

M20 Junction 10a

TR010006

Development Assumptions for Traffic Modelling



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Development Assumptions for Traffic Modelling

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1. Development Assumptions for Traffic Modelling

1. In its written submissions on the Open Floor Hearing (REP5-021), the Applicant stated that it would respond to Councillor Bartlett's submissions on cumulative effects once it had received these submissions in writing. Councillor Bartlett submitted his written submissions at Deadline 5 (REP5-029) and this document provides the Applicant's response to those submissions (insofar as they are related to cumulative effects).
2. This document summarises the development assumptions used in the traffic modelling forecasting process.
3. Developments are accounted for in one of two ways:
 - Explicitly, by estimating traffic generation and distribution associated with them and adding this to the existing modelled trips;
 - As 'background' growth, whereby existing 'base year' (2014 in this case) trips are factored up in the future using DfT factors by area, trip purpose, vehicle type etc.
4. The former is used to achieve greater local forecast accuracy and relates to potential developments that are near to the scheme and/or of significant size. The latter deals with overall national growth and also provides growth control totals for consistency across scheme evaluation. Where the former is used, the latter has to be reduced to avoid 'double counting' and invalidating the DfT control total.
5. The determination of which developments to include is carried out through the compilation of an 'Uncertainty Log', that documents potential local developments (and infrastructure schemes) and assigns them to one of four categories of uncertainty based on where they are in the planning process, and in agreement with the planning authority. The 'Core Scenario' is deemed to include all such developments in the lowest two categories of uncertainty; namely 'Near Certain' and 'More Than Likely'.
6. Low and High scenarios are also tested. These assume less and more developments respectively by filtering based on the categories, in conjunction with decreases and increases in the background growth levels to enable a range of growth scenarios to be assessed.
7. To evaluate the economic benefits of a scheme, the future comparison of the Without-scheme and With-Scheme cases in each of the three scenarios has to use the same level of travel demand in each case. Therefore any developments that are dependent on the scheme being tested (Junction M20 10a here) cannot be included as they would not go ahead in the Without-Scheme case. These are therefore omitted from the Low, Core and High growth scenarios.
8. However by way of operational sensitivity tests, some other scenarios were tested that assumed more development than is allowed in the standard reported scenarios. These included the 'Realistic' and 'Realistic Plus Stour Park' scenarios.

9. The results of these assumptions, and the allocation of developments to scenarios, are provided in Appendix A. The list of developments set out in Appendix A includes all those highlighted by Councillor Bartlett in his written submissions.

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Applicant's Responses to Written Representations

