FSSD will be checked so it's compliant with standards.</p>
Sizewell Link Road	Alignment Problem 2	Location: B – Chainage 3400	<p>Risk of vehicles leaving the carriageway and rolling down the embankment.</p> <p>The SLR at the location highlighted above appears to be located on a high embankment. If a vehicle were to lose control and leave the carriageway at this location there is a risk of an increase to the severity of any injuries suffered to the vehicle occupants due to the embankment height.</p>	It is recommended that all high embankments be protected by vehicle restraint systems.	RRRAP could not be carried out at the current stage due to 3D Topographical Survey information not being available. The design team recognises the need for RRRAP to be carried out when detailed survey information will come available at a further design stage. Mindful of this need, the design has already allocated for extra verge width to accommodate VRS.
Sizewell Link Road	Alignment Problem 3	Location: C – B1122/Middleton Moor Link road	<p>Risk of high vehicle speed and overshoot collisions.</p> <p>A new link road is proposed to link the SLR with the B1122 at Middleton Moor. The link road has a particularly straight alignment with a junction at each end and a proposed 100kph speed limit. There is a risk that the alignment of the link road will encourage high vehicle speeds and potentially lead to vehicles overshooting the give way/stop line at the junctions.</p>	It is recommended that measures are provided to help reduce vehicles speeds and adequate warning is provided to inform drivers of the junctions at either end of the link road.	Noted. Measures will be implemented at the next design stage.
Sizewell Link Road	Road Markings Problem 4	Location: D – Side road junctions at chainages 4100 and 5900	<p>Increased risk of collisions between vehicles waiting to turn into the side roads and other vehicles on the SLR.</p> <p>The SLR is constructed with several side road junctions, and many of these have a right turn lane proposed to provide a safe waiting area when turning into the side road. However, the two side roads as detailed above do not appear to have right turn lanes proposed. This is likely to increase the risk of a collision between a vehicle waiting to turn right into the side road and a vehicle continuing straight on the SLR.</p>	It is recommended that adequate provision is made on the SLR to allow for safe right turn manoeuvres into the side road junctions.	The current design includes right-turn lanes for all the T-junctions.

Scheme	Identified Problem	Location	Problem Summary	Recommendation	Designers Response
Two Village Bypass	Signing Problem 1	Location: A – New roundabout to the eastern end of the bypass	<p>Risk of high vehicle speeds causing overshoot or shunt type collisions at the proposed roundabout.</p> <p>Where the new bypass joins the A12 at the eastern end of the scheme, the A12 is in a rural environment (see Photo 1). Although there is currently a 50mph speed limit, it is a dual carriageway and drivers may not be expecting to encounter an at-grade roundabout in such a rural environment. This may lead to vehicle overshoot and shunt type collisions at the roundabout. There already appears to be a road safety issue at this location. There are existing 'Accident site' signs on the A12 approach to this junction.</p>	It is recommended that the roundabout be adequately signed in advance on the A12 and the location of the roundabout is made clear to drivers.	Recommendation is noted. This will be considered when the traffic sign design is undertaken.
Two Village Bypass	Signing Problem 2	Location: B – Public rights of ways crossing over the bypass.	<p>Risk of vehicles colliding with pedestrians crossing the bypass.</p> <p>The new bypass severs a number of public rights of way (PROW). Pedestrians using the PROWs are expected to cross over the bypass at-grade. There is a risk of collisions between vehicles and pedestrians on the bypass.</p>	It is recommended that adequate warning be provided for vehicles of the potential for pedestrians to be crossing the carriageway and that adequate visibility be provided to allow pedestrian to safely judge gaps in traffic prior to crossing.	Recommendation is noted. This will be considered when the traffic sign design is undertaken.
Yoxford Roundabout			No issues highlighted during RSA Stage 1	No issues highlighted during RSA Stage 1	No issues highlighted during RSA Stage 1
Freight Management Facility			No issues highlighted during RSA Stage 1	No issues highlighted during RSA Stage 1	No issues highlighted during RSA Stage 1
Darsham (Northern Park and Ride)	Alignment Problem 1	Location: A – Willow Marsh Lane East junction with Western Approach Park and Ride Access.	<p>Risk of agricultural vehicles being involved in head-on collisions and/or depositing mud onto the carriageway.</p> <p>The junction of Willow Marsh Lane East with Western Approach appears to be very narrow. Willow Marsh Lane provides access for agricultural vehicles to fields and barns (see Photo 1). Should the junction be of insufficient width, large vehicles could be forced to either encroach into the opposing traffic lanes which could result in head-on collisions or side swipe collisions. The large vehicles could also be forced to drive on the highway verge which may bring dirt and mud onto the carriageway which could increase the risk of a vehicle losing control.</p>	It is recommended that the Willow Marsh Lane East/Western Approach junction be of sufficient construction to accommodate the likely users.	The section highlighted is not a junction, but a "Direct Access" designed as per TD41/95 (now superseded by CD123). The access is expected to be used mainly by cyclists (national cycle route is retained on Willow Marsh Ln). White House Farm (building located on the A12, South-West of roundabout location) will still retain its main access on the A12 which will also grant right of way to all the surrounding fields (which however are included within the red line boundary). Thus, expected vehicular traffic flow is will be minimal and therefore, the risk of mud being brought onto the carriageway will also be minimal.

Scheme	Identified Problem	Location	Problem Summary	Recommendation	Designers Response
Darsham (Northern Park and Ride)	Signing Problem 2	Location: B – A12/Western Approach roundabout.	<p>Risk of drivers failing to correctly negotiate the roundabout.</p> <p>The proposed new roundabout at the junction of the A12 and Western Approach has three arms. Each arm has chevron signs and keep left signs to help guide drivers in the correct direction around the roundabout. However, whilst the two A12 arms have 2 chevron signs along with a keep left sign within the island, the Western Approach arm of the roundabout only has a single chevron sign proposed. This may increase the risk of a driver failing to identify the need to proceed to the left at the roundabout, potentially leading to a head-on collision.</p>	It is recommended that a minimum of two chevrons are provided along with the keep left arrow on each arm of the roundabout.	Recommendation is noted. This will be considered when the traffic sign design is undertaken.
Darsham (Northern Park and Ride)	Signing Problem 3	Location C – A12 Northbound Approach to roundabout	<p>Incorrect placement of signs.</p> <p>Existing speed limits change signage is shown to be installed on the 'old' line of the A12. This may result in drivers approaching the roundabout at excessive speeds and risk overshoot of the give way line and increased risk of collision. The visual 'gateway' created by the signage may also result in drivers heading towards them and entering the opposing traffic lane with risk of head on collision.</p>	It is recommended that the speed limit signage is installed on the realigned A12 approach towards the roundabout.	Unclear, further explanations required. The existing speed limit signs on the "old" A12 line are shown as "to be removed". Proposed speed limit change is now located on the A12 north of the roundabout.
B1078/B1079 Junction	Signing Problem 1	Location: A – Junction of the B1089 and the B1079.	<p>Risk of drivers overshooting the junction.</p> <p>The existing give way sign at the junction of the B1089 and the B1079 is partially masked by the speed limit signing (see Photo 1). Drivers approaching the junction from the west, have difficulty in seeing the sign, and the proposed give way sign is to be located in a similar location.</p> <p>Therefore, there is a risk of the new sign being obscured by the speed limit sign. This may increase the risk of drivers failing to identify the need to give way at this junction resulting in overshoot collisions with vehicles on the B1079.</p>	It is recommended that the give way sign be located so that it is clearly seen by approaching drivers and/or that an additional give way sign be located on the offside where it would be in the driver's eye-line.	Recommendation is noted. This will be considered when the traffic sign design is undertaken.
B1078/B1079 Junction	Signing Problem 2	Location: B – B1078 on approach to its junction with the B1079.	<p>Risk of drivers overshooting the junction.</p> <p>The proposals include replacing the existing advance give way signs. However, both advance give way signs display the same distance sub-plate of 100yds even though they are located at different distances from the give way markings. This may lead to drivers becoming confused as to the distance to the give way line resulting in overshoot collisions.</p>	It is recommended that the distance to hazard sub-plates of the advance give way signs be amended to show the correct distance to the give way line.	Recommendation is noted. This will be considered when the traffic sign design is undertaken.

Scheme	Identified Problem	Location	Problem Summary	Recommendation	Designers Response
A140/B1078 Junction	Signing Problem 1	Location: A – A140 southbound approach to its junction with the B1078	<p>Risk of vehicles entering the A140 into the path of other vehicles.</p> <p>Proposed advance directional sign (ADS) Diag. 2033, is to be provided on the A140 in advance of its junction with the B1078. The location of the sign (ADS furthest to the north) is to be positioned close to an existing field access and potentially within the visibility splay. This could restrict the view for drivers attempting to exit the field of vehicles approaching on the A140, increasing the risk of a collision.</p>	It is recommended that the ADS be positioned so it doesn't adversely affect drivers' visibility of other vehicles.	Sign to be relocated approx. 1.7m further from edge of carriageway to avoid clashes with a 160m – 2m set-back visibility splay (as per CD123 considering a design speed of 85kph). Sign location and installation feasibility to be assessed at detailed design stage.
A140/B1078 Junction	Signing Problem 2	Location: B – A140 southbound approach to its junction with the B1078	<p>Risk of drivers becoming confused as to the junction layout due to incorrect signage.</p> <p>Proposed warning signs Diag. 506.1R & 572 are a junction warning sign with supplementary distance plate to be located on the nearside and offside of the A140 on its southbound approach to the B1078 junction. However, the sign shows the side road of the junction to be to the right side of the main road and not the left side (as is the case). This could lead to driver confusion, late lane changes and braking manoeuvres resulting in shunt type collisions.</p>	It is recommended that the junction warning sign be amended to reflect the road layout.	Agreed, sign diag. 506.1R to be replaced by diag. 504.1.
A140/B1078 Junction	Signing Problem 3	Location: C – B1078 approach to the A140	<p>Risk of drivers failing to view the speed limit resulting in higher speeds.</p> <p>The existing 50mph/National Speed limit signs on the B1078 approach to the A140 junction are obscured by overgrown vegetation (see Photo 1). Should drivers fail to view the 50mph speed limit signs, it could result in higher vehicle speeds on the A140 increasing the risk of collisions.</p>	It is recommended that the vegetation be removed from the vicinity of the speed limit signs.	Agreed, drawings to include a note on vegetation clearance.
A12/A144 Junction	Road Markings Problem 1	Location: A – A12/A144 junction	<p>Risk of collisions between right turning vehicles.</p> <p>The proposed right turn waiting area for traffic entering or exiting the A144 has no road markings to help guide drivers as to where they should be positioned. A vehicle attempting a right turn out of the A144 may therefore position the vehicle within the central reserve whilst obstructing vehicles wishing to turn right into the A144. Also, without the provision of a safe waiting area for right turning vehicles out of the A144, drivers may become reluctant to perform the manoeuvre in two stages, instead attempting in a single manoeuvre where there is an increased risk of collisions.</p>	It is recommended that road markings be provided in the central reserve to help guide drivers.	Noted. Road markings are indicative at this stage. Traffic markings will be reviewed in light of this recommendation at detailed designed stage.
A12/A144 Junction	Signing Problem 2	Location: B – A12/A144 junction – private access onto A12.	<p>Risk of head-on collisions.</p> <p>There is a private access directly onto the A12 to the north of its junction with the A144 (see Photo 1). The private access is within the proposed section of A12 that has the traffic island within the central island. Should a vehicle exiting the private access turn right they would be travelling against the flow of traffic which could result in head-on collisions.</p>	It is recommended that appropriate directional signing be provided at the private access.	Noted. This will be considered when the detailed traffic sign design is undertaken.

Scheme	Identified Problem	Location	Problem Summary	Recommendation	Designers Response
B1119/A12 Junction			No issues highlighted during RSA Stage 1	No issues highlighted during RSA Stage 1	No issues highlighted during RSA Stage 1
A1094/B1069 Junction	Signing Problem 1	Location: A – Junction of the A1094 and the B1069	<p>Increased risk of collisions between turning vehicles.</p> <p>Although some vegetation clearance is proposed on the A1094, there does not appear to be any proposals for vegetation clearance on the B1069 approach to the junction with the A1094. There are a number of signs currently partially obscured by overgrown vegetation (see Photo 1) and the map type advance direction sign (ADS) is lying on the ground. If drivers fail to view the advance signing, there is an increased risk of a vehicle overshooting the give way line and colliding with a vehicle on the A1094.</p>	It is recommended that vegetation clearance be carried out on the B1069 and the ADS be re-erected.	Agreed, drawings to include a note on vegetation clearance.
Southern Park and Ride	Signing Problem 1	Location: A – A12 Northbound immediately after the offslip to the B1078	<p>Risk of drivers being unaware of the offside lane drop.</p> <p>As part of these junction improvement works, the offside lane drop on the A12 is to be relocated further to the south, just after the offslip to the B1078. The offside lane will be hatched with three 'tuck-in' arrows to help inform drivers of the need to move from the offside lane into the nearside.</p> <p>However, there doesn't appear to be any advance signage associated with the lane drop. If drivers are not notified of the lane drop in advance this could result in late lane change manoeuvres resulting in loss of control or side swipe collisions.</p>	It is recommended that adequate advance signage be provided of the lane drop.	Noted. Road markings are indicative at this stage. Traffic markings will be reviewed in light of this recommendation at detailed designed stage.
Southern Park and Ride	Road Markings Problem 2	Location: B – A12 northbound between the offslip and onslip.	<p>Increased risk of collisions at layby. The offside lane of the A12 is to be hatched-out from a point to the north of its offslip to the B1116.</p> <p>Immediately to the north of the start of the hatching, there is an existing layby. The layby is to remain following the improvement works. However, with the end of the offside lane of the A12 being so close to the layby, there is a risk of drivers merging into a single lane being unaware of the risk of vehicles either slowing to enter the layby or of vehicles exiting the layby, potentially at low speeds due to the gradients. This may increase the risk of collisions between vehicles on the A12 with vehicles entering or exiting the layby.</p>	It is recommended that the layby be closed or relocated.	Layby to be retained as per SCC requirements. The off-side lane is to be hatched off to its complete width prior the start of the layby. Therefore, at the layby location the carriageway is treated as a single carriageway and signs are erected to make drivers aware of the layby existence.
Southern Park and Ride	Alignment Problem 3	Location: C – A12 northbound onslip.	<p>Risk of vehicles colliding with power line poles.</p> <p>The park and ride scheme provides a new footway and crossing over the entry/exit from the proposed park and ride site. However, there is an existing power-line post within the proposed alignment of the footway and it will be very close to the edge of the diverge taper into the park and ride site (see Photo 1). Should these posts be subject to a collision with a passing vehicle, the electricity power line could fall to the ground and come into contact with other road users. The poles may also obstruct pedestrian movement on the footway, forcing pedestrians into the deceleration lane with risk of collision from traffic.</p>	It is recommended that power line posts be protected or relocated.	Noted. Liaison with Statutory undertakers will be carried out at the next stage of design and agreement on a suitable solution considering the recommendation.

