Appendix TA - V

BUS STRATEGY PLAN

London Resort Company Holdings

THE LONDON RESORT BUS STRATEGY

DECEMBER 2020

CONFIDENTIAL

London Resort Company Holdings

THE LONDON RESORT BUS STRATEGY

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WSP

WSP House
70 Chancery Lane
London
WC2A 1AF

Phone: +44 20 7314 5000

Fax: +44 20 7314 5111

WSP.com

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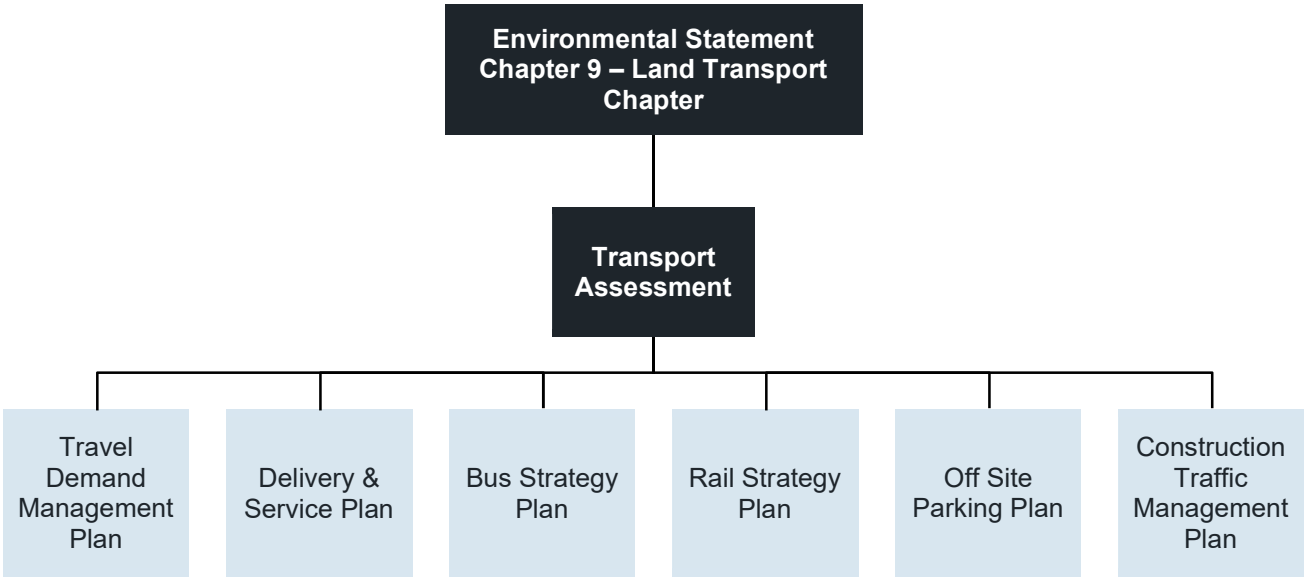
1 INTRODUCTION

1.1.1. This Bus Strategy Plan has been produced in order to set out the required strategy that will support the delivery of the London Resort project. This will include the provisional proposed bus enhancements required to accommodate both The London Resort staff and visitors who are likely to travel by bus.

1.1.2. At the outset, it is important to note that the delivery of the resort is some 4 years away, with full maturity not planned until 2038. The visitor profiles for this type of entertainment resort means that there will be varying levels of visitors and staff across the year, coming from different locations on a daily basis. With regards to staff patterns, whilst the TA sets out the assumed origins for staff, however this will become clearer as The London Resort gets closer to opening. As such, the strategy looks to identify how the bus service can be adapted over time to support the variations that are expected and a mechanism for dealing with these changes.

1.1.3. The Bus Strategy is part of a suite of documents which address the transport impacts of the Proposed Development and identify where mitigation measures are required.

1.1.4. The suite of documents are headed up by the ES Chapter 9 – Land Transport (document reference 6.1.9). The following figure shows the relationship between the Land Transport Chapter of the ES, the Transport Assessment and the suite of transport management plans and strategies.



1.1.5. The ES Chapter 9 – Land Transport (document reference 6.1.9) addresses the environmental impacts associated with changes in traffic flow as a result of the Proposed Development. The Transport Assessment (TA) is included as an Appendix to this and considers the transport strategy for the construction and operation of the Proposed Development.

1.1.6. The TA is supported by additional transport documents. These are the Delivery & Servicing Plan (DSP), Construction Traffic Management Plan (CTMP) the Rail Strategy Plan (RSP), the Bus Strategy Plan (BSP), Off Site Parking Plan (OSPP) and the Travel Demand Management Plan (TDMP). The implementation of these documents will be secured either through the DCO Requirements or the Development Obligation. Copies of these Plans are provided as Appendices to the Transport Assessment.

1.1.7. The CTMP provides details on the requirements for the management of transport impacts associated with the construction phases of the Proposed Development. Once the principal contractor has been appointed there will be opportunity for them to review and adjust the CTMP in agreement with the local authorities. The RSP and BSP set out the strategy to provide rail and bus accessibility to the Proposed Development.

1.1.8. The OSPP sets out the measures proposed to monitor whether on street vehicular parking associated with the Proposed Development occurs on roads and streets surrounding the Site. This document also sets out the proposed strategy to be implemented in the event that on street parking attributed to The Resort is identified in order to prevent stress on the existing level of on street parking serving surrounding residential areas.

1.1.9. The TDMP outlines a comprehensive and flexible approach to managing the travel demands of key audiences that will travel to and from the Resort. Specifically, this focuses on travel demands associated with Resort visitors and those employed at the Resort (employees).

1.1.10. Finally, the DSP sets out the key requirements and management guidance for individual occupiers to follow and implement in terms of the delivery of goods and stock required by The Resort as well as the approach to servicing the Proposed Development once operational.

1.1.11. The document presents the expected provisional bus demand, pulling together information from TN1,2,3,4 and the Future Mobility Mode Share Model and the assumptions behind the numbers. The analysis then drills down to the distribution of staff and visitors and the most likely catchment areas for bus users. After presenting the existing public transport network and relevant other public transport projects, it finally discusses the potential consequences of increased demand on the existing network and proposes the bus route enhancements which will be required to provide staff and visitors with convenient and attractive bus connections to the Resort from both north and south of the Thames. The last section presents the proposed mechanisms to support the implementation of the bus strategy.

2 DEMAND SOURCES AND ASSUMPTIONS

2.1 BASELINE MODE SHARES

2.1.1. While the major part of the road modelling assessment describes the worst-case scenario of car usage, the public transport strategy focuses on a more optimistic use of public transport. The bus mode share is issued from the Future Mobility Mode Share Model, which presents a base case scenario and the potential to significantly decrease private car mode share.

2.1.2. The Mode Share Model provides a maximum and minimum percentage of bus usage and averages between these two levels have been used to derive the Bus strategy.

2.1.3. The bus mode share considers trips which use buses as a main mode of transport to the Resort. Bus trips which are secondary to a main train trips are derived from the Railway strategy. Bus demand to feed the Ferry was aggregated from all mode's PT and private modes.

2.1.4. Three scenario years are considered; 2025, 2029 which corresponds to the opening of Gate Two and, finally, 2038 where the demand for the Resort is expected to be mature.

2.1.5. Two-day types are considered, the 85th percentile reflecting a weekday (85th %ile Day) and peak day reflecting the demand which could be observed on a special event day. The peak days are expected to be mostly non-weekdays.

2.1.6. The Bus strategy is based on the scenario where staff parking is limited to 500 spaces. It is worth noting that the bus mode share would drop by more than 10% should no limitation in staff car parking staff be implemented.

2.1.7. All figures presented in the Bus Strategy are provisional based on the interpretation of the Future Mobility Mode Share Model and the Railway model presented in Chapter 11 of the Transport Assessment. Overall staff represent the largest part of the potential demand for buses.

3 STAFF BUS DEMAND (MAIN MODE)

3.1 NUMBER OF STAFF

3.1.1. The London Resort plans include 1,800 employees to be accommodated on site. These employees will therefore not use the public bus network to travel to their place of work. The balance, the majority of the employees (presented in Table 3-1), will travel to the site at different times of the day, based on expected shift patterns on a typical weekday and a maximum peak day.

Table 3-1 - Number of Off-site Staff

Number of Off-site Staff	85th %ile Day	Peak Day
2025	6,791	8,591
2029	9,743	12,101
2038	10,228	12,715

3.1.2. The distribution of work trips across the day varies slightly for each year and day type, but the average percentage of staff arriving and departing per hour is illustrated in Figure 3-1. Arrivals occur throughout the day and 13% of the arrivals occur in the busiest hour between 9:00 and 10:00. Departures are less spread out and are expected to peak principally between 15:00 and 16:00 and 22:00 and 23:00, when almost 17% of the departures are indicated (Figure 3-1).

3.1.3. It is worth noting that these times are different from the typical peak time observed on buses in England (i.e. 07:00 to 09:00 and 16:00 to 18:00). The maximum proportion of staff travelling on the local buses during peak times will be 12.6%.

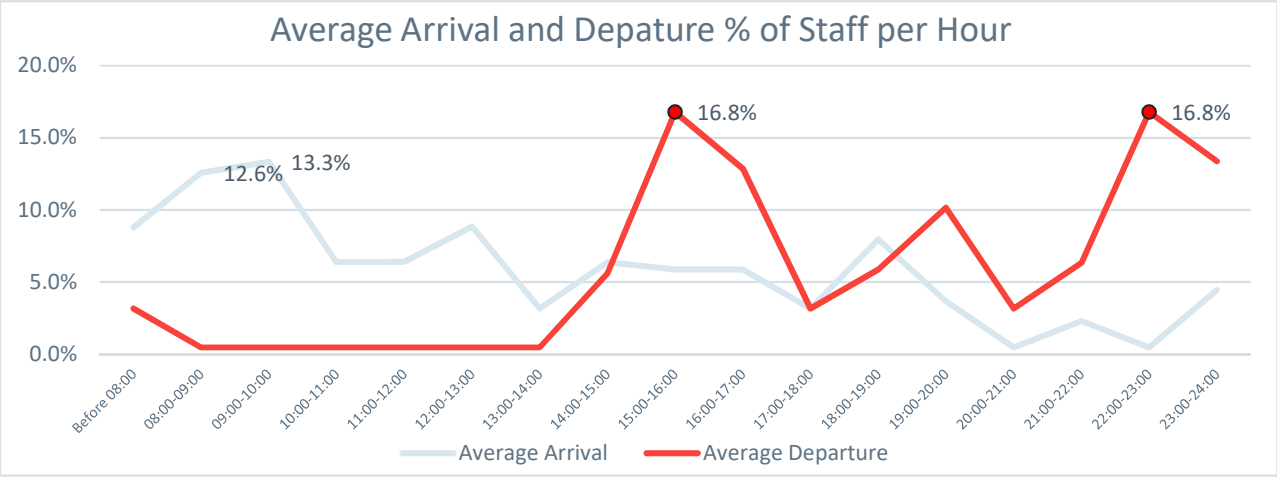


Figure 3-1 - Typical Arrival and Departure Time (Percentage of Staff per Hour)

3.2 STAFF BUS TRIP DEMAND

3.2.1. The Future Mobility Mode Share Model has provided a likely mode share for bus only trips. These are based on an analysis of all mode performances in journey time, coverage and other relevant aspects described in Chapter 8 of the Transport Assessment.

3.2.2. The bus mode share from buses is expected to range between 24% and 30% of the full staff trips. The bus demand figures have been estimated using an average figure of a 27% share on arrivals and departures.

3.2.3. The mode share was applied to the total staff trips, the resulting estimated daily and peak hour arrival and departure bus only trips are presented in Table 3-2.

