

DARTFORD LOCAL PLAN

**Inspector's Initial
Questions 27-29,
Transport: DBC
Response (Paper F)**

March 2022

Q27. The submission Local Plan is accompanied by Strategic Transport Modelling [INF-6 to INF-13]. However, the option testing output is dated September 2021. How did the options testing results inform the preparation of the plan and was this made available to inform comments on the plan during public consultation?

Transport modelling background

- 1.1 The Transport Background Paper (INF-4) sets out the context for the strategic transport modelling assessment of the Local Plan which was initiated in Spring 2019. This highlighted the extent of existing transport modelling data that was already available and that continued to be pertinent to informing future growth plans. A number of recent transport assessments had been undertaken in Dartford that provide additional information and understanding of the future capacity and issues arising on both the Strategic Road Network (SRN) and the Local Road Network (LRN). These include the Lower Thames Area Model, Dartford Town Centre VISSIM modelling and Ebbsfleet VISSIM modelling which are summarised in Part 2 of INF-4. These draw from adopted plans (notably the Core Strategy POL-1) and have remained applicable, not least given the continuity of many of Dartford's sustainable development aims. This evidence was complemented by the Strategic Transport Modelling, to inform the Dartford Local Plan.
- 1.2 As evidenced in the Spatial Strategy Topic Paper (SPS-1 section 4, pages 11 to 19) on the Borough Spatial Strategy policy S1, consideration of development growth options for the Local Plan was achieved through a range of sources including: transport modeling, a review of sustainable transport (SPS-1 paragraphs 4.10 to 4.12, pages 16 to 17), the Sustainability Appraisal (COR-7 & 8), the Strategic Housing Land Availability Assessment (HOU-2 to 5), the Economic Land Report (BAR-6) and responses to the Local Plan Preferred Options (CON-4) consultation.
- 1.3 During the formulation of the Dartford growth strategy it became clear that a substantial proportion of future development in the Borough would be at sites that already had planning consent. This was reflected in the use within the Dartford strategic modelling of the Dartford Cordon of the Lower Thames Area Model (DCLTAM) which had been provided to the Borough Council by National Highways (formerly Highways England). The Lower Thames Area Model (LTAM) underpins the Lower Thames Crossing DCO submission and was considered the most appropriate strategic transport model that could be used as the basis for the strategic transport assessment of the Dartford Local Plan. The baseline development for DCLTAM, as shown in its Uncertainty Log, also contained a large number of the same development sites that already had planning consent. (There has been a series of discussions with National Highways and extensive extra work commissioned by DBC over the course of the Dartford strategic modelling, regarding the Reference Case that should be used for the transport modelling assessment of Local Plan.)
- 1.4 The Infrastructure Topic Paper provides a useful summary of the role of the various strategic modelling reports (INF-6 to INF-13) at INF-1 paragraphs 5.2 to 5.10. The level of development in both DCLTAM, the Reference Case and Local Plan is covered in Strategic Transport Modelling Stage 2b Report (INF-8) and Stage 3a Report (INF-9) and a useful overview is provided in Transport Background Paper (INF-4).
- 1.5 Unusually, Dartford's Local Plan is not forecasting significant uplift of development beyond the Reference Case, for example residential, and for some land uses less than the DCLTAM baseline. It is important to emphasise the context of the Local Plan forecast growth where a large proportion of future development already has some form of planning consent (including structured permissions for large sites), and:

- Large scale historic but live outline consents often incorporated one or more land use maxima, to provide flexibility, but it was not generally the case that the 'theoretical' floorspace maximum across all uses and the site as a whole could be achieved. In particular, some non-residential/mixed-use outline consents (for instance) are unlikely to be developed to the headline floorspace level permitted due to:
 - changes in commercial markets (notably original plans for very intense scale office concentrated development at Ebbsfleet Central); or
 - the limited development parcels still available within some existing strategic employment sites.
- The Local Plan acknowledges that preliminary master planning for a new Ebbsfleet Central planning application is being undertaken by Ebbsfleet Development Corporation and the strategic transport assessment has taken emerging proposals into account through the land use assumptions for the Ebbsfleet Central area (zones 7096-7099) shown in Appendix M of the Stage 3a Report (INF-9A).