Scheme	Identified Problem	Location	Problem Summary	Recommendation	Designers Response
Bridleway 19	Walkers, Cyclists & Horse Riders Problem 1	Location: A – Bridleway crossing at the Lovers Lane / B1122 junction.	<p>Risk that the bridleway pen will reduce visibility for road users.</p> <p>Bridleway 19 is to cross over the B1122 to the south of its junction with Lovers Lane. The bridleway crossing has pens, consisting of post and rail fencing, on either side of the B1122 to provide a safe waiting area for horse riders. Due to the close proximity of the bridleway crossing to the Lovers Lane junction, there is a risk that the pen may restrict visibility for drivers attempting to exit Lovers Lane onto the B1122 resulting in a collision.</p>	It is recommended that the bridleway pens be located / constructed so they do not restrict visibility for other road users.	Agreed. Form of bridleway pen to be developed at next design stage
Bridleway 19	Walkers, Cyclists & Horse Riders Problem 2	Location: B – Bridleway crossing at the Lovers Lane / B1122 junction.	<p>Risk that drivers existing Lovers Lane will fail to stop for horse riders crossing.</p> <p>Bridleway 19 is to cross over the B1122 to the south of its junction with Lovers Lane. The bridleway crossing is a Pegasus crossing, requiring road users to stop when faced with a red traffic signal, allowing horse riders to cross. However, due to the close proximity of the crossing to the Lovers Lane junction, there is a risk of drivers exiting Lovers Lane and turning left, failing to identify the crossing resulting in a red-light violation and potentially colliding with horse riders crossing the B1122. Visibility at the junction may be further compromised due to Lovers Lane being within a cutting on the approach to the B1122.</p>	It is recommended that drivers on Lovers Lane are made aware of the Pegasus crossing on the B1122 and it can clearly be seen from the Lovers Lane junction.	Agreed. Advance signage Pegasus crossing for left turners to be provided on Lovers Lane. Current Earthworks design permits clear visibility of pen at junction.
Bridleway 19	Walkers, Cyclists & Horse Riders Problem 3	Location: C – Proposed bridleway between the north and western arms of the proposed Main Site Access roundabout.	<p>Risk of walkers, cyclists and horse riders falling down embankment at rear of facility.</p> <p>The proposed bridleway guides walkers, cyclists and horse riders between the north and western arms of the new roundabout. The bridleway is 3 metres in width, with an embankment adjacent to its northern edge. The narrow width of the facility (considering all users can utilise this facility) combined with the close proximity to the top of the embankment could lead to a walker, cyclist and horse rider falling down the embankment resulting in injury.</p>	It is recommended that either the Bridleway be widened (potential for widening shown on drawings) or a post and rail fence be provided at the top of the embankment.	Agreed. Bridleway to be moved towards roundabout and away from embankment on section to north of roundabout. Section to west or roundabout provided with post and rail fence.
Bridleway 19	Walkers, Cyclists & Horse Riders Problem 4	Location: Various– Bridleway crossings and on-street sections of Bridleway.	<p>Risk to drivers failing to realise the possibility of horse riders crossing the carriageway or riding within / adjacent to the carriageway.</p> <p>There are a number of Pegasus crossings proposed as part of Bridleway 19. Due to the rural nature of the area, drivers may not be expecting a signalised crossing and be slow to react to the red signal. Also, the Bridleway has an on-street section at Sandy Lane where horse riders and other road users will be forced to share the carriageway space. In addition, the Bridleway is very close to the edge of carriageway where it crosses the level crossing on the B1122 and horses may become spooked should a vehicle pass too close or at high speeds.</p>	It is recommended that warning signs are provided in advance of any section of Bridleway which crosses a carriageway or where horse-riders are forced to ride along a carriageway or horse riders are unsegregated from passing traffic.	<p>Provision of advance warning signs on existing highways (unaltered) i.e. B1122, Abbey Lane where Pegasus crossings are proposed to be discussed with local highways authority at detailed design stage. Required locations of signs would be outside the red-line boundary.</p> <p>Unable to practically avoid close proximity of horses and vehicles at B1122 level crossing.</p>

Scheme	Identified Problem	Location	Problem Summary	Recommendation	Designers Response
Bridleway 19	Walkers, Cyclists & Horse Riders Problem 5	Location D – B1122 Abbey Road	<p>New residential development access not considered within scheme design.</p> <p>There is a new residential development and associated access on the west side of B1122 Abbey Road, close to the location of the realigned Lovers Lane junction. This is not shown on the design drawings nor was sufficient information available to determine the geometry of the possible staggered cross roads during the site visit. The bridleway will cross the new junction, although how this will be achieved has not been addressed. Without holding pens at the bellmouth crossing there is risk of collision between equestrians, cyclists and pedestrians, or riders losing control of horses and their entering the road in front of traffic.</p>	It is recommended that the bridleway design be amended to include safe crossing of the new development access and new Lovers Lane junction be designed taking into account the new development access to help avoid any safety related issues involving turning vehicles.	It is understood that the development will make use of an existing private access located directly to the south of the Pegasus crossing. Therefore the entrance will not be crossed by the bridleway and will not form a cross roads with the new Lovers Lane junction.
Buckleswood Road Level Crossing			No issues highlighted during RSA Stage 1	No issues highlighted during RSA Stage 1	No issues highlighted during RSA Stage 1
GRR Level Crossing	Signing Problem 1	Location: A – B1122 southbound approach to crossing.	<p>Risk of crossing signals being obscured by parked vehicles.</p> <p>The level crossing is due to have a set of signals on either side to inform drivers of the need to stop when a train is approaching and the barriers are to be closed. However, the signals on the southbound carriageway are located in close proximity to a maintenance parking bay. If a high sided vehicle were to be parked in the maintenance bay, it may obscure drivers' view of the signals, increasing the risk of vehicles failing to stop when a train is approaching/crossing the road.</p>	It is recommended that the signals can be clearly viewed by drivers on approach to the crossing.	To be considered in signals detailed design.
King Georges Avenue / Valley Road	Walkers, Cyclists and Horse Riders Problem 1	Location: A – Footway/cycleway through the Big Field	<p>Footway/cycleway width may cause collisions between users.</p> <p>There is a proposed footway/cycleway from Valley Road to the north through the Big Field. The facility is 1.5m in width for two-way cycle and pedestrian usage. This narrow width may be insufficient to allow cyclists and pedestrians to pass each other safely, increasing the risk of collision between the users.</p>	It is recommended that the footway/cycleway be of sufficient width to allow users to safely pass each other.	Width of footway to be appraised at detailed design.
Lovers Lane	Walkers, Cyclists and Horse Riders Problem 1	Location: A – Bridleway crossing at the Lovers Lane / B1122 junction.	<p>Risk that the bridleway pen will reduce visibility for road users.</p> <p>Bridleway 19 is to cross over the B1122 to the south of its junction with Lovers Lane. The bridleway crossing has pens, consisting of post and rail fencing, on either side of the B1122 to provide a safe waiting area for horse riders. Due to the close proximity of the bridleway crossing to the Lovers Lane junction, there is a risk that the pen may restrict visibility for drivers attempting to exit Lovers Lane onto the B1122 resulting in a collision.</p>	It is recommended that the bridleway pens be located/constructed so they do not restrict visibility for other road users.	Agreed. Form of bridleway pen to be developed at next design stage.

Scheme	Identified Problem	Location	Problem Summary	Recommendation	Designers Response
Lovers Lane	Walkers, Cyclists and Horse Riders Problem 2	Location: B – Bridleway crossing at the Lovers Lane / B1122 junction.	<p>Risk that drivers exiting Lovers Lane will fail to stop for horse riders crossing.</p> <p>Bridleway 19 is to cross over the B1122 to the south of its junction with Lovers Lane. The bridleway crossing is a Pegasus crossing, requiring road users to stop when faced with a red traffic signal, allowing horse riders to cross. However, due to the close proximity of the crossing to the Lovers Lane junction, there is a risk of drivers exiting Lovers Lane and turning left, failing to identify the crossing resulting in a red-light violation and potentially colliding with horse riders crossing the B1122. Visibility at the junction may be further compromised due to Lovers Lane being within a cutting on the approach to the B1122.</p>	It is recommended that drivers on Lovers Lane are made aware of the Pegasus crossing on the B1122 and that it can clearly be seen from the Lovers Lane junction.	Agreed. Advance signage Pegasus crossing for left turners to be provided on Lovers Lane. Current Earthworks design permits clear visibility of pen at junction.
Lovers Lane	Walkers, Cyclists and Horse Riders Problem 3	Location D – B1122 Abbey Road	<p>New residential development access not considered within scheme design.</p> <p>There is a new residential development and associated access on the west side of B1122 Abbey Road, close to the location of the realigned Lovers Lane junction. This is not shown on the design drawings nor was sufficient information available to determine the geometry of the possible staggered cross roads during the site visit. The bridleway will cross the new junction, although how this will be achieved has not been addressed. Without holding pens at the bellmouth crossing there is risk of collision between equestrians, cyclists and pedestrians, or riders losing control of horses and their entering the road in front of traffic.</p>	It is recommended that the bridleway design be amended to include safe crossing of the new development access and new Lovers Lane junction be designed taking into account the new development access to help avoid any safety related issues involving turning vehicles.	It is understood that the development will make use of an existing private access located directly to the south of the Pegasus crossing. Therefore the entrance will not be crossed by the bridleway and will not form a cross roads with the new Lovers Lane junction.
Lovers Lane	Signs Problem 4	Location: C – Recycle centre on Lovers Lane	<p>Increased risk of collisions between traffic on Lovers Lane and queuing traffic.</p> <p>There is an existing Recycle Centre on Lovers Lane (see Photo 1). The Recycle Centre appears to suffer from queuing traffic (due to existing 'Queues Likely Ahead' signs and observations on site). With traffic flows likely to increase due to the Sizewell project, there is an increased risk of vehicles travelling along Lovers Lane colliding with the rear of stationary traffic waiting to turn into the Recycle Centre. This issue is compounded due to the Recycle Centre being sited in a location which is not clearly identifiable for northbound traffic and is over the crest of a summit. Any queues are, therefore, unlikely to be seen until a driver passes over the summit. Whilst a 'left turn in' taper is proposed to help alleviate the queuing southbound into the Recycle Centre, a right turn island is not proposed for northbound traffic wishing to turn right into the centre. The increased traffic levels are likely to increase the risk of vehicles on Lovers Lane colliding with stationary traffic at the Recycle Centre.</p>	It is recommended that a right turn lane be provided to provide a safe waiting area for vehicles waiting to turn right into the Recycle Centre.	Traffic data indicates very little northbound traffic turning right into the recycle centre. It is proposed to prohibit entrance into the recycle centre from the south with the provision of a no right hand turn sign and amendment to the junction layout which will allow drivers to exit only.

Scheme	Identified Problem	Location	Problem Summary	Recommendation	Designers Response
Main Site Access	Walkers, Cyclists and Horse Riders Problem 1	Location: A – Proposed bridleway between the north and western arms of the roundabout.	<p>Risk of walkers, cyclists and horse riders (WC&HRs) falling down embankment at rear of facility.</p> <p>The proposed bridleway guides WC&HRs between the north and western arms of the new roundabout. The bridleway is 3 metres in width, with an embankment adjacent to its northern edge. The narrow width of the route (considering all users can utilise this facility) combined with the close proximity to the top of the embankment could lead to a WC&HR falling down the embankment resulting in injury.</p>	It is recommended that either the Bridleway be widened (potential for widening shown on drawings) or a post and rail fence be provided at the top of the embankment.	Agreed. Bridleway to be moved towards roundabout and away from embankment on section to north of roundabout. Section to west of roundabout provided with post and rail fence.



Suffolk County Council

***SIZEWELL C
TWO VILLAGE BYPASS***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C TWO VILLAGE BYPASS

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF5

WSP

The Mailbox

Level 2,

100 Wharfside Street,

Birmingham

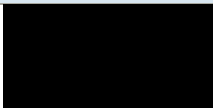
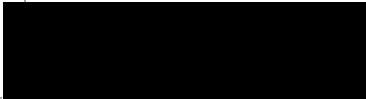

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DATE: SEPTEMBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	30/09/19			
Prepared by	Neil Jones			
Signature				
Checked by	Dave Minshall			
Signature				
Authorised by	Axel Kappeler			
Signature				
Project number	50400326			
Report number	50400326/2019/Ref5			
File reference	As above			



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APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C - Two Village Bypass Stage 1 Road Safety Audit</i>
Date:	<i>September 2019</i>
Document reference and revision:	<i>50400326/2019/Ref5</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the Sizewell C - *Two Village Bypass* scheme on behalf of Steve Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steve Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steve Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Monday 23rd September 2019 between 3pm – 4pm. The weather was fine with sunny spells. The road surface was dry during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. Departures on some of the approaches to the roundabout were required to achieve a better deflection within the available red line boundary.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

This aspect of the scheme consists of a new bypass on the A12 (Two Village Bypass, 2VBP) which will tie back in to the existing network via two new roundabouts (named eastern and western roundabout). A side road around the centre of the bypass will be diverted and linked to 2VBP via a left/right staggered T-Junction.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1. SIGNING

3.2. PROBLEM 1

Location: A – New roundabout to the eastern end of the bypass

Summary: Risk of high vehicle speeds causing overshoot or shunt type collisions at the proposed roundabout.

Where the new bypass joins the A12 at the eastern end of the scheme, the A12 is in a rural environment (See Photo1). Although there is currently a 50mph speed limit, it is a dual carriageway and drivers may not be expecting to encounter an at-grade roundabout in such a rural environment. This may lead to vehicle overshoot and shunt type collisions at the roundabout. There already appears to be a road safety issue at this location. There are existing 'Accident site' signs on the A12 approach to this junction.



Photo 1 – View of A12 southbound approach to proposed roundabout

RECOMMENDATION:

It is recommended that the roundabout be adequately signed in advance on the A12 and the location of the roundabout is made clear to drivers.

3.3. PROBLEM 2

Location: B – Public rights of ways crossing over the bypass.



Summary: Risk of vehicles colliding with pedestrians crossing the bypass.

The new bypass severs a number of public rights of way (PROW). Pedestrians using the PROWs are expected to cross over the bypass at-grade. There is a risk of collisions between vehicles and pedestrians on the bypass.

RECOMMENDATION:

It is recommended that adequate warning be provided for vehicles of the potential for pedestrians to be crossing the carriageway and that adequate visibility be provided to allow pedestrian to safely judge gaps in traffic prior to crossing.

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19

Appendix A

DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

SZC-SZ0204-000-DRW-1000XX P02	PROPOSED STAGGERED JUNCTION
SZC-SZ0204-000-DRW-100038_P12	TWO VILLAGE BYPASS PROPOSED LAYOUT AND PROFILE
SZC-SZ0204-000-DRW-100039 P05	TWO VILLAGE BYPASS A12/A1094 PROPOSED ROUNDABOUT LAYOUT & PROFILE
SZC-SZ0204-000-DRW-100040 P05	TWO VILLAGE BYPASS A12 WESTERN ROUNDABOUT LAYOUT
SZC-SZ0204-SBR-000-DRW-100004 P01	River Alde Road Bridge General Arrangement and Sections
SZC-SZ0204-SBR-000-DRW-100001 P01	Farnham Hall Footbridge General Arrangement and Elevation 1 of 2
SZC-SZ0204-SBR-000-DRW-100002 P01	Farnham Hall Footbridge General Arrangement and Elevation 2 of 2

Appendix B



PROBLEM LOCATION PLAN



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SIZEWELL C
A1094/B1069 JUNCTION

Stage 1 Road Safety Audit



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SIZEWELL C A1094/B1069 JUNCTION

Stage 1 Road Safety Audit

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OUR REF. NO. 50400326/2019/REF6

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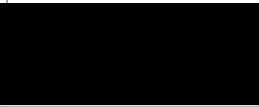
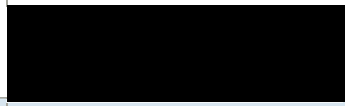

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DATE: SEPTEMBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	30/09/19			
Prepared by	Neil Jones			
Signature				
Checked by	Dave Minshall			
Signature				
Authorised by	Axel Kappeler			
Signature				
Project number	50400326			
Report number	50400326/2019/Ref6			
File reference	As above			



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APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C - A1094/B1069 Junction Stage 1 Road Safety Audit</i>
Date:	<i>September 2019</i>
Document reference and revision:	<i>50400326/2019/Ref6</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the Sizewell C - A1094/B1069 Junction scheme on behalf of Steve Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steve Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steve Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Monday 23rd September 2019 between 3:30pm – 5pm. The weather was fine with sunny spells. The road surface was dry during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. The audit team were not notified of any departures from standards.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

This aspect of the scheme consists of highway improvements to the A1094/B1069 junction. These consist of lowering the speed limit to 40mph, refreshing the carriageway markings and signing improvements.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1. SIGNING

3.2. PROBLEM 1

Location: A – Junction of the A1094 and the B1069

Summary: Increased risk of collisions between turning vehicles.