3.2.4. The maximum peak direction here refers to the Departure from the Resort in evening between 22:00 and 23:00. The "abbreviation "phpd" means per hour per direction.

Table 3-2 - Bus Trips Forecast and Peak Hour Volumes

Staff Bus Main Trip	85th %ile Day	Max 85th %ile Day phpd	Peak Day	Max Peak Day phpd
Estimated Bus Arr + Dep 2025	3,655	303	4,624	387
Estimated Bus Arr + Dep 2029	5,244	438	6,513	551
Estimated Bus Arr + Dep 2038	5,505	462	6,844	581

3.2.5. On a typical weekday in 2025, it is estimated that around 3,655 staff trips will be made using the bus as a main mode, and this will increase to 4,600 on a peak day. In 2029, it is estimated that up to 5,200 will be made by bus and 25% more on a peak day. In 2038, around 5,500 bus trips are expected to be made by staff on a typical day and around 6,800 bus trips on a peak day.

3.2.6. Peak hour maximum capacities required will range between 303 and 581 depending on the year and day type. Overall peak day will require between 25% and 28% more capacity than a typical weekday.

3.3 DISTRIBUTION OF STAFF BUS DEMAND ACCROS LOCAL AUTHORITIES

3.3.1. The overall distribution of staff issued from the TN2 (Trip distribution) was feed into the Mode Share Model and compared with the existing network. This analysis indicates that the total bus trips could be distributed between areas as presented in Table 3-3.

3.3.2. Not surprisingly, results indicate that the majority of staff bus trips (92%) will be originating from Gravesham (44%), Dartford (33%) and Thurrock (15%). The remaining 8% will be dispersed around Bexley (5%), Medway (2%) and Sevenoaks (1%).

Table 3-3 - Bus Trip Distribution for Staff

Trip Distribution	%
Thurrock	15%
Bexley	5%
Medway	2%
Dartford	33%
Gravesham	44%
Sevenoaks	1%

3.3.3. Table 3-4 provides the absolute numbers corresponding to the percentage for the 85th %ile Day and Peak days.

3.3.4. The main three areas which are likely to be significantly impacted by staff travelling by bus are Gravesham, Dartford and Thurrock, with respective additional capacity requirement of 258,193 and 84 passengers at the busiest time departing the Resort in the evening on a peak day in 2038 (see Table 3-4). The equivalent figures to be accommodated during the peak time on the urban network (8:00 to 9:00) will be 192, 143 and 67 passengers.

3.3.5. Within the Bexley, Sevenoaks and Medway demand, is estimated to reach up to 27,14, 4 trips respectively in the busiest hour on a peak day in 2038 trips, reducing to 20,10 and 3 trips respectively in the morning peak in urban network peak. It is believed that this small amount of demand dispersed across the local authorities could be accommodated within the existing bus network.

Table 3-4 - Bus Demand per Local Authorities (LA)

Staff Bus Demand	2025_85th %ile Day	Max phpd	2029_85th %ile Day	Max phpd	2038_85th %ile Day	Max phpd
Thurrock	531	44	762	64	800	67
Bexley	171	14	245	20	257	22
Medway	87	7	125	10	131	11
Dartford	1,212	101	1,739	145	1,826	153
Gravesham	1,626	135	2,332	195	2,448	205
Sevenoaks	28	2	40	3	42	4
Total	**3,655**	**303**	**5,244**	**438**	**5,505**	**462**
Thurrock	672	56	947	80	995	84
Bexley	216	18	304	26	320	27
Medway	110	9	156	13	163	14
Dartford	1,534	128	2,160	183	2,270	193
Gravesham	2,056	172	2,897	245	3,044	258
Sevenoaks	35	3	49	4	52	4
Total	**4,624**	**387**	**6,513**	**551**	**6,844**	**581**

3.4 DISTRIBUTION OF STAFF IN GRAVESHAM, DARTFORD AND THURROCK

3.4.1. For each of the three local authorities, detailed information on population number and social grade by postcode was reviewed using the Mosaic dataset 2019. These were used to understand the most likely distribution of staff bus users inside each of the three LAs.

3.4.2. The following criteria were applied to identify these locations:

- High density areas within 10 km of The London Resort;
- High number of people categorised as the following grades on the Social Grade Classification:
  - C1 (Supervisory, clerical and junior managerial, administrative, professional occupations);
  - C2 (Skilled manual occupations);
  - D (Semi-skilled and unskilled manual occupations); and
  - Absence of convenient access to regular and relevant rail services to The London Resort.

3.4.3. Figure 3-2 illustrates the potential locations where staff are likely to live based on their socio-economic grade. Using this method of inference creates the inherent assumption that staff are already living in the designated local authorities' areas. However, it may be that a proportion of the staff move to these areas to start working in The London Resort. For these, it is possible that the location choice is influenced by the accessibility of accommodation to the workplace, particularly if they are renting their accommodation.

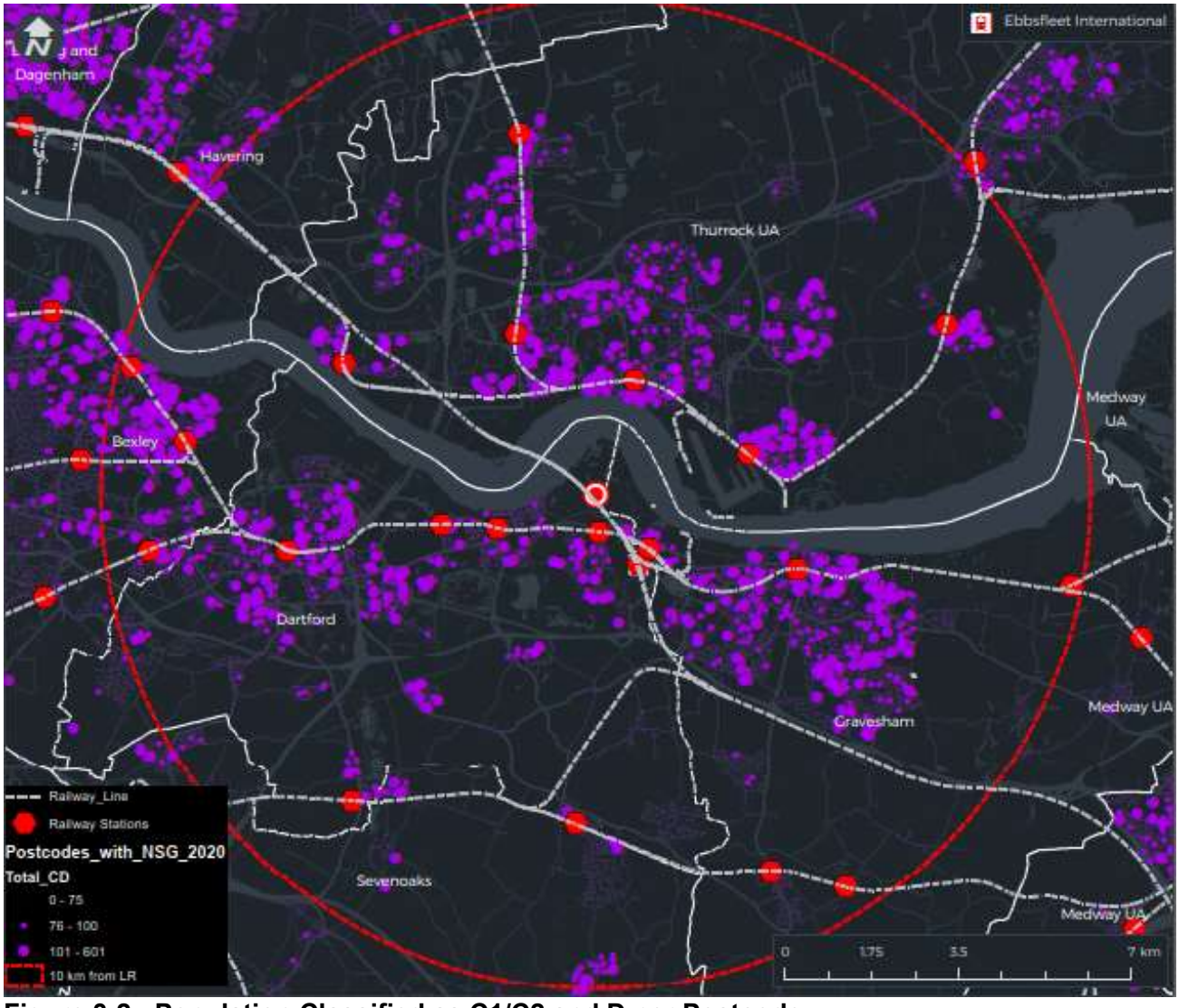


Figure 3-2 - Population Classified as C1/C2 and D per Postcode

4 VISITORS BUS DEMAND (MAIN MODE)

4.1 VISITOR NUMBERS

4.1.1. The total visitor numbers issued from TN1 are summarised in Table 4-1.

Table 4-1 - Total Number of Visitors

Year/Total Daily Visitors	85th %ile Day	Peak Day
2025	27,880	38,590
2029	36,657	50,380
2038	55,330	75,590

4.1.2. Each visitor is expected to take 2 trips to the Resort, one to arrive and one to depart. The difference between peak day and 85th percentile day varies between 37% and 38% depending on the years.

4.1.3. The Future Mobility Mode Share projections for visitors estimate that between 1.1% and 1.2% of the visitors will use bus as a main mode to reach The London Resort. A small proportion of the International Visitors are also expected to stay locally in private accommodation, excluding hotels and may therefore use the bus network to reach the Resort.

4.1.4. On a typical weekday in 2025, it is estimated that around 660 trips will be made using the bus as a main mode, and this will increase to 913 on a peak day. In 2029, it is estimated that up to 868 trips will be made by bus and 37% more on a peak day. In 2038, around 1,310 bus trips are expected to be made by visitors on a typical day and around 1,789 bus trips on a peak day (see Table 4-2).

Table 4-2 - Number of Visitors' Bus Trips per Day (Arrival and Departure)

Year/Total Visitor Bus Demand	85th %ile Day	Peak Day
2025 (Arr + Dep)	660	913
2029 (Arr + Dep)	868	1,193
2038 (Arr + Dep)	1,310	1,789

4.1.5. Figure 4-1 illustrates the distribution of the visits across a weekday in 2029. This arrival/departure profile is similar to that also observed in 2025 and 2038 in terms of the proportion.

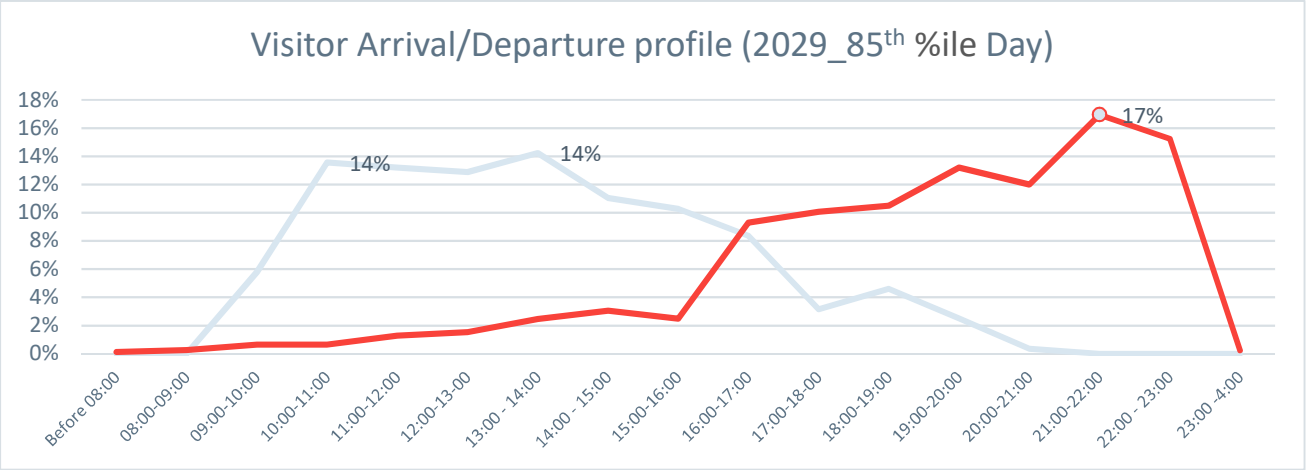


Figure 4-1 - Visitors' Arrival and Departures Times (85th %ile Day, 2029)

4.1.6. Visitors are expected to arrive between 10:00 and 14:00, representing as high a percentage as 14% at the busiest time and departures represent a higher figure than arrivals from 16:00, reaching 17% at the peak departure time between 21:00 and 22:00. In a peak day, the total demand is expected to increase overall and departures are expected to be slightly delayed increasing the maximum percentage of bus trips at the busiest hour (21:00 to 22:00) to 18%. The visitor demand should not affect the morning peak demand on the urban bus network as most of the visitors are not expected to arrive before 10:00.