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Development Heading	Individual Developments (if applicable)	Included?	In Study Area?	Scenarios					Notes
				Core	Pessimistic	Optimistic	Realistic	Realistic + Stour Park	
Lorry Park	Operation Stack	No	No						Model is designed to measure impact of average network conditions. Operation Stack will have minimal impact on these.
	Ashford Lorry Park	Yes	Yes						According to the AIT website, the Lorry Park has been operational from 2004. Therefore the Base year traffic demand will have been implicitly included in the Base Year model, and growth in the demand will have been incorporated in the underlying background growth.
Otterpool Park		No	No						Otterpool Park is in Shepway District, and is located near J11 of the M20 some way outside the Simulation Area of the model. It was therefore considered too far from the scheme to be included in the list of developments explicitly considered in the scheme's Uncertainty Log. It will be included as part of the background growth for the zone within which it is contained.
Parkway Rail Station at Westenhangar		No	No						The station is within the area covered by Otterpool Park, so see above. The impacts of this station upon traffic in and around Ashford and M20 J10a would be minimal, and therefore this would not be significant enough to be explicitly modelled.
Developments	Highmead House	Yes	Yes	Yes	No	Yes	Yes	Yes	Assumed to be equivalent to the development listed in the Uncertainty Log as Willsborough Lees. This was included in the Core Scenario with 260 dwellings assumed.
	Finberry	Yes	Yes	Partial	Partial	Partial	Yes	Yes	Due to a name change is listed in the Uncertainty Log as Cheeseman's Green. Full build-out is dependent on the M20 J10a scheme, so not all the development was allowed to be taken into account in the Core Scenario, only the proportion that could be given planning permission without the scheme: namely 700 of the 1,100 dwellings, and 79 of the expected employment of 500 jobs. It is however contained in full in the Realistic Scenario sensitivity test.
	Court Lodge	No	Yes						Not in the Uncertainty Log. It is close to one of the locations where the 3rd Urban Extension accesses the main network, but it is not clear if it is part of this development, and has been assumed not to be. As such it was included as part of background growth within Ashford.
	Steeds Lane	No	Yes						Not in the Uncertainty Log. Based on the location of Steeds Lane, does not appear to be a name change from a development in the Uncertainty Log. Therefore included as part of background growth within Ashford.
	Pound Lane	Yes	Yes						Assumed to be part of the 3rd Urban Extension, which contains 3,000 dwellings and 1,800 jobs split between three development zones, one of which matches the location of the Pound Lane development. The scenarios it is in are listed under the entirety of the 3rd Urban Extension.
	Park Farm	No	Yes						Not in the Uncertainty Log. Based on the location of Park Farm, does not appear to be a name change from a development in the Uncertainty Log. Therefore included as part of background growth within Ashford.
	Chilmington Green	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Chilmington Green has been included in all scenarios. It is listed in the Uncertainty Log as supplying 3,200 dwellings and 1,000 jobs when fully built.
	Stour Park	Partially	Yes	Partial (some of Phase 1)	Partial (some of Phase 1)	Partial (some of Phase 1)	Partial (all of Phase 1)	All of Phase 1 and all of Phase 2	Due to a name change is listed in the Uncertainty Log as Sevington, and is in all Scenarios. Full build-out is dependent on the M20 J10a scheme, so not all the development was allowed to be taken into account in the Core Scenario, only the proportion of Phase 1 that could be given planning permission without the scheme: namely 421 jobs. In the Realistic Scenario all of Phase 1 was included, generating 1,275 jobs. In the additional 'plus Stour Park' Scenario all of Phase 1 and all of Phase 2 were included with a combined total of 2,500 jobs.
	Waterbrook	Partially	Yes	Partial (some of Phase 1)	Partial (some of Phase 1)	Partial (all of Phase 1)	Partial (some of Phase 1)	Partial (some of Phase 1)	In the Uncertainty Log Waterbrook is split into three parts. Phase 1 elements that already had planning permission were included in all scenarios, and consisted of 21 jobs. Phase 1 elements that were awaiting planning permission were assumed to be Reasonably Foreseeable and were only included in the Optimistic Scenario - this would generate 417 jobs. Phase 2, consisting of 600 dwellings and 787 jobs, was considered both Reasonably Foreseeable and dependent on the M20 J10a scheme, and was not therefore contained in any scenario.
	3rd Urban Ext./Post 2017 Urban Allocations	Yes	Yes	Yes	No	Yes	Yes	Yes	Development generating 3,000 dwellings and 1,800 jobs. Split between suitably sited zones. Considered More Than Likely, so not in the Pessimistic Scenario.
	Charter House	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Development generating 344 dwellings and 298 jobs.
	Conningbrook	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Development generating 300 dwellings.
	Designer Outlet Centre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Development generating 971 jobs.
	Eureka Park	No	Yes	No	No	Yes	No	No	Development generating 4,424 jobs. Considered Reasonably Foreseeable, and so was included only in the Optimistic Scenario.
	Jemmett Road	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Development generating 154 dwellings.
	Newtown Road	Partially	Yes	Partial (Phase 1, some of Ph. 2-4)	Partial (Phase 1, some of Phases 2-4)	Partial (Phase 1, some of Ph. 2-4)	Yes	Yes	In the Uncertainty Log Newtown Road is split into 2 parts. Phase 1 elements are included in all scenarios, and consisted of 108 dwellings. Phases 2-4 were deemed to be dependent on the M20 J10a scheme, so not all the development was allowed to be taken into account in the Core Scenario, only the proportion that could be given planning permission without the scheme: namely 220 dwellings. This quanta of development is in all scenarios. In the Realistic Scenario all of Phases 2-4 were included, totalling 317 dwellings and 200 jobs.
	Orbital Park	No	Yes	No	No	No	Yes	Yes	Orbital Park was deemed to be dependent upon the M20 J10a scheme. Consequently the demand generated by its proposed 850 jobs appear only in the Realistic Scenario.
Repton Park	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Development generating 650 dwellings.	
Town Centre	Yes	Yes	Yes	No	Yes	Yes	Yes	Development generating 856 dwellings and 502 jobs. Considered More Than Likely, so not in the Pessimistic Scenario.	
Windfall	Partially	Yes	Partial (Dwellings only)	No	Yes	Partial (Dwellings only)	Partial (Dwellings only)	Windfall development split into Dwellings and Jobs. The Dwellings were considered More Than Likely, so the demand for the predicted 300 dwellings was included in all Scenarios bar the Pessimistic. The jobs were considered Reasonably Foreseeable, so the demand for the predicted 900 jobs was included only in the Optimistic Scenario. Demand was spread pro-rata across all Ashford zones.	
Network Rail High Output Operating Base	Near Waterbrook site	No	Yes						Not in Uncertainty Log; HOOB maintenance and ballast handling area. Temporary planning permission granted June 2016. Location south of and adjacent to rail line south of Sevington. Employment demand generated by such a site would be contained within the relevant zone's background growth, and likely to have limited impact on the modelling. Mainly rail activity.