Although some vegetation clearance is proposed on the A1094, there does not appear to be any proposals for vegetation clearance on the B1069 approach to the junction with the A1094. There are a number of signs currently partially obscured by overgrown vegetation (see Photo 1) and the map type advance direction sign (ADS) is lying on the ground. If drivers fail to view the advance signing, there is an increased risk of a vehicle overshooting the give way line and colliding with a vehicle on the A1094.

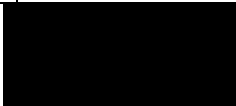
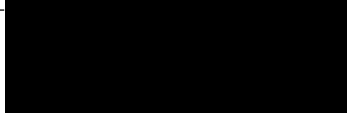
RECOMMENDATION:

It is recommended that vegetation clearance be carried out on the B1069 and the ADS be re-erected.



Photo 1 – Advance give way signs on approach to the junction

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19



Appendix A



DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

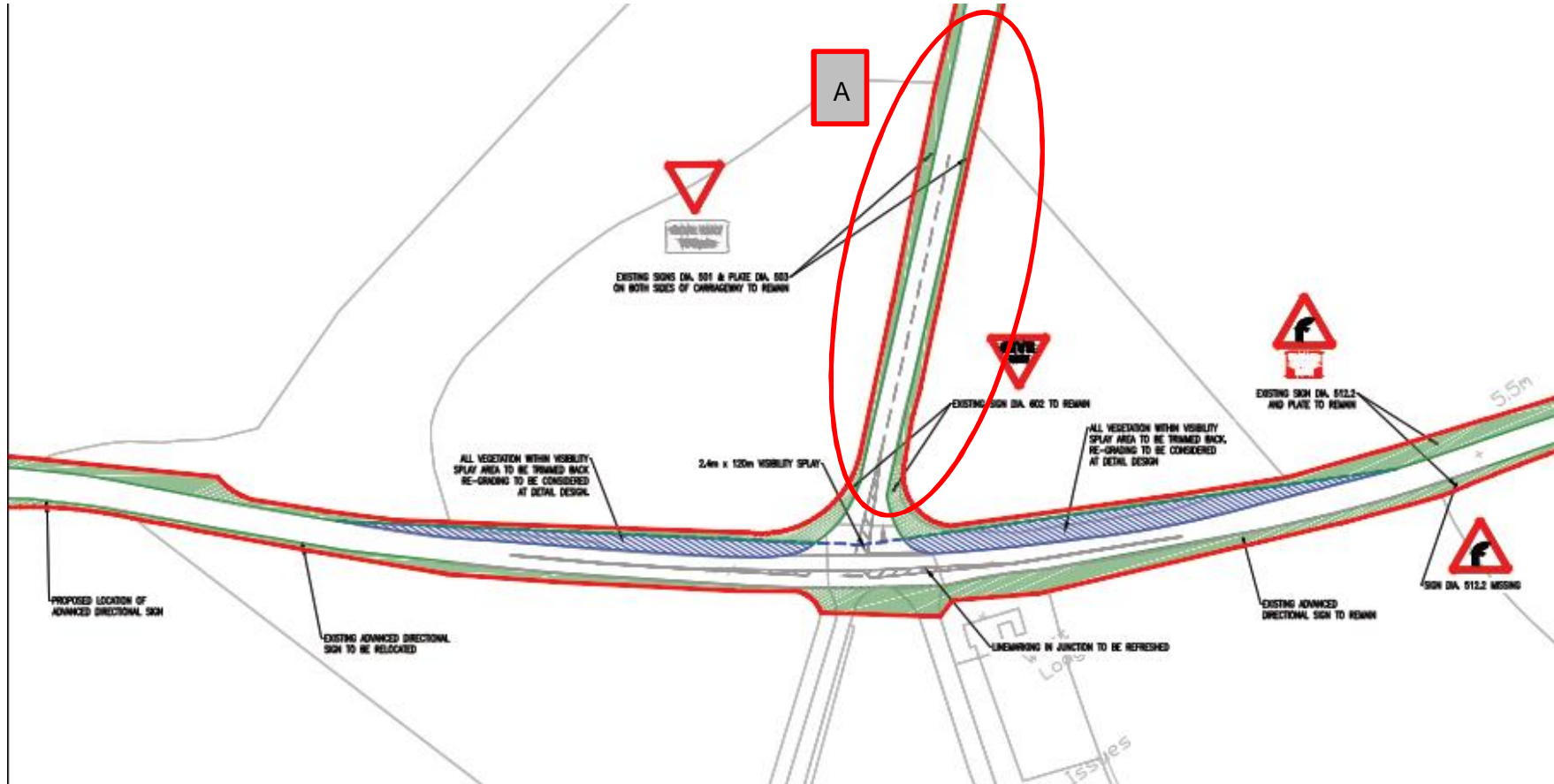
SZC-SZ0204-XX-000-DRW-100115RevP05 Extents of Proposed 40mph Speed Limit

SZC-SZ0204-XX-000-DRW-100049RevP04 Proposed Highway Layout

Appendix B



PROBLEM LOCATION PLAN





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Suffolk County Council

SIZEWELL C
A12/A144 JUNCTION

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C A12/A144 JUNCTION

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF10

WSP

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Birmingham

B1 1RT

WSP.com

DATE: OCTOBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	02/10/19			
Prepared by	Neil Jones			
Signature	[Redacted]			
Checked by	Dave Minshall			
Signature	[Redacted]			
Authorised by	Axel Kappeler			
Signature	[Redacted]			
Project number	50400326			
Report number	50400326/2019/Ref10			
File reference	As above			



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APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C – A12/A144 Junction Stage 1 Road Safety Audit</i>
Date:	<i>October 2019</i>
Document reference and revision:	<i>50400326/2019/Ref10</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the *Sizewell C – A12/A144 Junction* scheme on behalf of Steven Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steven Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steven Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Tuesday 24th September 2019 between 10am – 11am. The weather was heavy rain. The road surface was wet with some ponding during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. *The design of the junction on its approaching minor road has been adapted to the existing and available space, considering the constraint of the Thorington Holiday cottages edges, in order to avoid the limits of this property. (copied from Brief)*

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

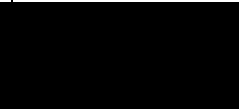
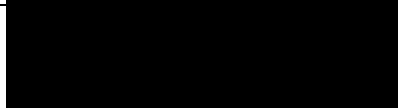
Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

This aspect of the scheme consists of new traffic islands, improvements to drainage and carriageway markings at the junction of the A12 and A144.

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	02/10/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	02/10/19



Appendix A



DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

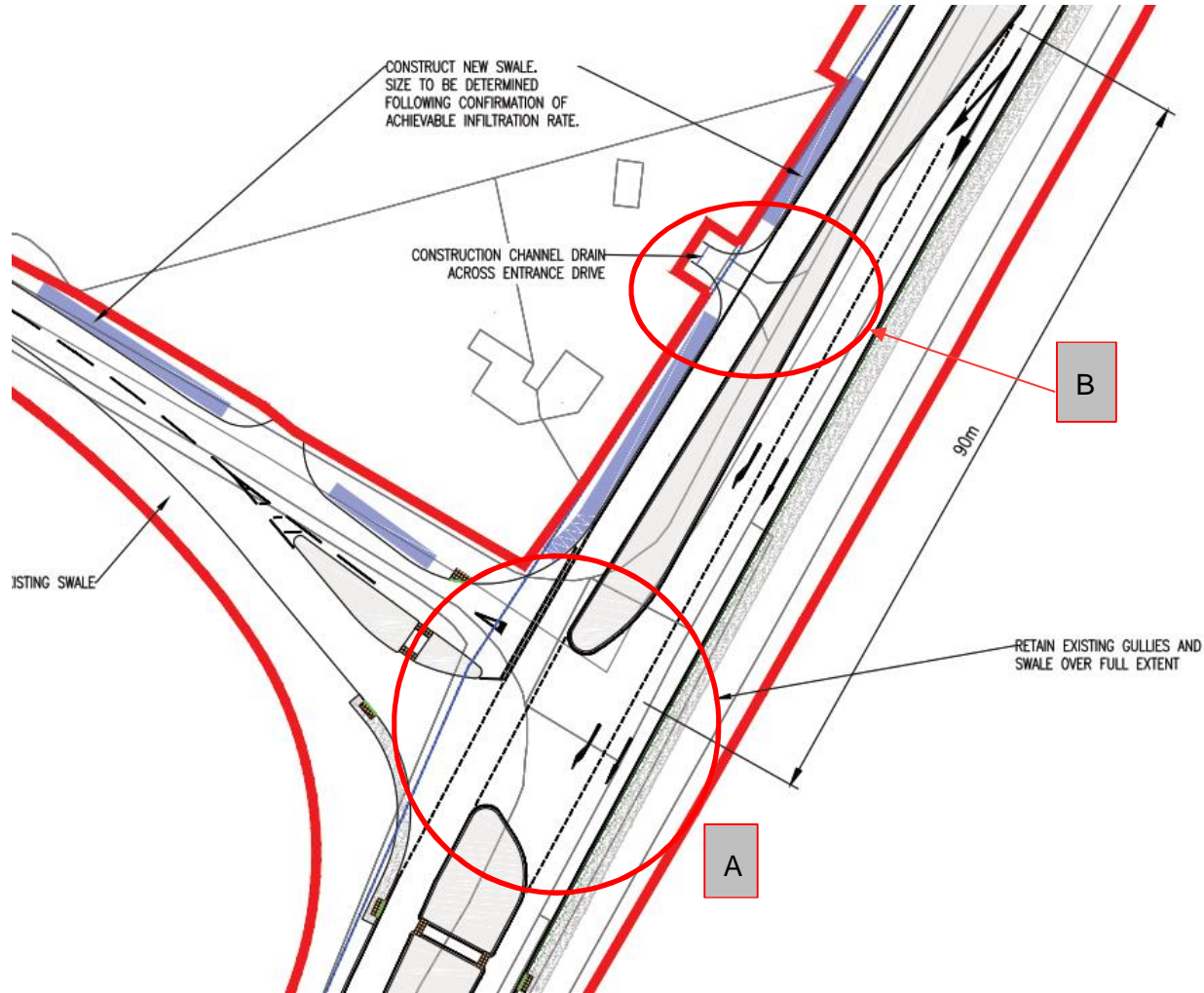
SZC-SZ0204-XX-000-DRW-100052_P09

A12/A144 Proposed Highway Layout

Appendix B

PROBLEM LOCATION PLAN







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Suffolk County Council

***SIZEWELL C
B1119/A12 JUNCTION***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C B1119/A12 JUNCTION

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF7

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DATE: SEPTEMBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	30/09/19			
Prepared by	Neil Jones			
Signature	[Redacted]			
Checked by	Dave Minshall			
Signature	[Redacted]			
Authorised by	Axel Kappeler			
Signature	[Redacted]			
Project number	50400326			
Report number	50400326/2019/Ref7			
File reference	As above			



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APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C - B1119/A12 Junction Stage 1 Road Safety Audit</i>
Date:	<i>September 2019</i>
Document reference and revision:	<i>50400326/2019/Ref7</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the Sizewell C - B1119/A12 Junction scheme on behalf of Steve Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steve Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steve Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Monday 23rd September 2019 between 4:30pm – 5:30pm. The weather was fine with sunny spells. The road surface was dry during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. The audit team were not notified of any departures from standards.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

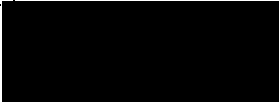

This aspect of the scheme consists of highway improvements to the B1119/A12 junction. These consist of changes to the carriageway markings, kerb lines and gullies.



3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

There were no Road Safety Issues raised during the Stage 1 Road Safety Audit.

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19



Appendix A



DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

SZC-SZ0204-XX-000-DRW-100054RevP07 Proposed Highway Layout

Appendix B



PROBLEM LOCATION PLAN

Not Required



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Suffolk County Council

SIZEWELL C
A140/B1078 JUNCTION

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C A140/B1078 JUNCTION

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF1

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WSP.com

DATE: SEPTEMBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	30/09/19			
Prepared by	Neil Jones			
Signature	[Redacted]			
Checked by	Dave Minshall			
Signature	[Redacted]			
Authorised by	Axel Kappeler			
Signature	[Redacted]			
Project number	50400326			
Report number	50400326/2019/Ref1			
File reference	As above			

1. PROJECT DETAILS

Report title:	<i>Sizewell C - A140/B1078 Junction Stage 1 Road Safety Audit</i>
Date:	<i>September 2019</i>
Document reference and revision:	<i>50400326/2019/Ref1</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the Sizewell C - A140/B1078 Junction scheme on behalf of Steve Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steve Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steve Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Monday 23rd September 2019 between 1pm – 2pm. The weather was fine with sunny spells. The road surface was dry during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. The audit team were not notified of any departures from standards.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

This aspect of the scheme consists of highway improvements to the A140/B1078 junction. These consist of signing and road marking alterations on the A140 approach to the junction.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1. SIGNING

3.2. PROBLEM 1

Location: A – A140 southbound approach to its junction with the B1078

Summary: Risk of vehicles entering the A140 into the path of other vehicles

Proposed advance directional sign (ADS) Diag. 2033, is to be provided on the A140 in advance of its junction with the B1078. The location of the sign (ADS furthest to the north) is to be positioned close to an existing field access and potentially within the visibility splay. This could restrict the view for drivers attempting to exit the field of vehicles approaching on the A140, increasing the risk of a collision.

RECOMMENDATION:

It is recommended that the ADS be positioned so it doesn't adversely affect drivers' visibility of other vehicles.

3.3. PROBLEM 2

Location: B – A140 southbound approach to its junction with the B1078

Summary: Risk of drivers becoming confused as to the junction layout due to incorrect signage.

Proposed warning signs Diag. 506.1R & 572 are a junction warning sign with supplementary distance plate to be located on the nearside and offside of the A140 on its southbound approach to the B1078 junction. However, the sign shows the side road of the junction to be to the right side of the main road and not the left side (as is the case). This could lead to driver confusion, late lane changes and braking manoeuvres resulting in shunt type collisions.

RECOMMENDATION:

It is recommended that the junction warning sign be amended to reflect the road layout.

3.4. PROBLEM 3

Location: C –B1078 approach to the A140

Summary: Risk of drivers failing to view the speed limit resulting in higher speeds.

The existing 50mph/National Speed limit signs on the B1078 approach to the A140 junction are obscured by overgrown vegetation (see Photo 1). Should drivers fail to view the 50mph speed limit signs, it could result in higher vehicle speeds on the A140 increasing the risk of collisions.

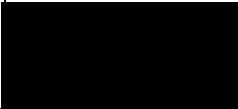

RECOMMENDATION:

It is recommended that the vegetation be removed from the vicinity of the speed limit signs.