4.1.7. The resulting maximum demand per hour for visitor direct bus trips demand is summarised below and in Table 4-3 per the three scenario years. Similarly, for staff, maximum demand is in the evening during the hour between 21:00 and 22:00.

2025

4.1.8. It is estimated that at the busiest hour, the direct bus demand for visitors will be around 56 passengers per hour on a weekday. In peak days the total demand is expected to increase by 38%, increasing the maximum demand for bus services at the busiest hour (21:00 to 22:00) to 84 bus trips.

2029

4.1.9. It is estimated that at the busiest hour, the direct bus demand for visitors will be around 74 passengers per hour on a weekday. In peak days the total demand is expected to increase by 37%, increasing the maximum demand for bus services at the busiest hour (21:00 to 22:00) to 110 bus trips.

2038

4.1.10. It is estimated that at the busiest hour the direct bus demand for visitors will be around 110 passengers per hour on a weekday. In peak days the total demand is expected to increase by 38%, increasing the maximum demand for bus services at the busiest hour (21:00 to 22:00) to 165 bus trips.

Table 4-3 - Maximum Hourly Visitor Bus Demand (Departure 21:00 to 22:00)

Day/Visitor Direct Bus Trips phpd	Max 85th %ile Day. phpd	Max Peak Day phpd
2025	56	84
2029	74	110
2038	111	165

4.1.11. The majority of the trips are expected to originate from Bexley, Dartford, Gravesham and Thurrock followed by Medway and Sevenoaks (See Table 4-4). Demand from/to Medway and Sevenoaks is sufficiently low that it is expected to be catered for by existing bus services supplemented by DRT if/where required.

Table 4-4 - Visitor Bus Demand per Local Authorities

Visitor Bus Demand 85th Day	2025_85th %ile Day	Max phpd	2029_85th %ile Day	Max phpd	2038_85th %ile Day	Max phpd
Thurrock	87	7	115	10	173	15
Bexley	191	16	251	21	379	32
Medway	22	2	29	2	44	4
Dartford	186	16	245	21	370	31
Gravesham	150	13	198	17	298	25
Sevenoaks	23	2	31	3	46	4
Total	**660**	**56**	**868**	**74**	**1,310**	**111**
Visitor Bus Demand Peak Day	**2025_Pk day**	**Max phpd**	**2029_Pk Day**	**Max phpd**	**2038_Pk Day**	**Max phpd**
Thurrock	121	11	158	15	237	22
Bexley	264	24	345	32	517	48
Medway	30	3	40	4	60	6
Dartford	258	24	337	31	505	47
Gravesham	208	19	271	25	407	38
Sevenoaks	32	3	42	4	63	6
Total	**913**	**84**	**1,193**	**110**	**1,789**	**165**

4.2 VISITOR SHUTTLE DEMAND

4.2.1. Around 0.2% of the visitors are expected to reach the Resort using the Bus Shuttles provided by the hotels in the surrounding areas. The locations of these are not yet know, but it is envisaged that the Hotels will actively be encouraged to provide the shuttle service where no convenient existing public transport options are available. These may be by means of the arrangements discussed in Chapter 14 of the Transport Assessment, which deals with the Transport Demand Management strategy.

5 TRAIN TRANSFER DEMAND (STAFF AND VISITOR)

5.1.1. Around 30% of the total demand is expected to reach the Resort by train, indicative total number of trips are provided in Table 5-1 and extracted from the Railway Model, described in the Railway strategy. These train passengers will need a bus connection to travel to/from the Resort.

Table 5-1 - Departures and Arrivals at Rail Station

Total Train Trip Est.	85th %ile Day	Peak Day*
Estimated Bus Arr + Dep 2025*	20,711	28,112
Estimated Bus Arr + Dep 2029	27,326	36,777
Estimated Bus Arr + Dep 2038*	37,779	51,258

5.1.2. These rail trips will be distributed across four train stations: Ebbsfleet, Greenhithe, Tilbury Town and Northfleet.

5.1.3. Swanscombe is the closest station to the Resort, however, it is not advocated for use from the Resort opening as current accessibility to mobility impaired passengers is poor. Plans to improve Swanscombe via Network Rail funding are discussed separately, targeting a potential implementation for 2029.

5.1.4. Table 5-2 summarises the expected total demand for bus travel per station and the corresponding busiest hour for an 85th %ile day in 2029.

Table 5-2 - Expected Demand per Station per Day Type in 2029

Station Arr/Dep	85th %ile Day	Max 85th %ile Day phpd	Peak Day	Max Peak Day phpd
Ebbsfleet	16,734	1,305	22,528	1,819
Greenhithe	9,245	721	12,445	1,005
Northfleet	224	17	302	24
Tilbury	1,123	88	1,502	121
Total	**27,326**	**na**	**36,777**	**2,969**

6 FERRY TRANSFER DEMAND

6.1.1. The Ferry transfer demand combines all the passengers using the ferry, independently of their mode of access, including public and private transport.

6.1.2. The private transport figures are based on the worst-case scenario, while the public transport and ferry figures are using more optimistic mode share from Mode Share Model and Railway Model.

6.1.3. The total estimated demand is presented in Table 6-1 and is expected to vary between 720 passengers in the busiest hour in 2025, 85th %ile day, up to approximately 2000 on a peak day in 2038 in the busiest hour.

Table 6-1 - Estimated Ferry Demand per Scenario Years

Total Ferry Demand	85th %ile Day	Max 85th %ile Day phpd	Peak Day	Max Peak Day phpd
Estimated Arr + Dep 2025	9,723	720	11,317	994
Estimated Arr + Dep 2029	13,776	1,019	16,574	1460
Estimated Arr + Dep 2038	20,088	1,491	22,214	1968

7 EXISTING BUS NETWORK AND ENHANCEMENTS PLANS

7.1 EXISTING BUS NETWORK SOUTH OF THE THAMES

7.1.1. The London Resort main site in Kent is well placed relative to the existing bus network, which offers frequent services in the locality, including connections to key destinations such as Bluewater Shopping Centre and the Darent Valley Hospital via Fastrack.

The bus services operating in the immediate vicinity of the London Resort Site are described in

7.1.2. Table 7-1 and Figure 7-1. It should be highlighted that the operation of public transport is currently disrupted by the Covid-19 pandemic. As a result, detailed timetable information shows the level of service currently operated during the Covid pandemic.

7.1.3. All the relevant services south of the Thames are operated by Arriva.

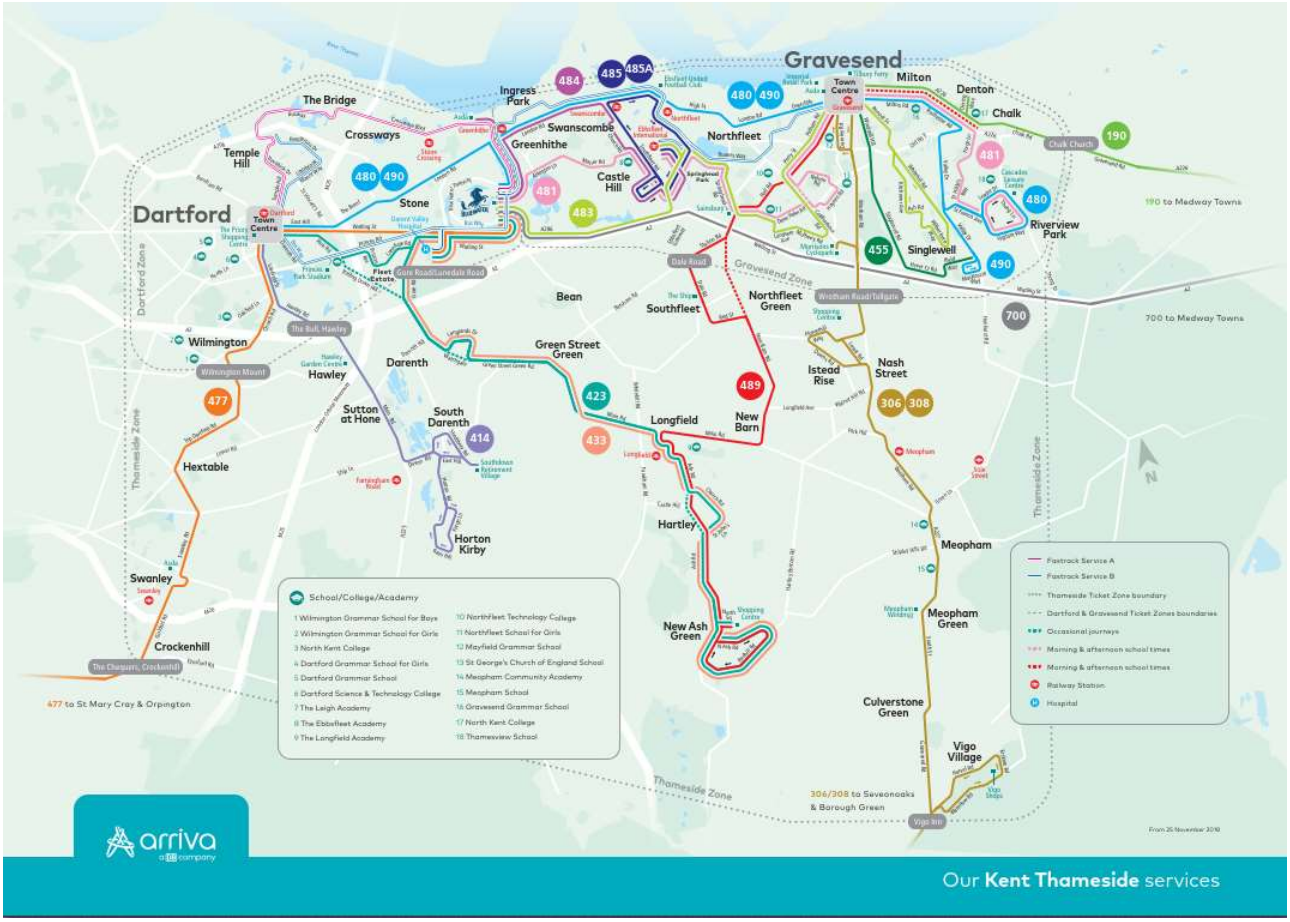


Figure 7-1 - Buses Serving Gravesend

Table 7-1 - Bus Services Operating Near the London Resort Site, South of the Thames

Route	Principal Locations Served	Days of Operation	Monday to Friday Daytime Frequency (Covid – Nov 20)	Comment
Fastrack B	Gravesend – Ebbsfleet International – Swanscombe – Ingress Park – Greenhithe – Bluewater – Darent Valley Hospital – Dartford – Temple Hill	Monday to Sunday	10 to 12 minutes	Sat: 10 to 12 min Sun: 20 min
306	Bluewater – Swanscombe – Northfleet – Gravesend – Istead Rise – Meopham – Vigo – Wrotham – Borough Green	Monday to Saturday	5 return journeys from 19:00	
480/490 Sapphire	Valley Drive – Denton – Gravesend – Northfleet – Swanscombe – Greenhithe – Bluewater (490) – Horns Cross – Dartford (480 daytime; 490 evenings/Sundays)	Monday to Sunday	Combined 12 minutes	Combined 10 min on Sat Combined 15 min on Sun
481	Riverview Park – Gravesend – Northfleet – Swanscombe – Bluewater	Monday to-Sunday	20 minutes	Sat: 20 min Sun: 60 min
483	Kings Farm – Gravesend – Bluewater	Monday to-Sunday	20 Minutes	Sat: 30 Min Sun: 30 min
484	Ebbsfleet Station – Castle Hill – Swanscombe – Greenhithe – Bluewater	Monday to-Saturday	Hourly	9:00 to 17:00 weekday, extended to 19:00 on Saturday
485/A	A Castle Hill – Ebbsfleet Station – Castle Hill	Monday to Saturday	Hourly peaks and evening only	

7.1.4. Figure 7-2 illustrates the bus catchment area within 60 minutes of Ebbsfleet using Tracc. The Tracc analysis demonstrates that there is good bus network coverage south of the Thames.