Transport options and consultation informing the Local Plan in summary

- 1.6 The overall approach to transport strategy was a notable component of the Local Plan 'Preferred Options' consultation (CON-4, see pages 37 to 40, and 55). Progress on the Strategic Transport Modelling (INF-6 to INF-13) then confirmed the significance of mitigation and the option of pursuing additional sustainable transport measures, particularly the active travel agenda, featured in various delivery documents supporting the Local Plan including the Sustainable Transport Strategy (INF-5).
- 1.7 As the location of much of the development to meet Borough needs is fixed through existing planning consents, the strategic transport modelling was not able to undertake a (full, hypothetical) exercise to assess the potential transport impacts of alternative future development distributions. Nevertheless, the strategic transport modelling has tested the impact of ambitious mode share targets for sustainable travel modes that would reduce the level of vehicular trips consistent with national policy; local aspirations, particularly within the Ebbsfleet Garden City, and emerging trends. Details of this mode shift testing is provided within Section 4 of the Stage 3a Report (INF-9) with the following two scenarios tested:
 - Core Mode Shift – 15% of journeys generated by Local Plan sites with an origin and destination within the built-up urban/suburban areas of Dartford and Gravesham are expected to use more sustainable forms of transport.
 - High Mode Shift - 30% of journeys generated by Local Plan sites with an origin and destination within the built-up urban/suburban areas of Dartford are expected to use more sustainable forms of transport.
- 1.8 To confirm, the Strategic Transport Modelling Stage 3b Local Plan Option Testing Report (INF-10) was available for the Pre-Submission Dartford Local Plan (COR-1) publication consultation in September 2021.
- 1.9 Throughout the strategic transport modelling assessment both National Highways and Kent Highways have been engaged in their role as the responsible authorities for the SRN and LRN respectively. Particularly as the modelling is originally derived from a National Highways model for the Lower Thames Crossing. Their engagement and input has been key to the progress made on the transport modelling, and DBC has regarded their active involvement in the process and detailed advice as a fundamental aim in securing a well-informed assessment.

- 1.10 There have also been communication and liaison meetings with neighbouring councils at key stages of the transport modelling specifically to discuss outputs from the transport model and its progress. There has been significant discussion of transport models and development in north Kent with Local Planning Authorities and Highways Authorities. These are outlined in Duty to Cooperate Compliance Statement COR-11 paragraphs 3.46 to 3.60 and Appendix 7.

Q28. National Highways indicated in their representations that they will not be able to review and comment on the pre-submission Local Plan in respect of the Strategic Road Network until they are content with the transport modelling and assessment. They also indicate that a merge and diverge assessment has not been undertaken in respect of the effect of the proposed spatial strategy on the strategic road network. Is this assessment covered by the Stage 4 Local Plan mitigation modelling report dated November 2021 [INF-12]? Or is the further work requested by National Highways in their representation intended to be a separate exercise to the Stage 4 report and thereby still in progress?

- 2.1 Yes, an assessment of the traffic impacts of the Local Plan on the merge and diverge layouts for the junctions on the strategic road network was carried out following the request from National Highways. The work that was undertaken is set out in sections 2.2.2 to 2.2.7 of the Strategic Transport Modelling Stage 4 Report (INF-12). The results of this assessment are covered in section 7.2 of the Stage 4 Report (INF-12).
- 2.2 The strategic road network was divided into the M25/A282 Corridor (INF-12, Chapter 3) and the A2 Corridor (INF-12, Chapter 4). The merge/diverge assessment was carried out in accordance with national standard CD122 Geometric Design of Grade Separated Junctions (Design Manual for Roads & Bridges – Volume 6, Section 2). The key graphs and layout categories used and referred to for this assessment have been replicated in INF-13, Appendix A (Assessment Graphs Figures 3.12a/b and Figures 3.26a/b) and Appendix B (Layout Categories Figures 3.14a-k and Figures 3.30a-e).
- 2.3 To confirm for clarity, the further work that was requested by National Highways regarding an assessment of the impact of the proposed Local Plan spatial strategy on the merges and diverges for the junctions on the Strategic Road Network has been undertaken with the results provided in section 7.2 of the Strategic Transport Modelling Stage 4 Report (INF-12).

Q29. Have specific mitigation measures been identified and have any costings been produced for any such measures identified in the mitigation modelling report [INF-12]? Are these included in the Infrastructure Delivery Plan (November 2021) [INF-2]? Is there an intention to progress a Statement of Common Ground with National Highways?