Photo 1 – View of speed limit signs

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19



Appendix A



DOCUMENT LIST

Documents

Collision Data

SZC Map

Drawings

SZC-SZ0204-XX-000-DRW-100041RevP04

A140/B1078 Existing Highway Layout

SZC-SZ0204-XX-000-DRW-100043RevP03

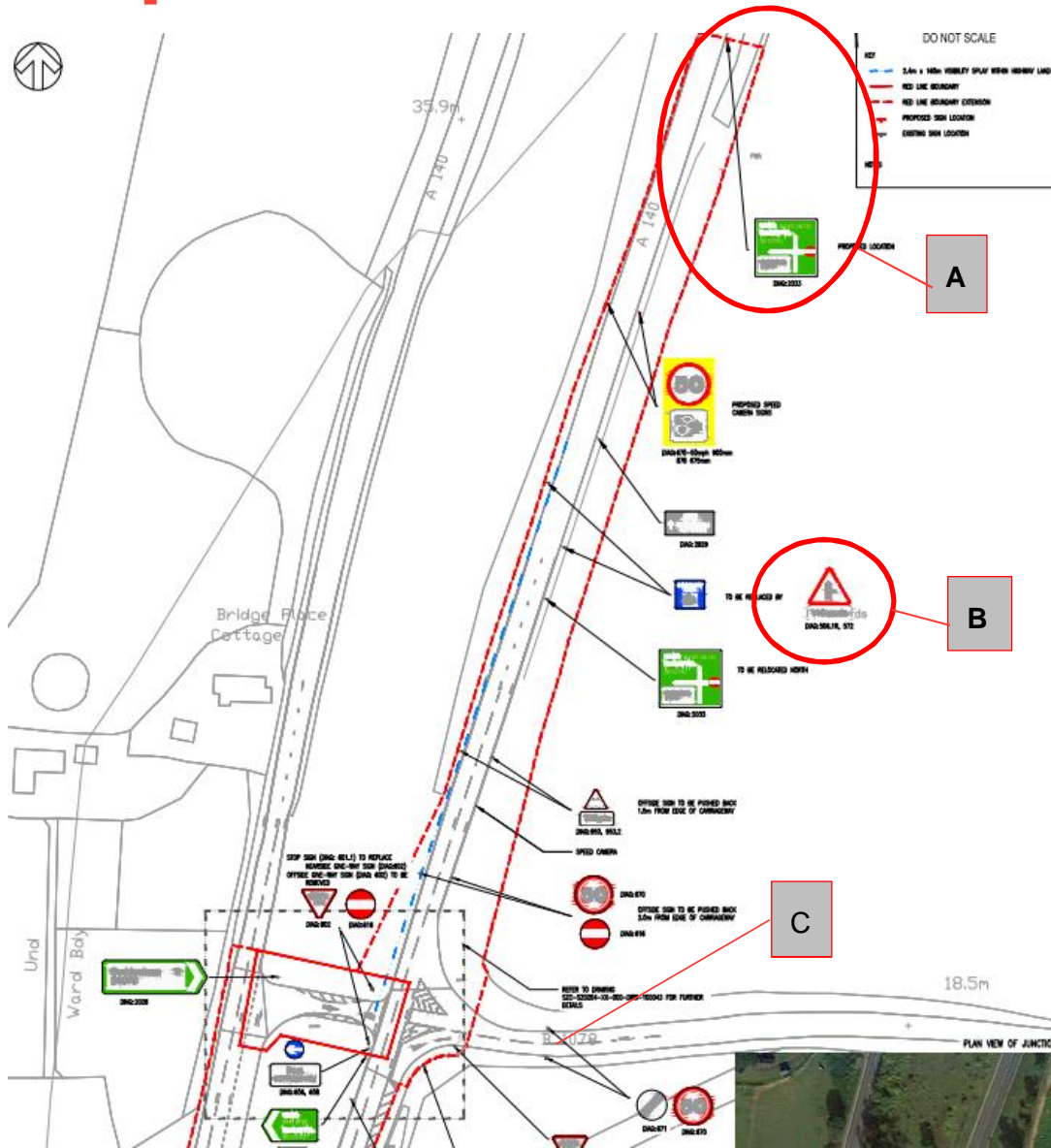
A140/B1078 Proposed Highway Layout



Appendix B



PROBLEM LOCATION PLAN





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Suffolk County Council

***SIZEWELL C
B1078/B1079 JUNCTION***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C B1078/B1079 JUNCTION

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF2

WSP

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Birmingham

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WSP.com

DATE: SEPTEMBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	30/09/19			
Prepared by	Neil Jones			
Signature	[Redacted]			
Checked by	Dave Minshall			
Signature	[Redacted]			
Authorised by	Axel Kappeler			
Signature	[Redacted]			
Project number	50400326			
Report number	50400326/2019/Ref2			
File reference	As above			



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2. INTRODUCTION	3
3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT	5
4. AUDIT TEAM STATEMENT	6

APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C - B1078/B1079 Junction Stage 1 Road Safety Audit</i>
Date:	<i>September 2019</i>
Document reference and revision:	<i>50400326/2019/Ref2</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the Sizewell C - B1078/B1079 Junction scheme on behalf of Steve Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steve Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng,MICE,MCIHT,MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steve Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Monday 23rd September 2019 between 1:15pm – 2pm. The weather was fine with sunny spells. The road surface was dry during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. The set-back visibility splay on a junction for 100kph should be 215m, 160m being one step below desirable minimum. 120m represents two steps below and 90m three steps below.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

This aspect of the scheme consists of highway improvements to the B1078/B1079 junction. These consist of signing and road marking alterations.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1. SIGNING

3.2. PROBLEM 1

Location: A – Junction of the B1089 and the B1079.

Summary: Risk of drivers overshooting the junction.

The existing give way sign at the junction of the B1089 and the B1079 is partially masked by the speed limit signing (see Photo 1). Drivers approaching the junction from the west, have difficulty in seeing the sign, and the proposed give way sign is to be located in a similar location. Therefore, there is a risk of the new sign being obscured by the speed limit sign. This may increase the risk of drivers failing to identify the need to give way at this junction resulting in overshoot collisions with vehicles on the B1079.



Photo 1 – View of the give way sign obscured by the speed limit signs

RECOMMENDATION:

It is recommended that the give way sign be located so that it is clearly seen by approaching drivers and/or that an additional give way sign be located on the offside where it would be in the driver's eye-line.

3.3. PROBLEM 2

Location: B – B1078 on approach to its junction with the B1079.

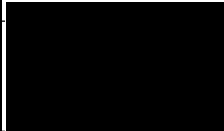

Summary: Risk of drivers overshooting the junction.

The proposals include replacing the existing advance give way signs. However, both advance give way signs display the same distance sub-plate of 100yds even though they are located at different distances from the give way markings. This may lead to drivers becoming confused as to the distance to the give way line resulting in overshoot collisions.

RECOMMENDATION:

It is recommended that the distance to hazard sub-plates of the advance give way signs be amended to show the correct distance to the give way line.

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	3009/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19



Appendix A



DOCUMENT LIST

Documents

Collision data
SZC Map

Drawings

SZC-SZ0204-xx-000-DRW-100046RevP04 B1078 Existing and Proposed Highway Layout combined

SZC-SZ0204-xx-000-DRW-100047RevP06 B1078/B1079 Proposed Highway Layout

Appendix B



PROBLEM LOCATION PLAN



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Suffolk County Council

***SIZEWELL C
BRIDLEWAY 19***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C BRIDLEWAY 19

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF18

WSP

The Mailbox

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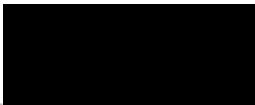
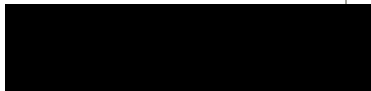
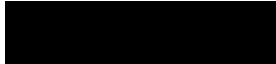
B1 1RT

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DATE: OCTOBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	03/10/19			
Prepared by	Neil Jones			
Signature				
Checked by	Dave Minshall			
Signature				
Authorised by	Axel Kappeler			
Signature				
Project number	50400326			
Report number	50400326/2019/Ref18			
File reference	As above			



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4. AUDIT TEAM STATEMENT	7

APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C – Bridleway 19 Stage 1 Road Safety Audit</i>
Date:	<i>October 2019</i>
Document reference and revision:	<i>50400326/2019/Ref18</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the *Sizewell C – Bridleway 19* scheme on behalf of Steven Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steven Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steven Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Tuesday 24th September 2019 between 12:30pm – 1:30pm. The weather was raining with sunny spells. The road surface was wet during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. The Pegasus crossing on B1122 immediately to the south of the relocated Lovers Lane Junction may be considered to be a departure from standard with the signals positioned less than 25m from the junction.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

Bridleway 19 provides a new pedestrian / cycleway and equestrian link from Sizewell GAP / Lovers Lane (starting to the east of the junction with King Georges Avenue) through to the junction of Roundhouse Lane on Eastbridge Road via the B1122 Abbey Road. The proposal is intended to provide a non-motorised user (NMU) route separated from Lovers Lane and B1122 which will be subject to increased traffic including Heavy Goods Vehicles (HGVs) during the Sizewell C expansion construction phase. The scheme also includes the diversion of the Public Right of Way in the fields to the west of the GRR. Whilst being separated from public highways for the most part the NMU route interfaces with the highways as follows;

- 1) Pegasus crossing of Eastbridge Road and B1122 in close proximity to the Main Site Access roundabout on the B1122.
- 2) Uncontrolled crossing of the access road to Leiston Abbey off B1122 Abbey Road.
- 3) Uncontrolled crossing of Abbey Lane at the junction with B1122
- 4) Crossing of the proposed GRR level crossing on the B1122 to the north of the (relocated) Lovers Lane junction.
- 5) Pegasus crossing of the B1122 to the south of the (relocated) Lovers Lane junction
- 6) Pegasus crossing on Lovers Lane to the north of the cross roads with Sandy Lane / Valley Road.
- 7) Pedestrian / cycle link to the temporary worker site access on Valley Road requiring uncontrolled crossings of Valley Road and field access.
- 8) Uncontrolled crossing on Sizewell Gap at southern termination of route.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1. WALKERS, CYCLISTS AND HORSE RIDERS

3.2. PROBLEM 1

Location: A – Bridleway crossing at the Lovers Lane / B1122 junction.

Summary: Risk that the bridleway pen will reduce visibility for road users.

Bridleway 19 is to cross over the B1122 to the south of its junction with Lovers Lane. The bridleway crossing has pens, consisting of post and rail fencing, on either side of the B1122 to provide a safe waiting area for horse riders. Due to the close proximity of the bridleway crossing to the Lovers Lane junction, there is a risk that the pen may restrict visibility for drivers attempting to exit Lovers Lane onto the B1122 resulting in a collision.

RECOMMENDATION:

It is recommended that the bridleway pens be located / constructed so they do not restrict visibility for other road users.

3.3. PROBLEM 2

Location: B – Bridleway crossing at the Lovers Lane / B1122 junction.

Summary: Risk that drivers existing Lovers Lane will fail to stop for horse riders crossing.

Bridleway 19 is to cross over the B1122 to the south of its junction with Lovers Lane. The bridleway crossing is a Pegasus crossing, requiring road users to stop when faced with a red traffic signal, allowing horse riders to cross. However, due to the close proximity of the crossing to the Lovers Lane junction, there is a risk of drivers exiting Lovers Lane and turning left, failing to identify the crossing resulting in a red-light violation and potentially colliding with horse riders crossing the B1122. Visibility at the junction may be further compromised due to Lovers Lane being within a cutting on the approach to the B1122.

RECOMMENDATION:

It is recommended that drivers on Lovers Lane are made aware of the Pegasus crossing on the B1122 and it can clearly be seen from the Lovers Lane junction.

3.4. PROBLEM 3

Location: C – Proposed bridleway between the north and western arms of the proposed Main Site Access roundabout.

Summary: Risk of walkers, cyclists and horse riders falling down embankment at rear of facility.

The proposed bridleway guides walkers, cyclists and horse riders between the north and western arms of the new roundabout. The bridleway is 3 metres in width, with an embankment adjacent to its northern edge. The narrow width of the facility (considering all users can utilise this facility) combined with the close proximity to the top of the embankment could lead to a walker, cyclist and horse rider falling down the embankment resulting in injury.

RECOMMENDATION:

It is recommended that either the Bridleway be widened (potential for widening shown on drawings) or a post and rail fence be provided at the top of the embankment.

3.5. PROBLEM 4

Location: Various– Bridleway crossings and on-street sections of Bridleway.

Summary: Risk to drivers failing to realise the possibility of horse riders crossing the carriageway or riding within / adjacent to the carriageway.

There are a number of Pegasus crossings proposed as part of Bridleway 19. Due to the rural nature of the area, drivers may not be expecting a signalised crossing and be slow to react to the red signal. Also, the Bridleway has an on-street section at Sandy Lane where horse riders and other road users will be forced to share the carriageway space. In addition, the Bridleway is very close to the edge of carriageway where it crosses the level crossing on the B1122 and horses may become spooked should a vehicle pass too close or at high speeds.

RECOMMENDATION:

It is recommended that warning signs are provided in advance of any section of Bridleway which crosses a carriageway or where horse-riders are forced to ride along a carriageway or horse riders are unsegregated from passing traffic.

3.6. PROBLEM 5

Location D – B1122 Abbey Road

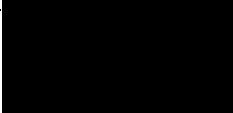

Summary: New residential development access not considered within scheme design

There is a new residential development and associated access on the west side of B1122 Abbey Road, close to the location of the realigned Lovers Lane junction. This is not shown on the design drawings nor was sufficient information available to determine the geometry of the possible staggered cross roads during the site visit. The bridleway will cross the new junction, although how this will be achieved has not been addressed. Without holding pens at the bellmouth crossing there is risk of collision between equestrians, cyclists and pedestrians, or riders losing control of horses and their entering the road in front of traffic.

RECOMMENDATION:

It is recommended that the bridleway design be amended to include safe crossing of the new development access and new Lovers Lane junction be designed taking into account the new development access to help avoid any safety related issues involving turning vehicles.

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	03/10/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	ITS Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	03/10/19

Appendix A

DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

<i>SZC-SZ0204-XX-000-DRW-100118-E</i>	<i>Pedestrian/Cycleway/Bridleway 1 of 6</i>
<i>SZC-SZ0204-XX-000-DRW-100119-I</i>	<i>Pedestrian/Cycleway/Bridleway 2 of 6</i>
<i>SZC-SZ0204-XX-000-DRW-100120-H</i>	<i>Pedestrian/Cycleway/Bridleway 3 of 6</i>
<i>SZC-SZ0204-XX-000-DRW-100121-G</i>	<i>Pedestrian/Cycleway/Bridleway 4 of 6</i>
<i>SZC-SZ0204-XX-000-DRW-100122-K</i>	<i>Pedestrian/Cycleway/Bridleway 5 of 6</i>
<i>SZC-SZ0204-XX-000-DRW-100123-J</i>	<i>Pedestrian/Cycleway/Bridleway 6 of 6</i>

Appendix B



PROBLEM LOCATION PLAN



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Suffolk County Council

***SIZEWELL C
BUCKLESWOOD ROAD LEVEL
CROSSING***

Stage 1 Road Safety Audit



Suffolk County Council

**SIZEWELL C
BUCKLESWOOD ROAD LEVEL CROSSING**

Stage 1 Road Safety Audit

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PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF17

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DATE: OCTOBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	03/10/19			
Prepared by	Neil Jones			
Signature	[Redacted]			
Checked by	Dave Minshall			
Signature	[Redacted]			
Authorised by	Axel Kappeler			
Signature	[Redacted]			
Project number	50400326			
Report number	50400326/2019/Ref17			
File reference	As above			



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APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C – Buckleswood Road Level Crossing Stage 1 Road Safety Audit</i>
Date:	<i>October 2019</i>
Document reference and revision:	<i>50400326/2019/Ref17</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the *Sizewell C – Buckleswood Road Level Crossing* scheme on behalf of Steven Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steven Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steven Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Tuesday 24th September 2019 between 1pm – 2pm. The weather was raining. The road surface was wet during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. The audit team were not notified of any departures from standards.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

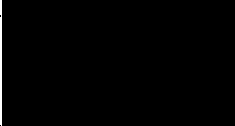
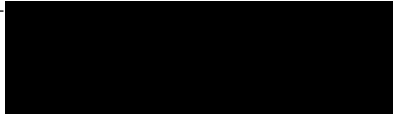
The GRR will cross the existing Buckleswood Road highway to the northwest of Leiston village. Modifications to the existing carriageway include local widening either side of the level crossing to achieve 5.0m width at the signalised level crossing. The level crossing will be elevated above the existing road level to accommodate drainage and therefore the regrading of the approach roads will be required. No changes to the road geometry are proposed other than those discussed above.