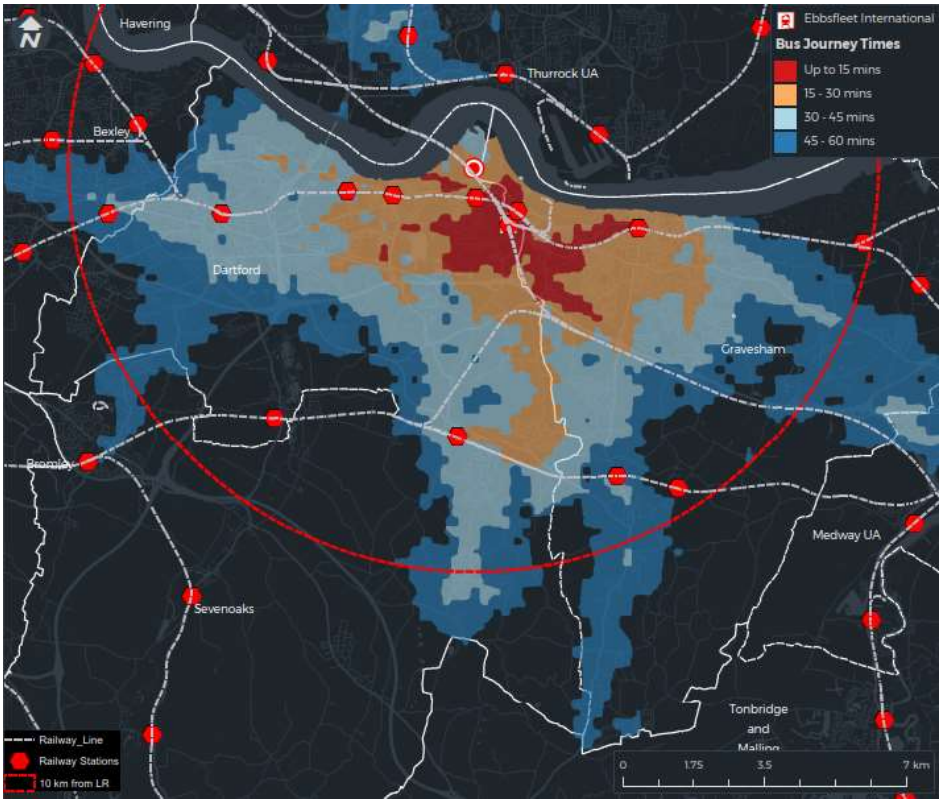


Figure 7-2 - Bus Network TRACC to Ebbsfleet Station

7.2 EXISTING NETWORK NORTH OF THE THAMES

7.2.1. The London Resort Site will be accessible from the north of the Thames via a Ferry connection from Tilbury Ferry Terminal.

7.2.2. This ferry terminal is directly accessible by bus route 99 running between the Tilbury Ferry Terminal and Tilbury Town railway station with approximately a 30-minute frequency to coincide with the current ferry arrivals and departures.

7.2.3. Despite this being the only direct bus link to / from the Ferry Terminal, there are other bus services available at Tilbury Town Railway Station. Table 7-2 describes these services.

7.2.4. Similarly, to the south of the Thames, the operation of public transport is currently disrupted by the Covid-19 pandemic. As a result, timetable information including service frequencies are based on the current “Covid schedule”.

7.2.5. The services are all provided on a commercial basis by Ensign Buses. These services also connect with other local services in and around Tilbury providing connections to the wider area.

Table 7-2 - Bus Services of Interest North of the Thames

Routes	Principal Locations Served	Days of Operation	Monday to Friday Daytime Frequency per Covid	Comment
66/ 66A	Lakeside – Grays – Tilbury – Chadwell – St MaryS1	Monday to Sunday	20 minutes +1 extra jrn in am pk	Sun: Hourly
73/73A	Lakeside – Grays – Chadwell – St Mary	Monday to Sunday	12 minutes in peaks Every 20 minutes	
Z1	Aveley – South Ockenden – Lakeside – Grays – Socketts Heath – Chadwell – Tilbury	Monday to Sunday	Additional peak and off-peak Journeys on route 73/A alignment	Omits Chadwell area
99	Tilbury Ferry Terminal and Tilbury Town railway station	Monday to Saturday	30 min to coincide with Ferry arrival/departure	

7.2.6. Figure 7-3 illustrates the bus and rail networks in Thurrock.

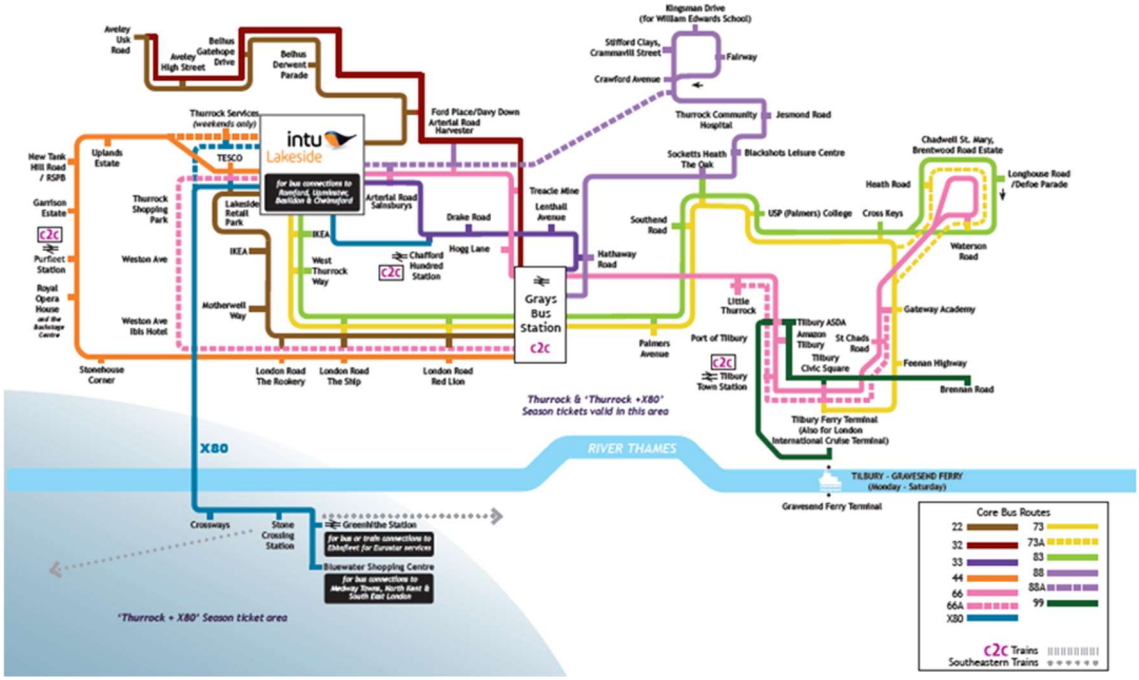


Figure 7-3 - Bus and Rail Networks in Thurrock

7.2.7. The analysis of the public transport network north of the river highlighted a few issues which deserve attention:

- No Direct connection from Grays/Thurrock to Tilbury Ferry Terminal, except for route 99;
- Poor Public transport links from North Grays to the Tilbury Ferry Terminal, where it takes 50 minutes with 2 changes to reach the Ferry Terminal, but only 9 minutes to drive by car; and
- The current design of route 99 serves other objectives that solely provide a connection between Tilbury Town Station and the Ferry Terminal. As such, the running times are not optimised to provide a fast-convenient bus connection to/from the Ferry Terminal.

7.3 OTHER RELEVANT INFORMATION TO THE URBAN BUS NETWORK

7.3.1. With the exception of school services, all other routes are normally operated by easy-access buses, providing an accessible network for prospective passengers, particularly those with child buggies and those with mobility impairments.

7.3.2. These services are covered by a range of multi-journey and other season tickets depending on operators, providing for connectivity to other areas not served by direct routes such as by connecting at Bluewater, giving access to south-east London and other parts of North Kent or Thurrock.

7.3.3. English National Concessionary Travel Scheme (ENTCS) bus passes for the elderly and disabled are also accepted on these services, giving free off-peak travel for those eligible.

7.3.4. The current network of services listed in Table 6-1 and Table 5-2 is provided on a commercial basis. This means that the routes, frequencies and fares are decided entirely by the operator, based on their assessment of the demand for travel and the costs of providing the services. The future development of the network will therefore, in the first instance, be dependent upon their business planning.

7.3.5. The local transport authority, Kent County Council, has the power to procure bus services which are not provided commercially but which meet its assessed need. The criteria used to inform this assessment include providing access to health, learning, employment and essential food shopping, so while leisure and entertainment would not meet the priorities of the local authority for public transport, providing access to jobs on site would. Currently, KCC spends a relatively small amount of its total supported bus services budget in Kent Thameside, as the density of development means that a higher proportion of bus services is provided commercially in the area than is provided in the more rural districts of Kent. However, it is understood that KCC has aspirations to take a more direct control and influence over bus network design in Kent Thameside.

7.4 FASTRACK

7.4.1. The ‘Fastrack’ service is part of a longer-term strategy for the regeneration of Kent Thameside, which aims to support new housing and jobs. As a reliable and high-quality transport mode to encourage sustainable travel habits, ‘Fastrack’ has been developed as a Bus Rapid Transit (BRT) service, with branded, reliable and frequent bus services that operate high frequency services on dedicated bus ways, bus lanes and using other junction priority measures such as ‘green-wave’ technology at traffic signal junctions.