Strategic modelling results

- 3.1 For the Local Road Network, the Strategic Transport Modelling Stage 3b Report (INF-10) identified 13 junctions where the Local Plan would have a detrimental impact compared with the Reference Case. The Strategic Transport Modelling Stage 4 Report (INF-12) includes the results of further more detailed modelling of these junctions and proposed mitigation schemes. The modelling results are contained within Appendices C to AF of the Stage 4 Report Appendices (INF-13) and summarized in Section 7.3 of the Stage 4 Report (INF-12) itself.
- 3.2 There were two out of the 13 Local Road Network junctions where mitigation measures have not been proposed, A226/Great Queen Street and A226/Hillhouse Road, due to the physical constraints at these junctions. Further investigation is needed to determine the nature of the problems at these junctions and any possible alternative solutions to physical alterations.
- 3.3 The proposed mitigation measures have not been costed at present. Proposed physical alterations to junctions, though relatively minor, require confirmation that they can be achieved within existing highway boundaries. Similarly, proposed mitigation at signal controlled junctions that involve changes to the signal timings need to be confirmed that they are feasible. Kent County Council (KCC) as the local highway authority will be heavily involved in this.
- 3.4 For the Strategic Road Network, the Strategic Transport Modelling Stage 3b Report (INF-10) identified the need for further detailed modelling at three junctions:
 - M25(A282) Junction 1a
 - A2/A2018 Junction
 - A2 Bean Junction
- 3.5 The merge/diverge assessment, requested by National Highways and carried out as part of the Strategic Transport Modelling Stage 4 (INF-12), has also shown a number of locations where the Local Plan would have an impact on the layout required when compared with the Reference Case.
- 3.6 The Stage 4 Report (INF-12) does not propose mitigation measures for junctions on the strategic road network where issues have been highlighted. Paragraph 7.4.2 of the Stage 4 Report (INF-12) acknowledges that the use of the strategic transport model has limitations when trying to determine the impact of the Local Plan on specific junctions, particular where these are complex junctions and there are constraints on the surrounding network.

Infrastructure plans

- 3.7 The Infrastructure Delivery Plan (INF-2) provides details of the latest infrastructure projects identified by the Council through engagement with key infrastructure providers, including Kent County Council (KCC) and National Highways (NH), required to support planned new development in the Borough and meet the new demands this will generate. The IDP is a "living document" and is subject to change as new

development takes place across the Borough and delivery partners identify the need for new infrastructure projects.

- 3.8 With the exception of the A2 Bean & Ebbsfleet Junctions and the M25(A282) Junction 1a, the Infrastructure Delivery Plan (INF-2) does not currently include any infrastructure projects that involve improvements to the junctions identified through the strategic transport modelling. Section 3 of the IDP identifies emerging projects that have not yet been clearly defined and where further work is required to provide specific details of projects such as the need for the project, delivery and timing, costs and clarity of funding sources and whether CIL funding would help to unlock delivery.
- 3.9 The Future Infrastructure Statement (INF-3) has a longer-term focus. Part 2 of it identifies the Department for Transport's Route Improvement Strategies and Kent County Council's Local Transport Plan for Kent as key emerging strategies that need to reflect the growth set out in Dartford's Local Plan and give priority to the transport infrastructure needed to support this growth.
- 3.10 Part 3 of the Future Infrastructure Statement (INF-3) identifies the A282(M25) Junction 1a as a medium/long term infrastructure project in terms of its Borough-wide spatial relationship supporting development along with the A2 Bean & Ebbsfleet Junction Improvements and Urban Traffic Management & Control measures that are currently being delivered having previously been identified through the Strategic Transport Improvement Programme (STIP) and included within the Infrastructure Delivery Plan (INF-2).

Statements of common ground and collaborative actions

- 3.11 In the case of M25(A282) Junction 1a, the Council has already established a Working Group involving National Highways and KCC Highways (and engages with Bexley London Borough -LBB) to determine a long-term solution to issues already experienced. A feasibility study was commissioned towards the end of December 2021 and the findings of this study are scheduled to be reported in mid-2022. Both short-term improvements to Junction 1a, funded through secured developer contributions, and longer term improvements are featured within Dartford's Infrastructure Delivery Plan (INF-2).
- 3.12 The Council has agreed with National Highways that a Statement of Common Ground will be prepared to establish a process for resolving the issues highlighted by the strategic transport assessment and to support sustainable transport planning. In the course of latest discussions with Bexley (LBB) it has been revealed that National Highways has raised similar issues in relation to the transport modelling for their Local Plan.
- 3.13 Discussions are therefore currently on the basis of a joint DBC/LBB Statement of Common Ground with National Highways. It is expected that further discussions with National Highways in the course of developing the Statement of Common Ground will cover the need for further more detailed modelling of the junctions on the strategic road network.
- 3.14 DBC is also in the process of drafting a Statement of Common Ground with Kent County Council. DBC is emphasising that transport needs to be a key element, to establish a process for resolving the issues highlighted by the strategic transport assessment and promoting a sustainable transport approach for future development.