3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

There were no road safety issues identified during the Stage 1 Road Safety Audit

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	03/10/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	ITS Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	03/10/19



Appendix A



DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

SZC-SZ0204-XX-000-DRW-100089-P05 Buckleswood Road Level Crossing Layout

Appendix B



PROBLEM LOCATION PLAN

Not Required



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Suffolk County Council

***SIZEWELL C
DARSHAM (NORTHERN PARK AND
RIDE)***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C DARSHAM (NORTHERN PARK AND RIDE)

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF9

WSP

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Birmingham

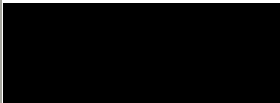
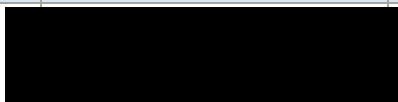
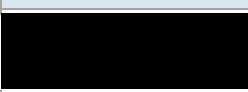
B1 1RT

WSP.com

DATE: OCTOBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	02/10/19			
Prepared by	Neil Jones			
Signature				
Checked by	Dave Minshall			
Signature				
Authorised by	Axel Kappeler			
Signature				
Project number	50400326			
Report number	50400326/2019/Ref9			
File reference	As above			



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APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C – Darsham Northern Park and Ride Stage 1 Road Safety Audit</i>
Date:	<i>October 2019</i>
Document reference and revision:	<i>50400326/2019/Ref9</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the *Sizewell C – Darsham Northern Park and Ride* scheme on behalf of Steven Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steven Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steven Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Tuesday 24th September 2019 between 9am – 10am. The weather was raining. The road surface was wet during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. The audit team was notified of departures on the western approach to the roundabout to achieve better deflection within the available red line boundary.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

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2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

This aspect of the scheme consists of a new at-grade roundabout on the A12 to provide access to the Darsham Park and Ride facility.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1. ALIGNMENT

3.2. PROBLEM 1

Location: A – Willow Marsh Lane East junction with Western Approach Park and Ride Access.

Summary: Risk of agricultural vehicles being involved in head-on collisions and/or depositing mud onto the carriageway.

The junction of Willow Marsh Lane East with Western Approach appears to be very narrow. Willow Marsh Lane provides access for agricultural vehicles to fields and barns (see Photo 1). Should the junction be of insufficient width, large vehicles could be forced to either encroach into the opposing traffic lanes which could result in head-on collisions or side swipe collisions. The large vehicles could also be forced to drive on the highway verge which may bring dirt and mud onto the carriageway which could increase the risk of a vehicle losing control.



Photo 1 – Willow Marsh Lane

RECOMMENDATION:

It is recommended that the Willow Marsh Lane East/Western Approach junction be of sufficient construction to accommodate the likely users.

3.3. SIGNING

3.4. PROBLEM 2

Location: B – A12/Western Approach roundabout.

Summary: Risk of drivers failing to correctly negotiate the roundabout.

The proposed new roundabout at the junction of the A12 and Western Approach has three arms. Each arm has chevron signs and keep left signs to help guide drivers in the correct direction around the roundabout. However, whilst the two A12 arms have 2 chevron signs along with a keep left sign within the island, the Western Approach arm of the roundabout only has a single chevron sign proposed. This may increase the risk of a driver failing to identify the need to proceed to the left at the roundabout, potentially leading to a head-on collision.

RECOMMENDATION:

It is recommended that a minimum of two chevrons are provided along with the keep left arrow on each arm of the roundabout.

3.5. PROBLEM 3

Location C – A12 Northbound Approach to roundabout


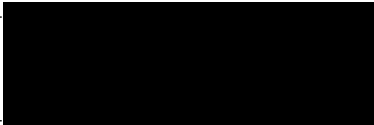
Summary: Incorrect placement of signs

Existing speed limits change signage is shown to be installed on the 'old' line of the A12. This may result in drivers approaching the roundabout at excessive speeds and risk overshoot of the give way line and increased risk of collision. The visual 'gateway' created by the signage may also result in drivers heading towards them and entering the opposing traffic lane with risk of head on collision.

RECOMMENDATION:

It is recommended that the speed limit signage is installed on the realigned A12 approach towards the roundabout.

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	02/10/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	02/10/19



Appendix A



DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

SZC-SZ0204-XX-000-DRW-100022_P07

Northern Park and Ride Willow March Lane

Access – Highway Works

SZC-SZ0204-XX-000-DRW-1000XX_P02

Northern Park and Ride Willow March Lane

Access – Proposed Profiles



Appendix B



PROBLEM LOCATION PLAN



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Suffolk County Council

***SIZEWELL C
FREIGHT MANAGEMENT FACILITY***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C FREIGHT MANAGEMENT FACILITY

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF4

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DATE: SEPTEMBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	30/09/19			
Prepared by	Neil Jones			
Signature				
Checked by	Dave Minshall			
Signature				
Authorised by	Axel Kappeler			
Signature				
Project number	50400326			
Report number	50400326/2019/Ref4			
File reference	As above			



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APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C - Freight Management Facility Stage 1 Road Safety Audit</i>
Date:	<i>September 2019</i>
Document reference and revision:	<i>50400326/2019/Ref4</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the Sizewell C - *Freight Management Facility Ride* scheme on behalf of Steve Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steve Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steve Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Monday 23rd September 2019 between 2:30pm – 3:30pm. The weather was fine with sunny spells. The road surface was dry during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. The audit team were not notified of any departures from standards.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

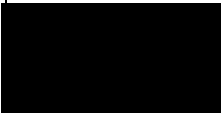
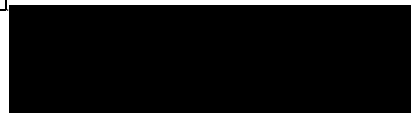
This aspect of the scheme consists of highway improvements to Felixstowe Road. These consist of a new junction with associated road marking improvements on Felixstowe Road.



3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

There were no road safety issues during this Stage 1 Road Safety Audit

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19



Appendix A



DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

SZC-SZ0204-XX-000-DRW-100XXXRevP05

Proposed Highway Layout – Seven Hills

Appendix B



PROBLEM LOCATION PLAN

Not Required



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Suffolk County Council

***SIZEWELL C
GRR LEVEL CROSSING***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C GRR LEVEL CROSSING

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF16

WSP

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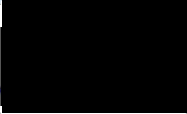
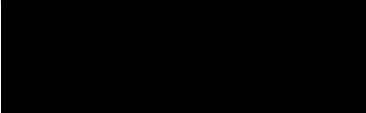

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DATE: OCTOBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	03/10/19			
Prepared by	Neil Jones			
Signature				
Checked by	Dave Minshall			
Signature				
Authorised by	Axel Kappeler			
Signature				
Project number	50400326			
Report number	50400326/2019/Ref16			
File reference	As above			



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APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C – GRR Level Crossing Stage 1 Road Safety Audit</i>
Date:	<i>October 2019</i>
Document reference and revision:	<i>50400326/2019/Ref16</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the *Sizewell C – GRR Level Crossing* scheme on behalf of Steven Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steven Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steven Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Tuesday 24th September 2019 between 12:30pm – 13:30pm. The weather was raining with sunny spells. The road surface was wet during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. The audit team were not notified of any departures from standards.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

The GRR will cross the existing B1122 highway to the north of Leiston village on-route to the Sizewell C construction site. Modifications are required to the B1122 to construct a signalised level crossing including the raising of the road level at the crossing point by 1.5m to 10m AOD. The horizontal geometry of the road is relatively unaffected. The GRR Level crossing location clashes with the existing junction to Lovers Lane. The Lovers Lane junction is to be relocated 80m to the south of the crossing (refer to Lovers Lane Safety RSA brief 50400326-GG119-LL1). In addition, Bridleway 19 will cross the B1122 to the south of the new Lovers Lane Junction and continue to the west of the B1122, including across the Level Crossing.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1. SIGNING

3.2. PROBLEM 1

Location: A – B1122 southbound approach to crossing.

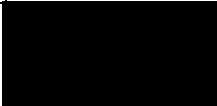
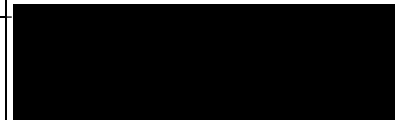
Summary: Risk of crossing signals being obscured by parked vehicles.

The level crossing is due to have a set of signals on either side to inform drivers of the need to stop when a train is approaching and the barriers are to be closed. However, the signals on the southbound carriageway are located in close proximity to a maintenance parking bay. If a high sided vehicle were to be parked in the maintenance bay, it may obscure drivers' view of the signals, increasing the risk of vehicles failing to stop when a train is approaching/crossing the road.

RECOMMENDATION:

It is recommended that the signals can be clearly viewed by drivers on approach to the crossing.

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	03/10/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	ITS Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	03/10/19



Appendix A



DOCUMENT LIST

Documents

Collision data

SZC Map

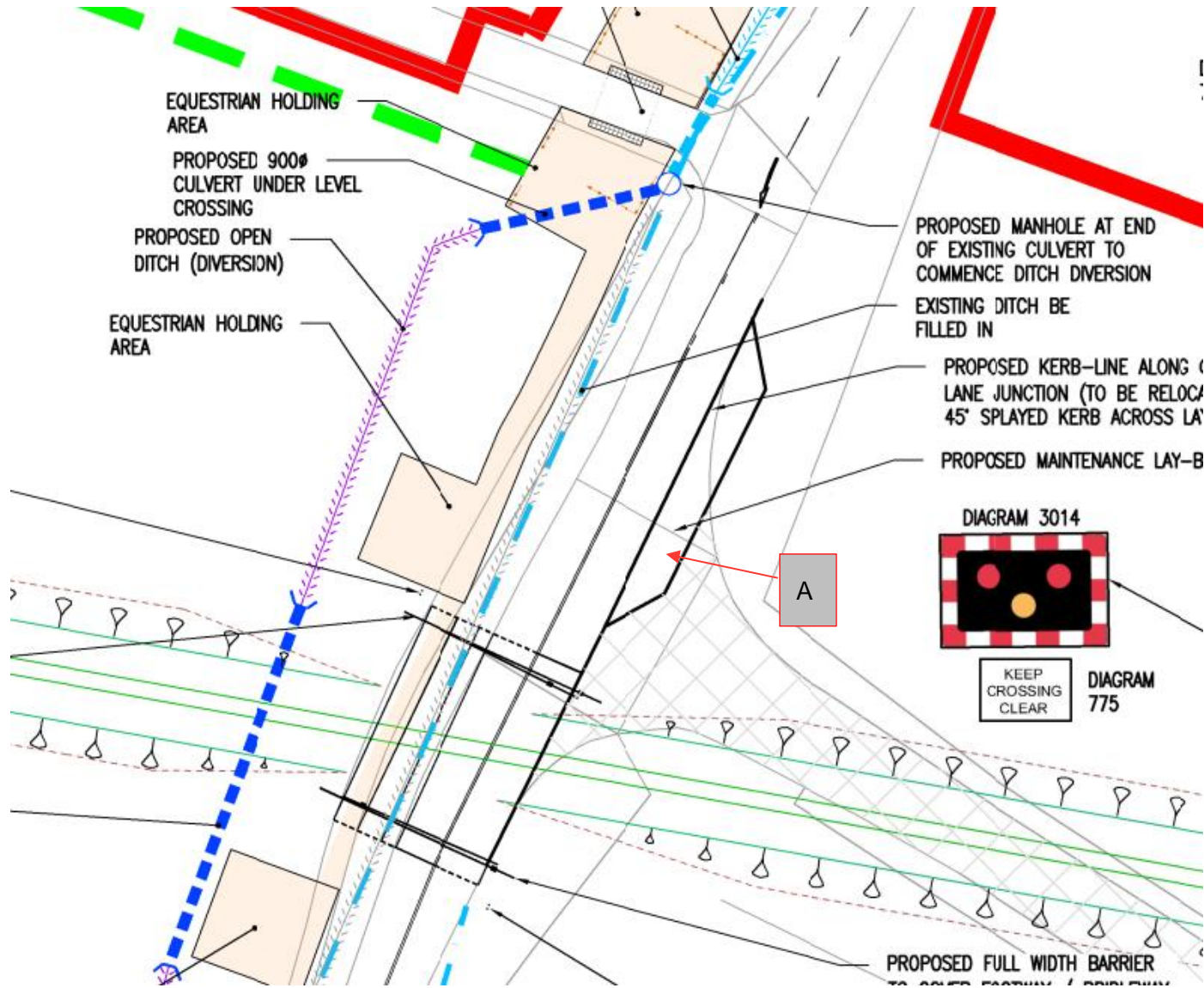
Drawings

SZC-SZ0204-XX-000-DRW-100010-P05 B1122 Abbey road Level Crossing Plan

Appendix B



PROBLEM LOCATION PLAN





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Suffolk County Council

SIZEWELL C

***KING GEORGES AVENUE/VALLEY
ROAD***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C KING GEORGES AVENUE/VALLEY ROAD

Stage 1 Road Safety Audit

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PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF14

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DATE: OCTOBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	02/10/19			
Prepared by	Neil Jones			
Signature	[Redacted]			
Checked by	Dave Minshall			
Signature	[Redacted]			
Authorised by	Axel Kappeler			
Signature	[Redacted]			
Project number	50400326			
Report number	50400326/2019/Ref14			
File reference	As above			



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4. AUDIT TEAM STATEMENT	6

APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C – King Georges Avenue/Valley Road Stage 1 Road Safety Audit</i>
Date:	<i>October 2019</i>
Document reference and revision:	<i>50400326/2019/Ref14</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the *Sizewell C – King Georges Avenue/Valley Road* scheme on behalf of Steven Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steven Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steven Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Tuesday 24th September 2019 between 11:30am – 12:30pm. The weather was raining. The road surface was wet during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. The audit team were not notified of any departures from standards.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

The scheme involves the construction of an access bell mouth into the temporary construction site (Big Field). This serves the bottom third area of the site to be used for predominately for parking / bus pick-up. Other than the junction construction King Georges Avenue highway will be unaffected.

Immediately off the junction with Lovers Lane, Valley Road is to be widened to accept two-way traffic and provide access into the worker accommodation area of the Big Field site. A more formal access into the field opposite the Big Field junction is to be provided. The junction of Valley Road / Lovers Lane is to be re-constructed to accommodate vehicle movements.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1. WALKERS, CYCLISTS AND HORSE RIDERS

3.2. PROBLEM 1

Location: A – Footway/cycleway through the Big Field

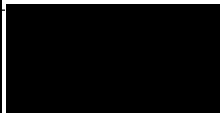

Summary: Footway/cycleway width may cause collisions between users.

There is a proposed footway/cycleway from Valley Road to the north through the Big Field. The facility is 1.5m in width for two-way cycle and pedestrian usage. This narrow width may be insufficient to allow cyclists and pedestrians to pass each other safely, increasing the risk of collision between the users.

RECOMMENDATION:

It is recommended that the footway/cycleway be of sufficient width to allow users to safely pass each other.