7.4.2. Fastrack services are shown in schematic form in Figure 7-4 below.

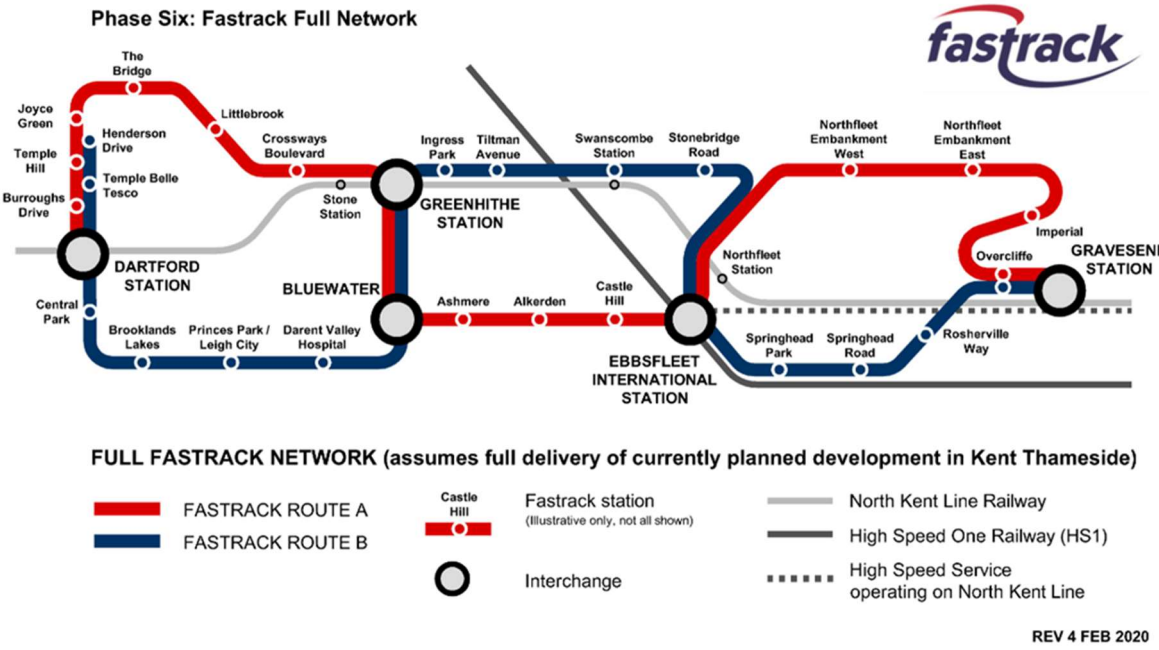


Figure 7-4 - Fastrack Map (Kent County Council Fastrack Team (2020))

7.4.3. Fastrack Route B, which is the most relevant to the site; already operates along the A226. It serves Temple Hill, Dartford, Darent Valley Hospital, Bluewater Shopping Centre, Greenhithe, Swanscombe, Ebbsfleet International Train Station and Gravesend. The bus operates from 05:00 to 24:00 with the current frequency (Nov 2020) of:

- Monday to Saturday time - every 10 to 12 minutes;
- Evenings - every 15 minutes; and
- Sunday - every 20 minutes.

7.4.4. The Fastrack network offer multiples interchange opportunities with Fastrack A and other bus routes in key locations such as Dartford station, Bluewater, Greenhithe, Ebbsfleet and Gravesend.

7.4.5. The 'Fastrack' network has been planned and funded by both public sector and private sector developer contributions and in time it is expected that the network will include four routes, extending over 40km and offering bus priority for around 75% of the routes. 'Fastrack' to date has achieved a high profile both locally and nationally and has won many awards, but more importantly, it has achieved higher patronage in the first few years than originally forecast.

7.4.6. On average over the last 3 years (up to February 2020) 3,400 passenger trips were made on a weekday on Fastrack A and 5,400 trips on Fastrack B. This is equivalent to around 2.6 million passenger trips yearly on the whole Fastrack system.

7.4.7. Demand on Saturdays is generally around 25% lower than weekdays, and demand on Sundays is generally 66% lower than a weekday.

7.4.8. Demand on Fastrack has been affected by the Covid 19 pandemic and has resulted in a significant drop in passenger numbers using the service, notably in peak times. It is difficult at this stage to evaluate the long-term effects of the pandemic and whether the reduction observed in peak time will continue or return to pre-Covid levels.

7.4.9. The Fastrack network is due to be retendered in 2022 and there is an intention to make optional provision for up to 30% more capacity along the contract length.

7.4.10. Subject to progress with residential and other developments, further services are expected to be added to the network. Such changes are not yet finalised but the KKC Fastrack team shared early thoughts on the potential provision of two new routes and the diversion of Fastrack B to The London Resort.

7.4.11. WSP's public transport team has regularly liaised with the Kent County Council Fastrack Team during the production of the Bus Strategy.

7.5 KENT RELEVANT PROJECTS

Mobility-as-a-Service (MaaS)

7.5.1. KCC is currently trialling an implementation of a MaaS system in Kent in an urban environment including Fastrack BRT and the local rail provision. The trial project will focus on the area surrounding Ebbsfleet and consists of three phases: analysis up to early 2021, planning up to autumn 2021 and targeting implementation in summer 2022. This will be followed by a potential roll out across Kent from 2023 to 2025 - assuming a successful pilot.

7.5.2. KCC's role will be to orchestrate the creation of a sustainable multi-modal MaaS Framework and ensure transport is truly integrated at an operational level, thus providing seamless travel options for passengers.

7.5.3. KCC's ambition is to create a MaaS Framework which could be regarded as best practice for other MaaS schemes in Kent, nationally and internationally.

7.5.4. The project so far plans to support multimodal transport integration in the study area including:

- Train travel to and from London and Kent;
- Fastrack electric bus services (from September 2022);
- Local Arriva bus services;
- Bike and ebike hire;
- Electric car club hire; and
- Potentially the electric autonomous shuttles on Fastrack and DRT in Ebbsfleet should these project timescales allow.

The ultimate aims of the project would be to allow residents to live in Ebbsfleet Garden City without the need for a private car for local journeys and without causing gridlock.

Technically, the "Customer MaaS app & website will seek to deliver integrated journey planning, ticketing & payments & support door to door travel for a wide range of transport offering monthly multimodal travel subscription products as well as PAYG to an integrated transport system. All travel needs for residents and visitors in Ebbsfleet will be supported through the MaaS app & website".

The MaaS back office platform and customer facing Mobile app will be seamlessly integrated via Open API's with transport and information providers to allow customers to access Information and planning of multimodal journey planner and real time information, booking, payment, ticketing & customisable user accounts with incentives. Revenue settlements will also be achieved through the back-office platform.

The app will integrate Betterpoints to incentivise healthy active travel choices and zero emission vehicles to help reduce the public health burden on the NHS and supporting their 'Ebbsfleet Garden City, Healthy New Town Programme' (extracted from KCC PowerPoint presentation Oct 2020).

Other projects related to PT in Kent

7.5.5. A number of others relevant public transport projects are also in the pipeline:

- Fastrack new contract - from Sept 2022 bringing Fastrack A and B together into one KCC managed contract;
- Fastrack Bean Road Tunnel – zero emissions buses only – from Sumer 2022;
- Ebbsfleet All Electric bus town - Fastrack fleet and DRT fleet going electric – from Summer 2022;
- DRT as a first mile/last mile solution to connect Ebbsfleet residents with the train, Fastrack and bus network to allow them to not use their cars – DRT Ebbsfleet – dependent on Redrow/Henley Camland S106 developer funding and contract with Arriva to launch Winter 20;
- Fastrack autonomous electric shared shuttles trial;
- Green Corridors KCC/EDC project –improving cycling and walking infrastructure in the Ebbsfleet Garden City area;
- Kent and Medway Energy and Low Emissions Strategy and emerging action plan / Kent Net Zero Plans; and
- Provide the right conditions for an integrated transport system in Ebbsfleet before trailing a 1st Clean Air Zone / Zero Emissions Zone in Kent.

7.5.6. It is the intention that The London Resort proposals and Bus strategy is well-aligned with KCC's ambitious plans.

8 BUS STRATEGY

8.1 BUS STRATEGY PRINCIPLES

8.1.1. The Bus strategy for The London Resort is based on both the projected demand and an existing network analysis, underpinned by the following principles:

- Provides a range of convenient and attractive bus connections to fit different scenario years, day types and user types;
- Builds on and optimises the existing network rather than duplicating and dispersing resources across overlapping routes;
- Builds on KCC's ambitious strategy, policies and tools, such as Fastrack and MaaS;
- Differentiated solutions for high demand and lower demand areas;
  - Provides improved high frequency bus service for areas with high demand within a direct bus route catchment, prioritising the premium Fastrack service where appropriate;
  - Provides practical, smart, flexible solutions to accommodate lower demand areas such as Demand Responsive Travel (DRT);
  - Provides a shuttle service for areas of high demand where lower quality public transport connections are available, and where DRT is not suitable; and
  - Provides a Mass transit solution for train interchanges.
- Where possible, and within the vicinity of the Site provides Bus priority measures; and
- Improves interchanges with convenient bus stop locations, integrated schedules, seamless integrated fares and easy to access information.
- Enhancements or amendments to existing commercial bus services will be negotiated through Kent County Council.

8.2 IMPACT ON EXISTING NETWORK AND MITIGATIONS

FASTRACK B

8.2.1. The spatial analysis of the population distribution in Gravesham and Dartford indicates that around 40% of the population is categorised as C1/C2 and D and is within 700m of the Fastrack B bus route, which should coincide with the approximate locations of staff. The local visitor demand for buses is small and location patterns are expected to follow those of the full population, independently of the social grade.

8.2.2. To serve The London Resort; the Fastrack service will need to be rerouted to the Interchange Plaza via the London Resort Access Road as presented in Figure 8-1. This diversion will be provided with full bus priority. While this diversion will omit a few existing bus stops, journey time should be speeded up using the dedicated new road. It has not yet been agreed if all Fastrack B bus trips will be diverted or only a proportion of them. This will be decided with/by the KCC Fastrack team considering the overall trip pattern on Fastrack B closer to the opening of the Resort.