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	02/10/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	02/10/19



Appendix A



DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

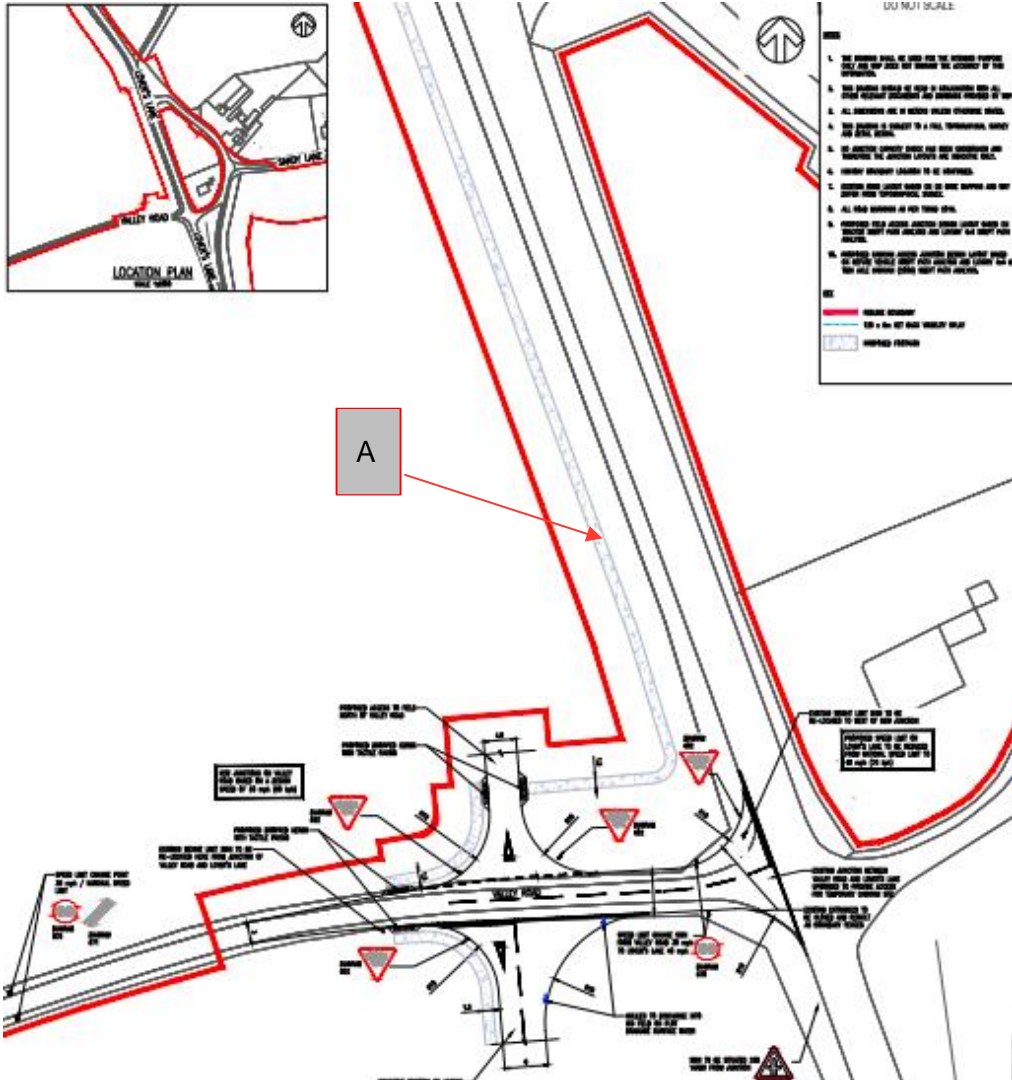
SZC-SZ0204-XX-000-DRW-100128-P04 Valley Road Proposed Junction General Arrangement

SZC-SZ0204-XX-000-DRW-100129-P03 King Georges Avenue Proposed Junction Layout

Appendix B



PROBLEM LOCATION PLAN





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Suffolk County Council

***SIZEWELL C
LOVERS LANE***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C LOVERS LANE

Stage 1 Road Safety Audit

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PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF15

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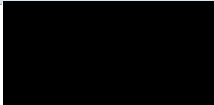
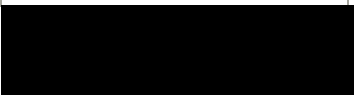
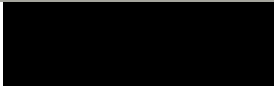
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DATE: OCTOBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	03/10/19			
Prepared by	Neil Jones			
Signature				
Checked by	Dave Minshall			
Signature				
Authorised by	Axel Kappeler			
Signature				
Project number	50400326			
Report number	50400326/2019/Ref15			
File reference	As above			



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APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C – Lovers Lane Stage 1 Road Safety Audit</i>
Date:	<i>October 2019</i>
Document reference and revision:	<i>50400326/2019/Ref15</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the *Sizewell C – Lovers Lane* scheme on behalf of Steve Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steve Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steve Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Tuesday 24th September 2019 between 12pm – 1pm. The weather was raining with sunny spells. The road surface was wet during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. Departures from standard are required on the realigned section of road in the vicinity of the site access ghost island junction. Specifically, the horizontal radii on the realigned road is 180m which is 2 steps below the requirement for a 70kph design speed road within Table 3 TD 9/93. This is constrained by the redline boundary and space required for the WMZ 6 Balancing Pond. It is considered that the tighter radii will discourage overtaking / speeding on the bend and therefore improve safety on the approaches to the ghost island junction.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

Lovers Lane highway will be used to provide the primary access to the Sizewell C construction site for Heavy Goods Vehicle (HGV) deliveries. The road also links the construction site access to the temporary worker site (Big Field) situated to the south on Lovers Lane. Access to Lovers Lane will be from the A12 to the north via the B1122. HGV access via Leiston Village being prohibited under normal circumstances.

Lovers Lane has a revised design speed limit of 70kph reverting back to 100kph to the south of the Big Field access junction. The highway improvements on Lovers Lane comprise of the following;

- 1) Re-location of the Lovers Lane junction on the B1122 to the south. The existing junction clashes with the proposed Green Rail Route (GRR). A new section of approach road to the junction is proposed to tie back into Lovers Lane.
- 2) Re-alignment of Lovers Lane in the vicinity of the proposed construction site access and provision of a ghost island junction at the access. The existing road possess adverse bends at this location and clashes with the proposed WMZ 6 balancing pond location. The scope includes the construction site access down to the crossing point of the GRR.
- 3) Provision of a Pegasus Road crossing to the north of the Valley Road cross roads. This is for the Bridleway 19 pedestrian / cyclist / equestrian route which runs along Lovers Lane from King Georges Avenue junction through to the B1122.
- 4) Off slip access to the Recycle Centre to the north of the Valley Road junction.
- 5) Widening of Lovers Lane to accommodate a ghost island and new HGV access into the 'Big Field'.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1. WALKERS, CYCLISTS AND HORSE RIDERS

3.2. PROBLEM 1

Location: A – Bridleway crossing at the Lovers Lane / B1122 junction.

Summary: Risk that the bridleway pen will reduce visibility for road users.

Bridleway 19 is to cross over the B1122 to the south of its junction with Lovers Lane. The bridleway crossing has pens, consisting of post and rail fencing, on either side of the B1122 to provide a safe waiting area for horse riders. Due to the close proximity of the bridleway crossing to the Lovers Lane junction, there is a risk that the pen may restrict visibility for drivers attempting to exit Lovers Lane onto the B1122 resulting in a collision.

RECOMMENDATION:

It is recommended that the bridleway pens be located/constructed so they do not restrict visibility for other road users.

3.3. PROBLEM 2

Location: B – Bridleway crossing at the Lovers Lane / B1122 junction.

Summary: Risk that drivers exiting Lovers Lane will fail to stop for horse riders crossing.

Bridleway 19 is to cross over the B1122 to the south of its junction with Lovers Lane. The bridleway crossing is a Pegasus crossing, requiring road users to stop when faced with a red traffic signal, allowing horse riders to cross. However, due to the close proximity of the crossing to the Lovers Lane junction, there is a risk of drivers exiting Lovers Lane and turning left, failing to identify the crossing resulting in a red-light violation and potentially colliding with horse riders crossing the B1122. Visibility at the junction may be further compromised due to Lovers Lane being within a cutting on the approach to the B1122.

RECOMMENDATION:

It is recommended that drivers on Lovers Lane are made aware of the Pegasus crossing on the B1122 and that it can clearly be seen from the Lovers Lane junction.

3.4. PROBLEM 3

Location D – B1122 Abbey Road

Summary: New residential development access not considered within scheme design

There is a new residential development and associated access on the west side of B1122 Abbey Road, close to the location of the realigned Lovers Lane junction. This is not shown on the design drawings nor was sufficient information available to determine the geometry of the possible staggered cross roads during the site visit. The bridleway will cross the new junction, although how this will be achieved has not been addressed. Without holding pens at the bellmouth crossing there

is risk of collision between equestrians, cyclists and pedestrians, or riders losing control of horses and their entering the road in front of traffic.

RECOMMENDATION:

It is recommended that the bridleway design be amended to include safe crossing of the new development access and new Lovers Lane junction be designed taking into account the new development access to help avoid any safety related issues involving turning vehicles.

SIGNS

3.5. PROBLEM 4

Location: C – Recycle centre on Lovers Lane

Summary: Increased risk of collisions between traffic on Lovers Lane and queuing traffic.

There is an existing Recycle Centre on Lovers Lane (see Photo 1). The Recycle Centre appears to suffer from queuing traffic (due to existing ‘Queues Likely Ahead’ signs and observations on site). With traffic flows likely to increase due to the Sizewell project, there is an increased risk of vehicles travelling along Lovers Lane colliding with the rear of stationary traffic waiting to turn into the Recycle Centre. This issue is compounded due to the Recycle Centre being sited in a location which is not clearly identifiable for northbound traffic and is over the crest of a summit. Any queues are, therefore, unlikely to be seen until a driver passes over the summit. Whilst a ‘left turn in’ taper is proposed to help alleviate the queuing southbound into the Recycle Centre, a right turn island is not proposed for northbound traffic wishing to turn right into the centre. The increased traffic levels are likely to increase the risk of vehicles on Lovers Lane colliding with stationary traffic at the Recycle Centre.


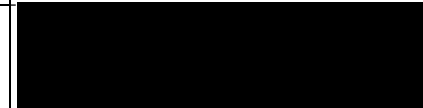


Photo 1 – View south of the Recycle Centre

RECOMMENDATION:

It is recommended that a right turn lane be provided to provide a safe waiting area for vehicles waiting to turn right into the Recycle Centre.

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	03/10/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	03/10/19

Appendix A

DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

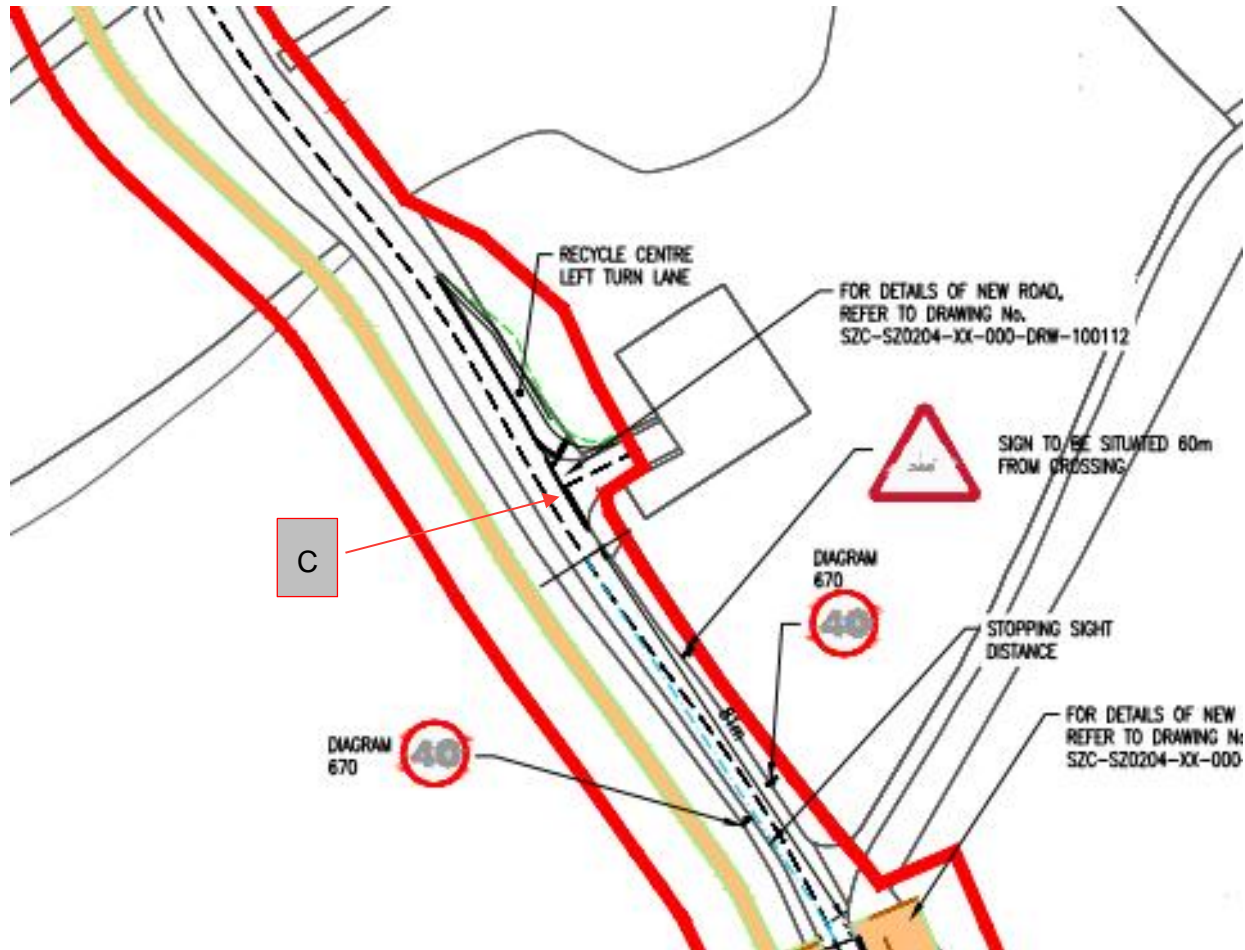
<i>SZC-SZ0204-XX-000-DRW-100104-P08</i>	<i>Lovers Lane Improvement Works Sheet1</i>
<i>SZC-SZ0204-XX-000-DRW-100105-P08</i>	<i>Lovers Lane Improvement Works Sheet2</i>
<i>SZC-SZ0204-XX-000-DRW-100106-P07</i>	<i>Lovers Lane Improvement Works Sheet3</i>
<i>SZC-SZ0204-XX-000-DRW-100110-P05</i>	<i>Lovers Lane B1122 Junction</i>
<i>SZC-SZ0204-XX-000-DRW-100111-P06</i>	<i>Lovers Lane Secondary Site Access Junction</i>
<i>SZC-SZ0204-XX-000-DRW-100112-P05</i>	<i>Lovers Lane Recycle Centre Left Turn Lane and Pegasus Crossing</i>
<i>SZC-SZ0204-XX-000-DRW-100114-P05</i>	<i>Lovers Lane Widening and Big Field Access Junction</i>



Appendix B



PROBLEM LOCATION PLAN





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Suffolk County Council

***SIZEWELL C
MAIN SITE ACCESS***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C MAIN SITE ACCESS

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF13

WSP

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DATE: OCTOBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	02/10/19			
Prepared by				
Signature				
Checked by	Dave Minshall			
Signature				
Authorised by	Axel Kappeler			
Signature				
Project number	50400326			
Report number	50400326/2019/Ref13			
File reference	As above			



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3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT	5
4. AUDIT TEAM STATEMENT	6

APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C – Main Site Access Stage 1 Road Safety Audit</i>
Date:	<i>October 2019</i>
Document reference and revision:	<i>50400326/2019/Ref13</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the *Sizewell C – Main Site Access* scheme on behalf of Steven Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steven Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steven Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Tuesday 24th September 2019 between 11am – 12pm. The weather was raining. The road surface was very wet during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. *No departures from standard have been formally submitted to the Highway Authority for approval at this stage. However, a few potential departures from standard have been identified that may or may not be required depending on the outcome of later design stages.*

Western Arm (B1122) forward visibility on approach to proposed roundabout - Tree and vegetation clearance will be required to achieve 120m DMSSD. If these clearance works prove not to be possible a departure from standard would be required.