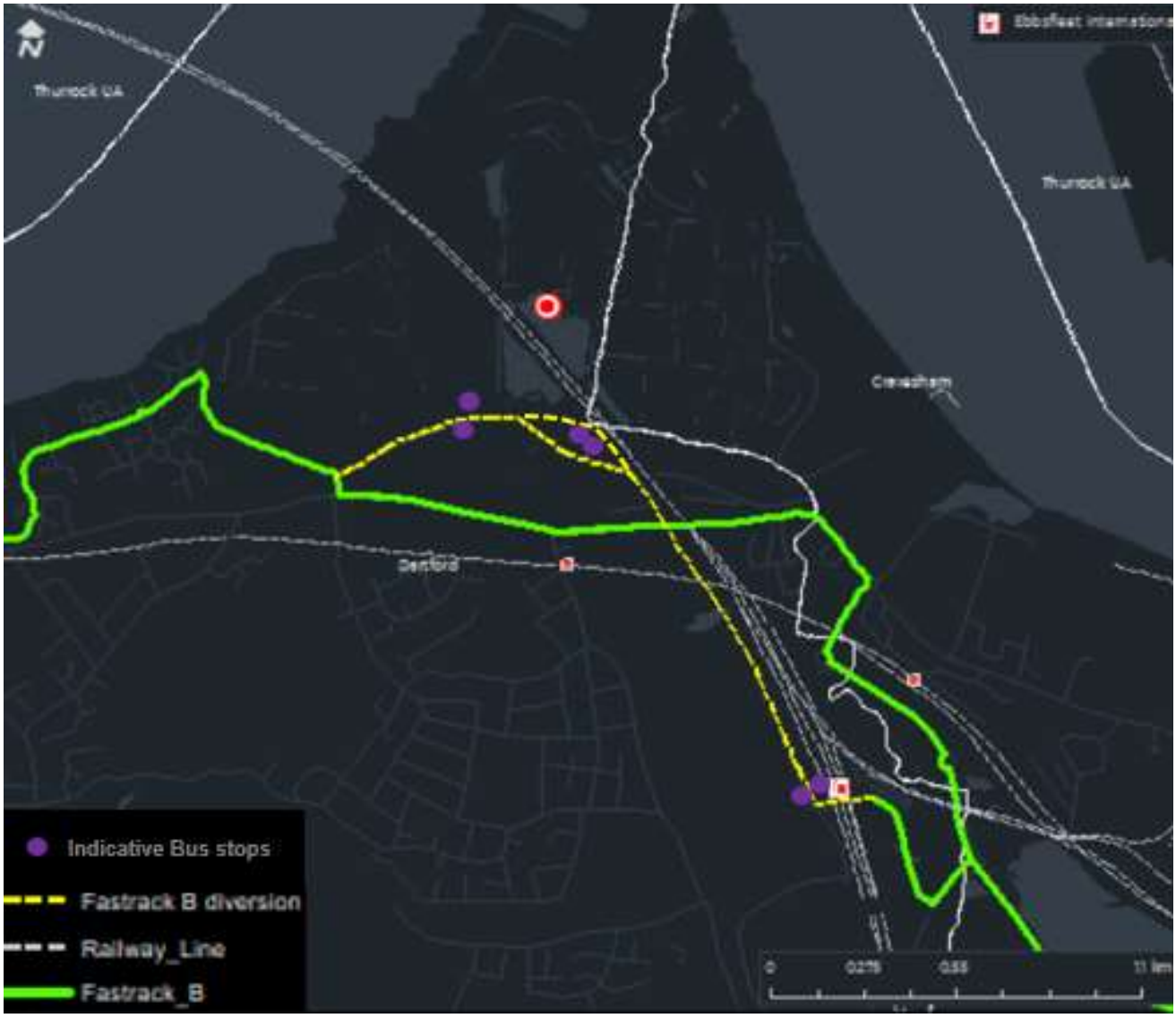


Figure 8-1 - Fastrack Proposed Diversion to Serve The London Resort

Fastrack B capacity will also need to be enhanced to cater for the expected Resorts demand. At the moment it is expected that the potential additional daily total demand for Fastrack B bus trip only could be between 1,270 in 2025 up to 1,977 trips in 2038. This indicates an increase of 24% of existing pre-Covid weekday demand, and up to 37% in 3038 (see

Table 8-1).

8.2.3. The additional demand for train interchange at Greenhithe Station is anticipated to be partially covered by the Fastrack services (B & C) to a maximum of 180 passenger in peak hours and will be complemented by the people mover service discussed in the next section as and when required.

Table 8-1 - Potential Additional Demand on Fastrack B&C – 85th Percentile Day

Fastrack B Potential Demand	Total Daily pax 2025_85th	Max ph	Total Daily pax 2029_85th	Max ph	Total Daily pax 2038_85th	Max ph
Fastrack B Catchment Gravesham	650	54	933	78	979	82
Fastrack B Catchment Dartford	485	40	696	58	730	61
Fastrack B Visitor	135	11	177	15	267	23
Fastrack B and C Train interchange (Greenhithe)	1,890	180	945*	90	945*	90
Total	**2,800**		**2,751**		**2,922**	

**Reduction expected due to Swanscombe station improvement.*

8.2.4. The additional capacity for route B could be provided by either increasing frequency or changing the vehicle type, for example to articulated buses.

8.2.5. If the frequency increase option is chosen, the additional capacity required in both directions will be around additional 1 bus per hour (bph) in 2025 for an 85th percentile day and 2 bph per direction in 2038. This will be raised by another 1 bph on peak days.

FASTRACK C

8.2.6. Ingress Park is a large newly developed area located to the south west of The London Resort. Increasing the number of buses in this area has been contentious, and the benefits of further additional capacity should be carefully assessed to ensure the impacts on emission, noise and safety are understood and mitigated. The Fastrack team is currently investigating a potential new route along the alignment below to avoid increasing bus volumes operating through Ingress Park while continuing to improve the level of service on Fastrack.

8.2.7. The potential alignment for the new route could be:

New Fastrack C: Greenhithe Stn, The London Resort, Ebbsfleet International, Bluewater and the hospital, ultimately linking Dartford and potentially Abbey Wood, operating at 1 BPH in each direction (every 60 minutes) growing organically with demand. (See Figure 8-2*)*

8.2.8. The new potential Fastrack Route C could cater for some of the additional demand expected from Greenhithe and potentially expand the catchment area of Fastrack to additional members of staff.

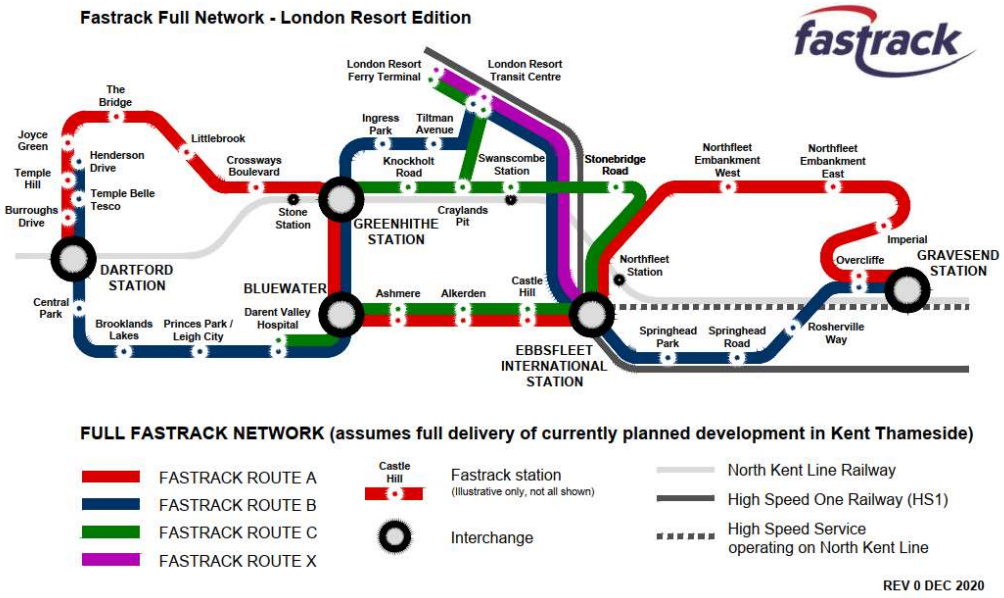


Figure 8-2 - Fastrack Potential Network Development (Dec 2020)

URBAN BUS NETWORK

8.2.9. The spatial analysis of potential staff location in Dartford and Gravesham, added to the small number of visitor trips which is expected to be distributed evenly across the counties, shows few other areas which are likely to generate additional bus demand.

8.2.10. illustrates these six areas of interest and the potential proportion of demand they could generate:

- Area 1: East of Gravesham (40% of Gravesham demand);
- Area 2: South West of Gravesham (20% of Gravesham demand);
- Area 3: West of Ebbsfleet (20% of Dartford demand);
- Area 4: West of Dartford (20% of Dartford demand); and
- Area 5 and 6: pocket of potential demand south of Dartford (10%+10% of Dartford demand).

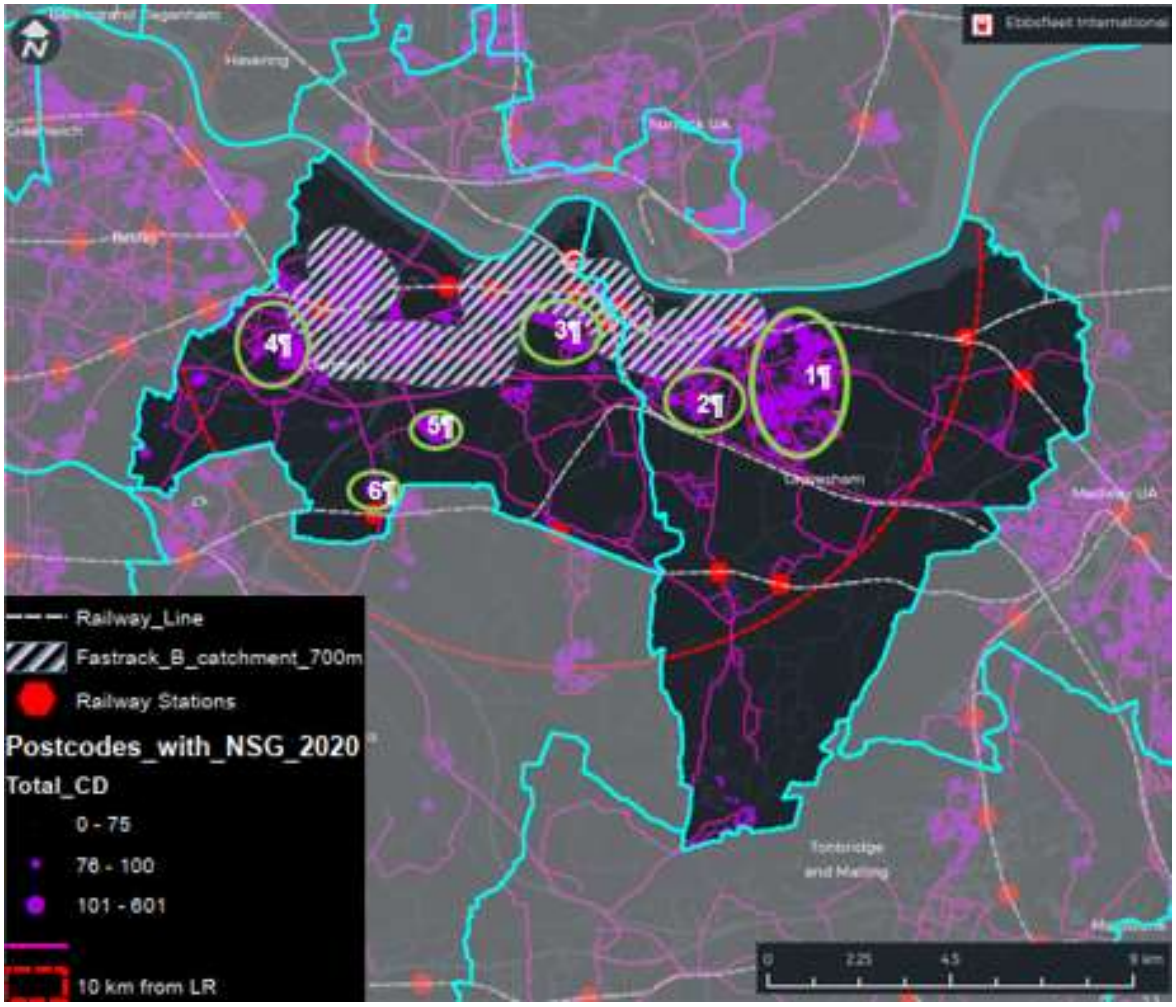


Figure 8-3 - Areas of Potential Bus Demand

8.2.11. Applying the proportions below to the Staff and Visitor demand gives an indication of the level of the number of additional trips to be expected to be generated to/from these areas. Table 8-2 provides a summary of these combining staff and visitors for the 85th percentile day.

Table 8-2 - Potential Bus Demand Split per Areas, Total and Busiest Hour

Total Bus Demand	2025_85th %ile Day	Max phpd	2029_85th %ile Day	Max phpd	2038_85th %ile Day	Max phpd
Area 1	710	59	1,016	86	1,142	97
Area 2	355	30	508	43	571	49
Area 3	280	24	399	34	466	40
Area 4	280	24	399	34	466	40
Area 5	140	12	200	17	233	20
Area 6	140	12	200	17	233	20

8.2.12. The following paragraphs discuss the potential solutions to serve and mitigate the impact the estimated additional demand per area.

8.2.13. Area 1: East Gravesham will require increased capacity in the order of 1 or 2 bph in peak time, 85th %ile Day. This could target route 480 and 490 up to The London Resort, with additional journeys terminating at the Interchange Plaza or Swanscombe only, rather than all continue to Dartford Station. The peak day services will require an increase of 1 bph. Route 480/490 will be as important as Fastrack to support staff and visitors travelling by bus.

8.2.14. Area 2: East of Ebbsfleet is relatively well connected to Ebbsfleet but does not have a direct link to The London Resort. The demand for this area is expected to generate up to 30 bus trips in 2025 at the busiest time raising to 49 in 2038. To cater for this demand, it may be possible to extend the current route 484 which operates between Bluewater/Swanscombe / Ebbsfleet in the off peak. The service would need to be extended to area 2 following the routeing of route 483 until Perry Street, operating 1 bph from 8:00 am to midnight. The extension is estimated to require 30 minutes round trip. Alternatively, two vehicles could be allocated to a DRT service.

8.2.15. Area 3: West of Ebbsfleet benefits from a direct bus link to Swanscombe Station via routes 306 and 484, however this is only at off peak times. Swanscombe station is also accessible by walking from this area, requiring between a 3- and 25-minute walk. As a result, it is not proposed to add extra bus service to cater for this area, but it is proposed to include this area in the Maas DRT catchment, allocating one vehicle per hour, to operate at least two trips.

8.2.16. Area 4: West of Dartford is very close to Dartford Station which is served by local train services and the Fastrack network. The demand for this area would fill half a bus in at the busiest hour but it will be difficult to justify peak resources on this service. A potential extension of routes 480/490 could be consider in off peak, otherwise a DRT service could focus on this area. For this area it is important to strengthen the connection to Dartford station with seamless interchanges. This provide an opportunity to expand the Kent MaaS project area.

8.2.17. Areas 5 and 6 are discussed in the next section.

DEMAND RESPONSIVE SERVICES (DRT)

8.2.18. Areas 5 and 6 are locations of potential demand but represent a very small proportion of the overall demand. With an expected number of trips per peak hours of 12 in 2025, increasing to 20 in 2038, a direct bus link to the Resort cannot be justified. However, should some staff live in the area, a DRT bus service could be provided. The MaaS project provides exactly the right platform to support such services. Providing a bus service on demand also raises the opportunity to continuously monitor bus usage and understand when/if the established demand requires a regular scheduled bus service at a later stage.

STATION INTERCHANGES / PEOPLE MOVER

8.2.19. A significant number of visitors and staff are expected to arrive by train and ferry. The rail and ferry passengers will be provided with an option to make the first/last leg of their journey to reach the Resort by bus. Provision will also be made for alternative active modes such as walking, cycling etc.

8.2.20. Different solutions need to be implemented for each station:

Ebbsfleet Station

8.2.21. It expected that the majority of rail passengers will be using Ebbsfleet International Station, this will vary from 12,700 in 2025 rising to up to 31,400 in the 2038 peak day as presented in Table 8-3. considering the worst-case scenario where no trips are made using active modes.

Table 8-3 - Potential Maximum Train Trips to/from Ebbsfleet

Ebbsfleet Train Interchange Demand	85th %ile Day	Max 85th Pdph	Peak Day	Max Peak Day Pdph
Estimated Bus Arr + Dep 2025	12,687	996	17,225	1,382
Estimated Bus Arr + Dep 2029	16,734	1,305	22,528	1,819
Estimated Bus Arr + Dep 2038	23,156	1,886	31,425	2,697

8.2.22. To cater for these passengers, the Resort aims to operate a very high frequency bus service to the Interchange Plaza and Ebbsfleet Station (People Mover E), continuing to the Ferry pier to connect with sailings and using articulated buses. The frequency will vary depending on the time of the day as described in Figure 8-4, peaking to serve Ebbsfleet International Station in the evenings.

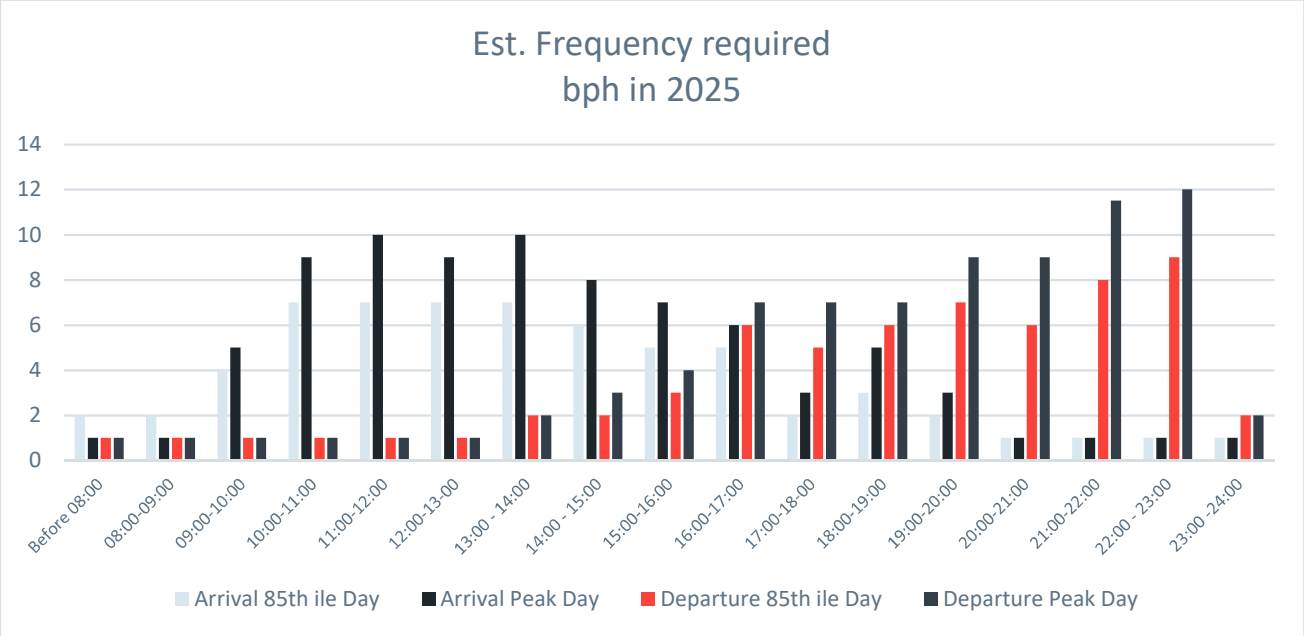


Figure 8-4 - People Mover Required Frequencies per Hour in 2025, Based on 85th %ile Day and Peak Day

8.2.23. Table 8-4 provides an understanding of the maximum require frequency for the People Mover in different years and type of days.

Table 8-4 - People Mover E Frequency Requirement between Ebbsfleet and the Resort

People Mover Frequency - E	85th %ile Day	Peak Day
2025	9	12
2029	11	16
2038	16	23

8.2.24. However as mentioned earlier, it is expected that improvements to Swanscombe Station will reduce the need for the People Mover by then. This will be monitored carefully.

Ferry terminal (South of the River)

8.2.25. The visitors and staff using the Ferry from Tilbury terminal, will require a bus connection to reach the Resort entrance. The bus connection will be provided to meet the Ferry timetable and operated with Artic vehicle with People Mover F.

8.2.26. To cater for the expected load of 720 passengers at the busiest hour, 6 buses per hour will need to be provided in 2025, increasing to 16 bus per hour to cater for the 2,000 passengers expected on a peak day in 2038 peak, as presented in Table 8-5.

Table 8-5 - People Mover F Frequency Requirement between Ferry Terminal and the Resort

People Mover Frequency - F	85th %ile Day	Peak
2025	6	8
2029	8	12
2038	12	16

8.2.27. The Bus service will use articulated vehicles which will interwork with the People Mover between Ebbsfleet and the Resort.

Greenhithe

8.2.28. It is estimated 550 people will be using this station at a busiest hour during the 85th %ile Day and 760 on a peak day in 2025. While some passengers will be able to use the Fastrack network to reach the Resort (Route B&C), Greenhithe station will be supplemented by an additional three vehicles to support transfer/to and from the Greenhithe Station when/if the Fastrack services needs additional capacity. These three vehicles will be able to provide capacity for up to 6 buses per hour between Greenhithe and the Resort. It is anticipated that these will be required only until improvements are made in Swanscombe station. This service will use 12-meter vehicles and will be part of the People Mover fleet and maximum frequency are defined in Table 8-6.

Table 8-6 - People Mover Frequency Requirement between Greenhithe and the Resort

People Mover Frequency - G	85th %ile Day	Peak
Fastrack B/C	2	2.5
2025 until Swanscombe Station is improved	5	6

8.2.29. The proposed People Mover network is illustrated in Figure 8-5.

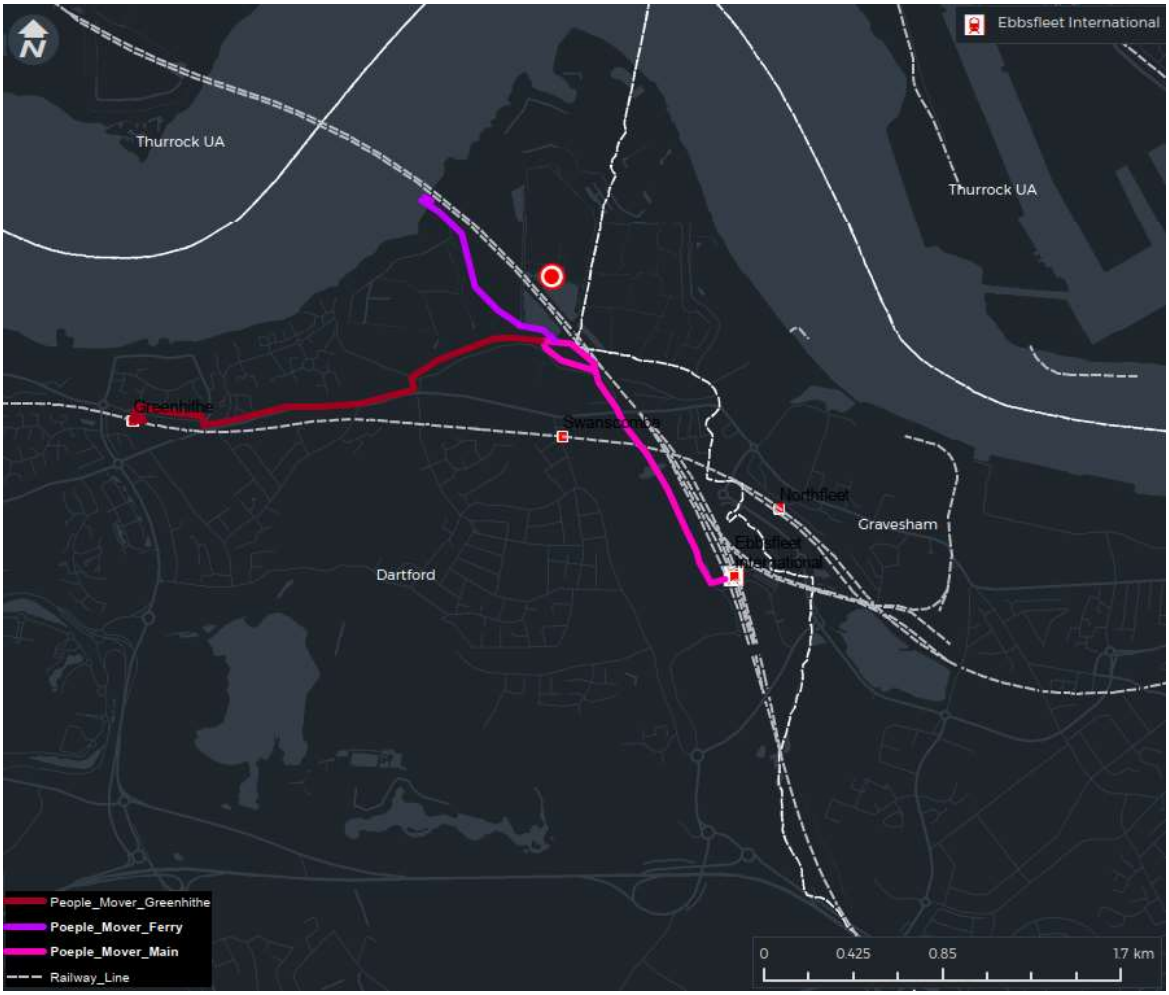


Figure 8-5 - People Mover Network

Northfleet

8.2.30. Those arriving by train journey to/from Northfleet Station will be able to use the Sapphire routes 480/490 which pick up and drop off in the High Street. To improve this connection, the Resort will liaise with KCC and with the Operator, Arriva, to consider a potential diversion on either service 480 or 490 to directly serve Northfleet Station Road. This will add 1.5 minutes per direction.