Southern Arm (B1122) forward visibility on the exit from the roundabout - Tree and vegetation clearance will be required to achieve 120m DMSSD. If these clearance works prove not to be possible a departure from standard would be required. (copied from the Brief).

Northern Arm (East Bridge Road) combination of a relaxation in horizontal curvature (90m radii) and relaxation in superelevation (3.5%). (the above is copied directly from the Brief)

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

This aspect of the scheme includes a new at-grade 4-arm roundabout on the B1122 to provide access to the Sizewell main site.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1. WALKERS, CYCLISTS AND HORSE RIDERS

3.2. PROBLEM 1

Location: A – Proposed bridleway between the north and western arms of the roundabout.

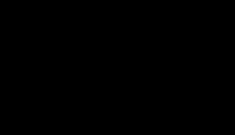

Summary: Risk of walkers, cyclists and horse riders (WC&HRs) falling down embankment at rear of facility.

The proposed bridleway guides WC&HRs between the north and western arms of the new roundabout. The bridleway is 3 metres in width, with an embankment adjacent to its northern edge. The narrow width of the route (considering all users can utilise this facility) combined with the close proximity to the top of the embankment could lead to a WC&HR falling down the embankment resulting in injury.

RECOMMENDATION:

It is recommended that either the Bridleway be widened (potential for widening shown on drawings) or a post and rail fence be provided at the top of the embankment.

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	02/10/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	02/10/19



Appendix A



DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

SZC-SZ0204-XX-000-DRW-100000_P01 Main Site Access Roundabout Proposed layout

SZC-SZ0204-XX-000-DRW-100002_P01 Main Site Access Roundabout Utility Plan

SZC-SZ0204-XX-000-DRW-100001_P01 Main Site Access Roundabout Proposed Vertical Profiles

Appendix B



PROBLEM LOCATION PLAN



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Suffolk County Council

SIZEWELL C
SIZEWELL LINK ROAD

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C SIZEWELL LINK ROAD

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF11

WSP

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DATE: OCTOBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	02/10/19			
Prepared by				
Signature				
Checked by	Dave Minshall			
Signature				
Authorised by	Axel Kappeler			
Signature				
Project number	50400326			
Report number	50400326/2019/Ref11			
File reference	As above			



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APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C – Sizewell Link Road Stage 1 Road Safety Audit</i>
Date:	<i>October 2019</i>
Document reference and revision:	<i>50400326/2019/Ref11</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the *Sizewell C – Sizewell Link Road (SLR)* scheme on behalf of Steven Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steven Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steven Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Tuesday 24th September 2019 between 10:30am – 11:30am. The weather was raining. The road surface was very wet during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. *Departures required on the A12/SLR roundabout north and south approaches and B1122/MMLR¹ roundabout west approach. Specifically, the horizontal radii on the approaches of the existing roads (i.e. A12 and B1122) are tighter than the ones indicated in TD9/93 Table 3. This was required to achieve a better deflection within the available red line boundary. (copied from Brief).*

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be

¹ Middleton Moor Link Road

produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

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Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

The Sizewell Link Road (SLR) has a design speed of 100kph. It would connect the A12 to a new roundabout, whilst bypassing the existing B1122 and settlements of Middleton Moor and Theberton and re-joins the B1122 to the east of Theberton. A new roundabout will be located on the B1122 (west of Middleton Moor) and a new link road will connect this to the SLR at a T-junction.

Seven additional T-junctions are proposed on the SLR between Middleton Moor Link Road (MMLR) and the east end tie in to the B1122.

Currently, all the T-junctions have been designed as ghost island junctions with provisions for non-motorised users (NMU)s to provide continuity of the public right of way (PROW).

The western section of SLR (i.e. between the A12 roundabout and MMLR junction) has geometry that would allow overtaking, but this has not been an important consideration in the design.

ROAD MARKINGS

3.5. PROBLEM 4

Location: D – Side road junctions at chainages 4100 and 5900

Summary: Increased risk of collisions between vehicles waiting to turn into the side roads and other vehicles on the SLR.

The SLR is constructed with several side road junctions, and many of these have a right turn lane proposed to provide a safe waiting area when turning into the side road. However, the two side roads as detailed above do not appear to have right turn lanes proposed. This is likely to increase the risk of a collision between a vehicle waiting to turn right into the side road and a vehicle continuing straight on the SLR.

RECOMMENDATION:

It is recommended that adequate provision is made on the SLR to allow for safe right turn manoeuvres into the side road junctions.

Appendix A

DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

SZC-SZ0204-XX-000-DRW-100055_P07	Highway Works – Key Plan
SZC-SZ0204-XX-000-DRW-1000XX_P01	Trust Farm Staggered Junction
SZC-SZ0204-XX-000-DRW-100056_P09	Proposed Layout and Profile – Dwg1
SZC-SZ0204-XX-000-DRW-1000XX_P01	Sizewell Link Road/Fordley Road Junction
SZC-SZ0204-XX-000-DRW-1000XX_P01	Hawthorn Road Junction
SZC-SZ0204-XX-000-DRW-1000XX_P01	Sizewell Link Road/Moat Road Junction
SZC-SZ0204-XX-000-DRW-1000XX_P01	Pretty Road Junction & Footbridge
SZC-SZ0204-XX-000-DRW-100096_P06	General Arrangement – Dwg 3
SZC-SZ0204-XX-000-DRW-100097_P06	General Arrangement – Dwg 4
SZC-SZ0204-XX-000-DRW-100098_P06	General Arrangement – Dwg 5
SZC-SZ0204-XX-000-DRW-100099_P06	General Arrangement – Dwg 6
SZC-SZ0204-XX-000-DRW-100061_P06	General Arrangement Key plan
SZC-SZ0204-XX-000-DRW-100062_P06	General Arrangement – Dwg 1
SZC-SZ0204-XX-000-DRW-100063_P06	General Arrangement – Dwg 2
SZC-SZ0204-SBR-000-DRW-100006_P01	SLR Pretty Road Footbridge Cross Section and Miscellaneous details Sheet 2 of 2
SZC-SZ0204-SBR-000-DRW-100003_P01	SLR Suffolk Rail Bridge General Arrangement and sections

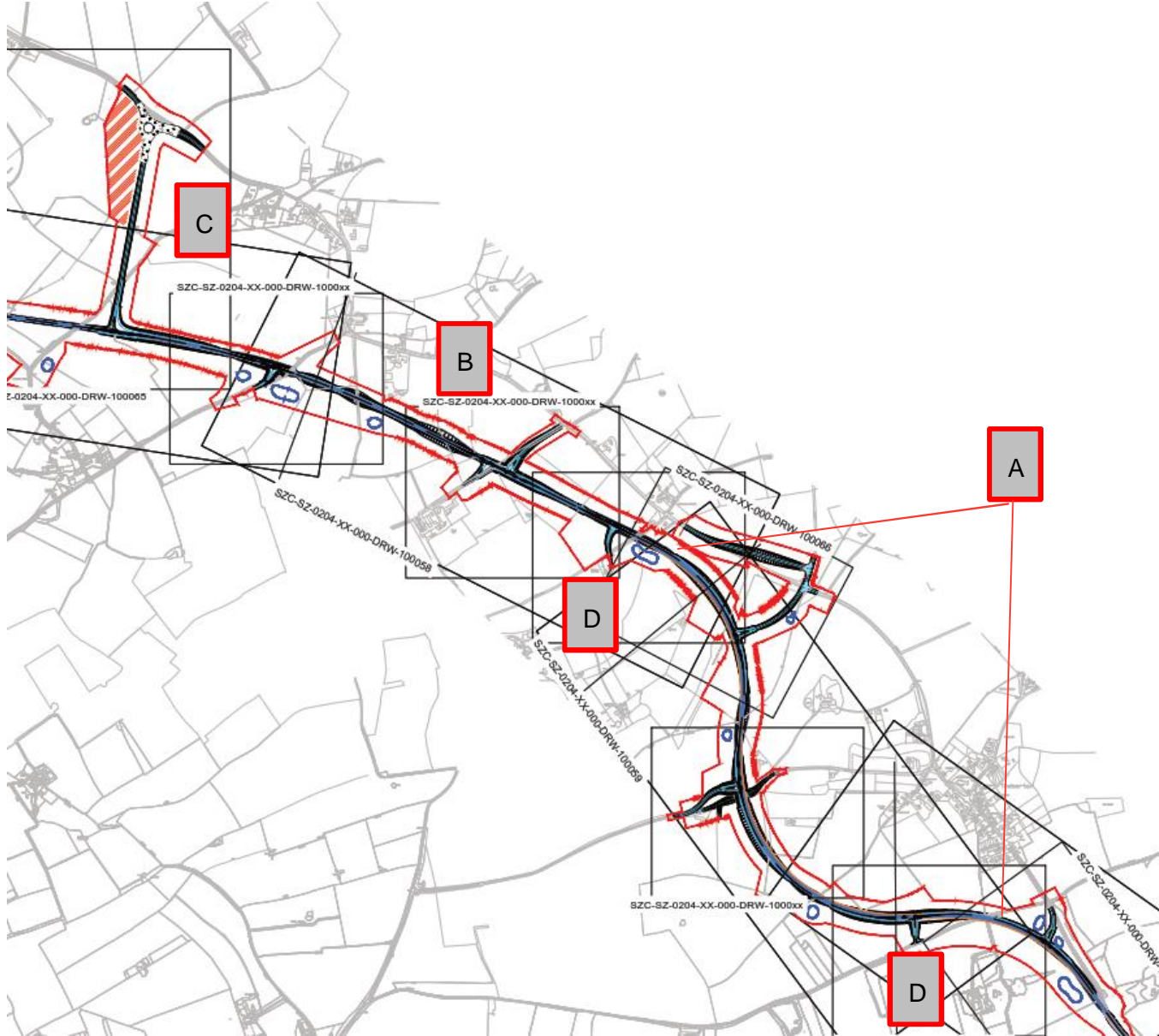


SZC-SZ0204-SBR-000-DRW-100005_P01	SLR	Pretty	Road	Footbridge	General
Arrangement and Elevation Sheet 1 of 2					
SZC-SZ0204-XX-000-DRW-100060_P09	Proposed Layout and Profile – Dwg 5				
SZC-SZ0204-XX-000-DRW-100064_P06	Sizewell Link Road/A12 Junction				
SZC-SZ0204-XX-000-DRW-100065_P06	Sizewell Link Road/A12 Junction				
SZC-SZ0204-XX-000-DRW-100066_P06	Sizewell Link Road/B1122/B1125 Junction				
SZC-SZ0204-XX-000-DRW-100067_P06	Sizewell Link Road/B1122/Theberton Junction				
SZC-SZ0204-XX-000-DRW-100057_P09	Proposed Layout and Profile – Dwg 2				
SZC-SZ0204-XX-000-DRW-100058_P09	Proposed Layout and Profile – Dwg 3				
SZC-SZ0204-XX-000-DRW-100059_P09	Proposed Layout and Profile – Dwg 4				
SZC-SZ0204-XX-000-DRW-100002_P01	Utility Plan				
SZC-SZ0204-XX-000-DRW-100000_P01	Main Site Access Roundabout Proposed Layout				
SZC-SZ0204-XX-000-DRW-100001_P01	Main Site Access Roundabout Proposed Vertical Profiles				
SZC-SZ0204-XX-000-DRW-100032_P07	Southern Park & Ride A12 Highway Works Drg4				
SZC-SZ0204-XX-000-DRW-100028_P07	Southern Park & Ride A12 Highway Works Key Plan				
SZC-SZ0204-XX-000-DRW-100029_P11	Southern Park & Ride A12 Highway Works Dwg1				
SZC-SZ0204-XX-000-DRW-100030_P07	Southern Park & Ride A12 Highway Works Dwg2				
SZC-SZ0204-XX-000-DRW-100031_P08	Southern Park & Ride A12 Highway Works Dwg3				

Appendix B



PROBLEM LOCATION PLAN





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Suffolk County Council

***SIZEWELL C
SOUTHERN PARK AND RIDE***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C SOUTHERN PARK AND RIDE

Stage 1 Road Safety Audit

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PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF3

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DATE: SEPTEMBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	30/09/19			
Prepared by	Neil Jones			
Signature	[Redacted]			
Checked by	Dave Minshall			
Signature	[Redacted]			
Authorised by	Axel Kappeler			
Signature	[Redacted]			
Project number	50400326			
Report number	50400326/2019/Ref3			
File reference	As above			



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APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C - Southern Park and Ride Stage 1 Road Safety Audit</i>
Date:	<i>September 2019</i>
Document reference and revision:	<i>50400326/2019/Ref3</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the Sizewell C - *Southern Park and Ride* scheme on behalf of Steve Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steve Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMAPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steve Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Monday 23rd September 2019 between 2pm – 3pm. The weather was fine with sunny spells. The road surface was dry during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. The audit team were not notified of any departures from standards.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

This aspect of the scheme consists of highway improvements to the A12/B1078 junction. These consist of signing and road marking alterations, as well as an additional access from the A12 eastbound slip road into fields to the north of the A12.

3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

3.1. SIGNING

3.2. PROBLEM 1

Location: A – A12 Northbound immediately after the offslip to the B1078

Summary: Risk of drivers being unaware of the offside lane drop.

As part of these junction improvement works, the offside lane drop on the A12 is to be relocated further to the south, just after the offslip to the B1078. The offside lane will be hatched with three 'tuck-in' arrows to help inform drivers of the need to move from the offside lane into the nearside. However, there doesn't appear to be any advance signage associated with the lane drop. If drivers are not notified of the lane drop in advance this could result in late lane change manoeuvres resulting in loss of control or side swipe collisions.

RECOMMENDATION:

It is recommended that adequate advance signage be provided of the lane drop.

3.3. ROAD MARKINGS

3.4. PROBLEM 2

Location: B – A12 northbound between the offslip and onslip.

Summary: Increased risk of collisions at layby.

The offside lane of the A12 is to be hatched-out from a point to the north of its offslip to the B1116. Immediately to the north of the start of the hatching, there is an existing layby. The layby is to remain following the improvement works. However, with the end of the offside lane of the A12 being so close to the layby, there is a risk of drivers merging into a single lane being unaware of the risk of vehicles either slowing to enter the layby or of vehicles exiting the layby, potentially at low speeds due to the gradients. This may increase the risk of collisions between vehicles on the A12 with vehicles entering or exiting the layby.

RECOMMENDATION:

It is recommended that the layby be closed or relocated.

3.5. ALIGNMENT

3.6. PROBLEM 3

Location: C – A12 northbound onslip.

Summary: Risk of vehicles colliding with power line poles.

The park and ride scheme provides a new footway and crossing over the entry/exit from the proposed park and ride site. However, there is an existing power-line post within the proposed alignment of the footway and it will be very close to the edge of the diverge taper into the park and ride site (see Photo 1). Should these posts be subject to a collision with a passing vehicle, the electricity power line could fall to the ground and come into contact with other road users. The poles may also obstruct pedestrian movement on the footway, forcing pedestrians into the deceleration lane with risk of collision from traffic.


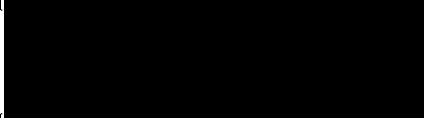


Photo 1 – Power line poles to the rear of the layby

RECOMMENDATION:

It is recommended that power line posts be protected or relocated.