8.3 NORTH OF THE RIVER

8.3.1. The demand north of the Thames is summarised in Table 8-7.

Table 8-7 - Demand in Thurrock

Total Bus demand (Arr/Dep)	2025_85th %ile Day	Max pdph	2029_85th %ile Day	Max pdph	2038_85th %ile Day	Max pdph
Bus trips staff	531	44	762	64	800	67
Bus trips visitor	87	7	115	10	173	15
Train trips	846	67	1,123	88	1,521	124
Total	**1,464**	**118**	**2,000**	**162**	**2,494**	**206**

8.3.2. Around 620 trips a day are expected using buses as a main mode in 2025 (85th %ile), this being for both staff and visitors and this is expected to increase up to almost 1000 trip a day in 2038, excluding train users.

8.3.3. This will lead to 51 bus trips at the busiest hour in 2025, rising to 82 trips in 2038. A peak day will see this demand increasing by over 25%.

8.3.4. The population in socio-economic categories C1/C2 and D in Thurrock is illustrated in Figure 8-6.

Figure 8-6 - Population Distribution in Thurrock (Category C1/C2 and D)

8.3.5. Based on the existing rail network which requires one change in Grays, making the train less attractive for local people and the conclusion of the analysis of the Thurrock bus network discussed earlier, the Bus Strategy proposes an extension of Route 73 or 66 to The Ferry Terminal, requiring an additional 10 minutes running time per direction.

8.3.6. Between 67 and 124 passenger trips are expected to/from Tilbury Town Station at the busiest hour between 2025 and 2038 (85th %ile day). It is proposed to cater for these passengers by the provision of a new shuttle route with the sole objective of providing a fast link between Tilbury Town Station and the Tilbury Ferry Terminal.

8.3.7. The shuttle will be scheduled to meet the train arrivals and departures. One vehicle will be able to provide a service up to every 20 minutes, which is equivalent to 280 spaces. This will largely cater for the busiest loads on 85th %ile days and peak days.

9 INFRASTRUCTURE REQUIREMENTS

9.1.1. It is expected that the proposals above will require enhancements to infrastructure. These will be finalised when the services plans are agreed.

9.1.2. Improvements are anticipated to be required at:

- Ebbsfleet Station, to accommodate the People Mover and the internal flow of passengers within the Station;
- Tilbury Ferry terminal and Tilbury Town Station to accommodate the new bus service in between these two locations;
- Bus stops arrangements in Greenhithe;
- Bus stops in Northfleet;
- Bus stops around Swanscombe, to optimise the last/first mile to the Resort;
- Bus priorities need to be implemented wherever physically possible in conjunction with KCC;
- Interchange Plaza will require a number of lay-by and bus terminus arrangements where vehicles can take a layover and should be equipped with electric charging infrastructure for buses; and
- Opportunity charging infrastructure will almost certainly be necessary to ‘top-up’ electric buses during the day, and this would most likely be located at the Interchange Plaza.

10 IMPLEMENTATION MECANISMS

10.1 GENERAL

10.1.1. While the analysis supporting the bus, strategy provides a good understanding of the likely impact of The London Resort on the public bus network on a normal day and a peak day, it is recognised that there will be variability on people's anticipated origins and destinations and loads depending on seasons, events, weather and other factors.

10.1.2. To provide the flexibility required to adapt the Bus Strategy to reflect the likely changes on travel pattern, it is proposed that this will be dealt with by way of the Transport Demand Management Steering Group. The Steering Group will have the specific duties to:

- Create and implement monitoring mechanisms;
- Monitor bus usage and capacity requirements for the Resort staff and visitors;
- Specify required bus changes as and when required to encourage the use of public transport;
- Overview the implementation of the network changes;
- Specify and organise the delivery of additional bus services for peak days;
- Monitor usage on DRT services;
- Monitor the need to pump-prime bus services as/when appropriate;
- Monitor the infrastructure requirement delivery; and
- Ensure fair and service integration is seamless.

10.1.3. The role and responsibilities of the Steering Group will evolve as the Resort develops.

10.1.4. The Steering Group is expected to be composed of representatives from The London Resort, KCC, Thurrock Council, KCC Fastrack team to include liaison with local bus operators such as Arriva and Ensign.

10.1.5. The paragraphs below detail the specific mechanism anticipated to implement the proposed improvements on the bus network.

10.2 FASTRACK

FASTRACK B

10.2.1. The additional visitors and staff demand on Fastrack B is expected to be continuous through the day, providing the opportunity to improve loading factors on existing services.

10.2.2. The cost of the expected frequency increase requirement of 1 bph in 2025 and 2 bph in 2029 is expected to be covered by the additional revenue generated by additional passengers. This revenue is expected to be sufficient to cover the cost of improved Fastrack B service level required for the staff and visitors from the from the opening of the Resort. However, should a shortfall be observed, and no operational solutions found, the Resort should be willing to sponsor the services until the cost of the improvement can be covered. The Steering Group would monitor this carefully.

FASTRACK C

The implementation of Fastrack C will be useful to support the large number of people who are expected to arrive and depart from Greenhithe Station to reach The Resort. It is believed, again, that the revenue from fares should cover the cost of the implementation of this service between Greenhithe Station and The Resort, as well as limiting the number of services operating through Ingress Park.

10.3 THE PEOPLE MOVER NETWORK

10.3.1. It is intended that the People Mover operation should be contracted by The London Resort, with the latter able to control the deployment of vehicle resources according to demand on different days and at different times of the day. To aid flexibility, it is proposed that, whilst the majority of the vehicles should be 18m articulated buses, a number of 12m single deck buses should also be in the fleet. For example, if the volume of arrivals at Greenhithe Station in the early year of operation of the Resort should be higher than can be accommodated by Fastrack, the latter buses could be deployed to provide the required additional capacity.

10.3.2. The vehicles operating the People Mover service should be powered by battery electricity in the interest of zero emissions.

10.3.3. The People Mover will use the dedicated new road to be built between Ebbsfleet International Station and the Interchange Plaza. The journey is expected to last less than 5 minutes.

10.3.4. To encourage and facilitate a seamless interchange, the mass transit fare should be either integrated in the cost of the door to door journey or the Resort ticket or provided for free. The Resort will work with KCC to achieve seamless and through fare capability on the local bus network.

10.3.5. The shuttle between the Tilbury Ferry Terminal and Tilbury Town will be operated on the same basis as the People Mover.

10.4 ROUTE 480 AND 490

10.4.1. While route 480 and 490 are operated by Arriva, KCC has expressed the desire to carry out negotiation over the operation of these services on behalf of The London Resort.

10.4.2. It is believed that the additional demand for these services will also cover the capacity increase required. Should this not be the case, The Resort should be prepared to pump-prime the additional service level required. The potential shortfall will be monitored by the PT Working Group.

10.5 ROUTE 66 OR 73

10.5.1. The London Resort will endeavour to negotiate with Ensign buses, involving Thurrock Council, the extension of one or other of route 66 or 73 to the Tilbury Ferry Terminal.

10.5.2. The Resort would be prepared to pump-prime the service extension and keep monitoring capacity via the PT Working Group.

10.6 DRT NETWORK

10.6.1. A network of up to 5 DRT routes is expected to be required to cater for areas where the bus demand does not justify a new traditional bus service and there is no direct attractive existing bus connection available. For these routes, The Resort will provide KCC with the financial contribution required to operate DRT as part of the MaaS project to the 5 identified areas until such service can either cover its cost or justify a traditional bus service.

10.6.2. The contribution will be calculated to cover the net cost of on demand operation of 3 electric small buses (under 10m) and 2 electric minibuses (7m) plus 2 spare vehicles as and when required. Cost and usage will be monitored through the Steering Group.

10.7 PEAK DAYS SERVICES

10.7.1. As described in this Bus Strategy, on peak days, additional capacity will be required on the bus network to cater for additional staff and visitors. These peak days are anticipated to be few and on non-weekdays. As such, it would not be necessary to invest in additional new vehicles on the local network to cover these specific few events.

10.7.2. It is believed that it is normal practice for bus operators to have a number of spare vehicles released from the reduced off-peak and weekend frequency seating in their depots at these times. As such it is believed that the most economical way to deal with peak days is to tender additional services as and when required. This will also be managed by the Steering Group.

10.8 INFRASTRUCTURE

10.8.1. The London Resort will be responsible to incorporate the bus stopping and waiting requirements at Ebbsfleet International Station and at the Interchange Plaza, including electric re-charging infrastructure as required by their design.

10.8.2. Bus stop requirements will be implemented following KCC and relevant councils' respective processes.

10.8.3. Tilbury Ferry Terminal and Tilbury Town Station requirements will be discussed and implemented in partnership with Thurrock Council.

11 SUMMARY OF PROPOSALS

11.1.1. The demand analysis demonstrated that a large portion of staff and some visitors are likely to travel by bus.

11.1.2. The services listed below are envisaged to be enhanced or introduced to support active use of public transport to arrive and depart from The London Resort:

South of the Thames

- Fastrack B diversion;
- Fastrack B capacity increased;
- Partial Introduction of Fastrack C between Greenhithe and the Resort;
- Increased frequency on routes 480/490;
- Potential extension or restructure of Route 484 or a DRT2 to serve Perry Street (area 2) and improve service in area 3.
- Potential extension of routes 480 or 490 in East Dartford or introduction of DRT4
- Potential Diversion of routes 480 or 490 to service Northfleet Station Road;
- Proposed DRT3/4/5/6 in Area 3/4, Area 5 and Area 6; and
- Introduction of a People Mover network of 3 routes linking Ebbsfleet (People Mover E), the Ferry terminal (People Mover E) and Greenhithe (People Mover G) to the Resort Interchange Plaza. The capacity delivered by the People Mover be reconsidered in 2029 in the light of progress with major work at Swanscombe Station to facilitate a fully accessible approach to the Resort.

North of the Thames

- Extension of route 73 or 66 to Tilbury Ferry terminal; and
- Introduction of a new dedicated shuttle service between Tilbury Town Station and Tilbury Ferry Terminal ONLY operating to meet train arrivals.

Implementation

- A Transport Demand Management Steering Group will be set up to monitor and overview the adoption and implementation of the Bus Strategy in a flexible manner. The Working Group will be composed of representatives of the London Resort, relevant councils and local bus operators;
- The London Resort will take the responsibility to implement and operate the People Mover network as well as the Tilbury Terminal Shuttle;
- It is predicted that the fares generated by the additional demand on the local bus services, including Fastrack, will cover the cost of capacity increases required. Should this not be the case, The Resort would be prepared to pump-prime the services. The potential shortfall will be monitored by the PT Working Group;
- Enhancements or amendments to existing commercial bus services will be negotiated through Kent County Council;
- The Resort hopes to include the operation of the potential 5 DRT routes into the KCC MaaS project and contribute financially to cover the net cost of operating these services;
- Peak days additional capacity requirements will be specified and tendered as and when required by the Steering Group; and

- Infrastructure will be implemented in partnership and following the relevant Authorities' processes.

WSP House
70 Chancery Lane
London
WC2A 1AF

wsp.com