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	30/09/19



Appendix A



DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

SZC-SZ0204-XX-000-DRW-100028RevP07 Highway Works Key Plan

SZC-SZ0204-XX-000-DRW-100031RevP08 Highway Works Drawing 3

SZC-SZ0204-XX-000-DRW-100030RevP07 Highway Works Drawing 2

SZC-SZ0204-XX-000-DRW-100029RevP11 Highway Works Drawing 1

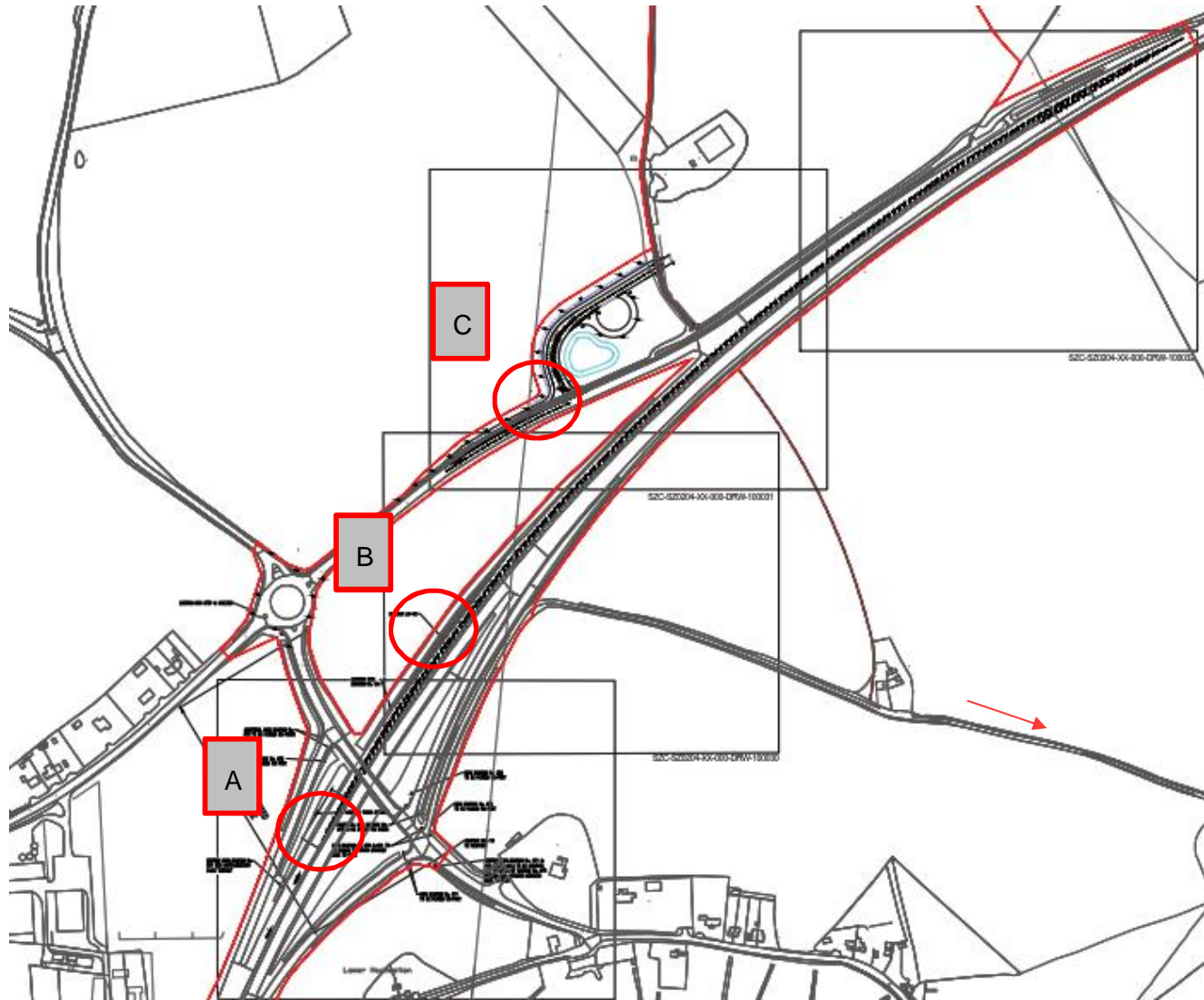
SZC-SZ0204-XX-000-DRW-100032RevP07 Highway Works Drawing 4



Appendix B



PROBLEM LOCATION PLAN





WSP
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Suffolk County Council

***SIZEWELL C
THEBERTON BYPASS***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C THEBERTON BYPASS

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF12

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DATE: OCTOBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	02/10/19			
Prepared by	Neil Jones			
Signature	[REDACTED]			
Checked by	Dave Minshall			
Signature	[REDACTED]			
Authorised by	Axel Kappeler			
Signature	[REDACTED]			
Project number	50400326			
Report number	50400326/2019/Ref12			
File reference	As above			

1. PROJECT DETAILS

Report title:	<i>Sizewell C – Theberton Bypass Stage 1 Road Safety Audit</i>
Date:	<i>October 2019</i>
Document reference and revision:	<i>50400326/2019/Ref12</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the *Sizewell C – Theberton Bypass* scheme on behalf of Steven Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steven Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMAPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steven Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Tuesday 24th September 2019 between 10:30am – 11:30am. The weather was raining. The road surface was very wet during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. The audit team were not notified of any departures from standards.

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

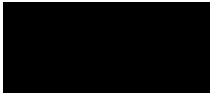
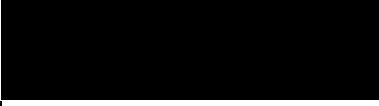
Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

The Theberton Bypass is a variant of the Sizewell Link Road where the bypass is to be constructed to the south of the village of Theberton.

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	02/10/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	02/10/19



Appendix A



DOCUMENT LIST

Documents

Collision data

SZC Map

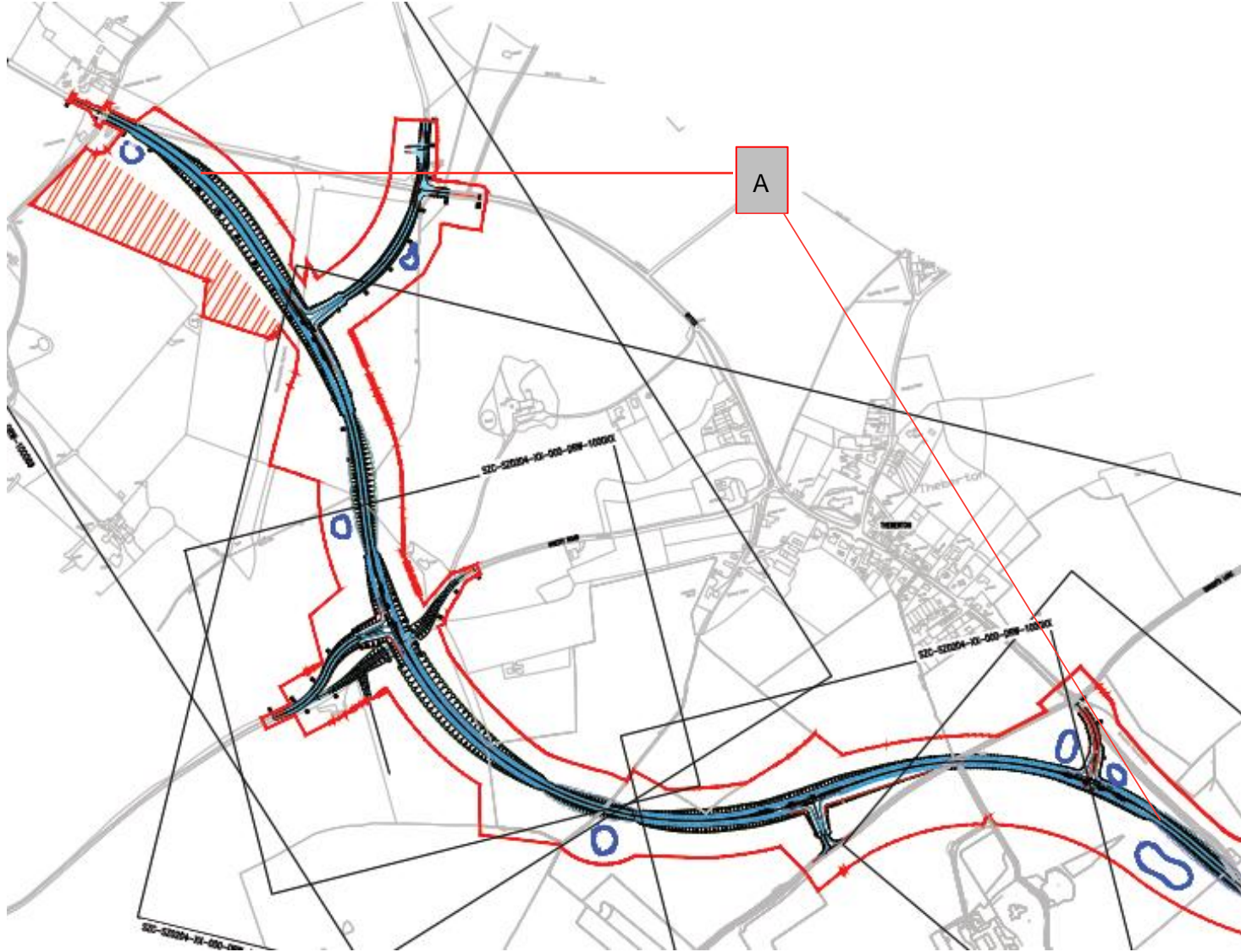
Drawings

SZC-SZ0204-XX-000-DRW-100068_P05	Theberton Bypass Highway Works Key Plan
SZC-SZ0204-XX-000-DRW-100070_P06	Proposed Layout and Longsection Drawing 2
SZC-SZ0204-XX-000-DRW-100069_P06	Proposed Layout and Longsection Drawing 1

Appendix B



PROBLEM LOCATION PLAN





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Suffolk County Council

***SIZEWELL C
YOXFORD ROUNDABOUT***

Stage 1 Road Safety Audit



Suffolk County Council

SIZEWELL C YOXFORD ROUNDABOUT

Stage 1 Road Safety Audit

CONFIDENTIAL

PROJECT NO. 50400326

OUR REF. NO. 50400326/2019/REF8

WSP

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Birmingham


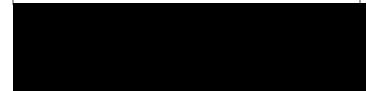

B1 1RT

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DATE: OCTOBER 2019



Quality control

Issue/revision	First issue	Revision 1	Revision 2	Revision 3
Remarks	N/A			
Date	02/10/19			
Prepared by	Neil Jones			
Signature				
Checked by	Dave Minshall			
Signature				
Authorised by	Axel Kappeler			
Signature				
Project number	50400326			
Report number	50400326/2019/Ref8			
File reference	As above			



CONTENTS

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3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT	5
4. AUDIT TEAM STATEMENT	6

APPENDICES

APPENDIX A

APPENDIX B

1. PROJECT DETAILS

Report title:	<i>Sizewell C – Yoxford Roundabout Stage 1 Road Safety Audit</i>
Date:	<i>October 2019</i>
Document reference and revision:	<i>50400326/2019/Ref8</i>
Prepared by:	<i>WSP</i>
On Behalf of:	<i>Suffolk County Council</i>

2. INTRODUCTION

2.1.1. This report results from a Stage 1 Road Safety Audit (RSA) carried out on the *Sizewell C – Yoxford Roundabout* scheme on behalf of Steven Merry, Audit Project Sponsor. The Road Safety Audit was carried out during September 2019.

2.1.2. The Road Safety Audit Team approved by Steven Merry, Audit Project Sponsor was as follows:

Audit Team Leader: Neil Jones BA(hons), DipTEDM, MSoRSA, MCIHT

Audit Team Member David Minshall IEng, MICE, MCIHT, MSoRSA, IMaPS

Neil Jones holds a Road Safety Certificate of Competence meeting the requirements of the European Directive 2008/96/EC and GG119 paragraph 3.9 and appendix G.

2.1.3. The audit took place in WSP's Birmingham office in September 2019. The Road Safety Audit was undertaken in accordance with the Road Safety Audit brief provided by Steven Merry, Audit Project Sponsor, and accepted by the Audit Team on the 9th September 2019.

2.1.4. The Audit Team visited the site together on Tuesday 24th September 2019 between 9am-10am. The weather was raining. The road surface was wet during the site visit. Traffic was free flowing.

2.1.5. The Road Safety Audit also comprised of an examination of the documents and drawings supplied to the Road Safety Audit Team, referenced in Appendix A of this report.

2.1.6. All comments and recommendations are referenced to the design drawings and the locations have been indicated on the plan located in Appendix B.

2.1.7. The terms of reference of the Road Safety Audit are as described in the Design Manual for Roads and Bridges Standard GG 119 Road Safety Audit.

2.1.8. The Road Safety Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

2.1.9. *Departures on A12 West and B1122 approaches were required to achieve a better deflection within the available red line boundary. Existing radii on A12 and B1122 on the junction appear lower than those advised by DMRB TD9/93 Table 3. (copied from Brief)*

2.1.10. Audit administration

This Audit Report has been submitted to the Audit Project Sponsor for consideration. A copy of this RSA report should then be passed onto the design team to allow a RSA response report to be produced. This should be completed within 1 month of the issue of the RSA report and the Audit Project Sponsor should then provide a copy to the RSA team for information.

The Audit Project Sponsor is responsible for identifying any misinterpretations of the scheme proposals or if any problem or recommendation is not accepted.

Safety issues identified during the audit and site inspection which the Terms of Reference exclude from this report, but which the audit team wishes to draw to the attention of the Audit Project Sponsor, will be set out in a separate letter.

2.2. Purpose of the Scheme

The plan is to build and operate a new nuclear power station in Suffolk on land immediately to the north of the Sizewell B power station, adjacent to an area that has had nuclear power stations operating since 1966. As part of these works, a number of highway improvement works and new carriageway construction (including 2 new bypasses) are to be constructed.

This aspect of the scheme consists of the upgrade of the existing T-Junction between the A12 and the B1122 to a Roundabout. Furthermore, the final section of the B1122 is realigned and connected to the new B1122 alignment via a T-Junction to retain access to properties on the south-western side of the Roundabout.

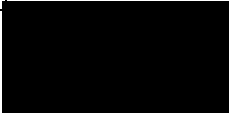
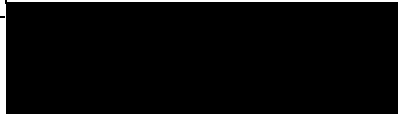
The resulting space located in between the existing B1122 carriageway and the proposed roundabout will be used to accommodate an infiltration pond.



3. PROBLEMS IDENTIFIED AT THIS STAGE 1 ROAD SAFETY AUDIT

There were no road safety issues raised during the Stage 1 Road Safety Audit

4. AUDIT TEAM STATEMENT

We certify that this audit has been carried out in accordance with GG 119.	
ROAD SAFETY AUDIT TEAM LEADER	
Name:	Neil Jones
Signed:	
Position:	ITS Principal Consultant (Road Safety Engineering)
Organisation:	WSP
Date:	02/10/19
ROAD SAFETY AUDIT TEAM MEMBER(s)	
Name:	Dave Minshall
Signed:	
Position:	Principal Engineer (Road Safety Engineering)
Organisation:	WSP
Date:	02/10/19



Appendix A



DOCUMENT LIST

Documents

Collision data

SZC Map

Drawings

SZC-SZ0204-XX-000-DRW-100019_P08
LAYOUT

A12/B1122 ROUNDABOUT PROPOSED

SZC-SZ0204-XX-000-DRW-100020P02
PROFILES

A12/B1122 ROUNDABOUT PROPOSED

Appendix B



PROBLEM LOCATION PLAN

Not Required



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