

Local Plan Panel Meeting	
Meeting Date	17 th February 2022
Report Title	Swale Borough Local Plan Review: Strategic Transport Modelling Evidence - part 2
Cabinet Member	Cllr Mike Baldock, Cabinet Member for Planning
SMT Lead	James Freeman, Head of Planning
Head of Service	James Freeman, Head of Planning
Lead Officer	Natalie Earl, Senior Planner
Key Decision	No
Classification	Open
Recommendations	<ol style="list-style-type: none"> 1. Note the strategic transport modelling results at Appendix I; 2. Recommend to Cabinet that this work be part of the evidence base used to inform the Preferred Option stage (Regulation 19) of the Local Plan Review; and 3. Undertake further, focused analysis on what the optimum development strategy would look like in terms of minimising the impacts on the transport system.

1 Purpose of Report and Executive Summary

- 1.1 The purpose of this report is to set out the results of the strategic transport modelling work which has been undertaken as part of the Local Plan Review (LPR). The work has been undertaken with the Kent County Council Highways team on the steering group to advise and provide technical expertise. The modelling at this stage is highways focused and intended to give a broad overview of how the network will perform with the level and distribution of development the Local Plan Review preferred option is proposing.
- 1.2 The report also looks at the implications for future transportation work, including any additional modelling required to support progress of the Local Plan Review. The need to undertake further transport work will impact on the timing of the current local plan programme and a new Local Development Scheme will be required in due course.

2 Background

- 2.1 Members will recall that at the meeting of this Panel on 11th June 2020, they received the results of the last round of transport modelling. The report stated that a further modelling run would take place once members had chosen their preferred option. These are the results of that modelling run.

- 2.2 This latest Swale Transport Model (2021) was developed to test the traffic impacts of both new developments and transport infrastructure across Swale. The location of the allocations included in the modelling work are those broadly set out in the preferred option as was appropriate for this stage in the local plan process. The model was developed with a base year of 2017 to examine the traffic impacts of both future development proposals and transport infrastructure across Swale.
- 2.3 This work develops a refreshed set of transport forecast models with model outputs to be used as evidence base to support the LPR proposals. The key model outcomes aim to show the differences between a 2038 **Reference Case (RC)**, as adapted to include the identified committed and extant permissions and schemes, and a 2038 **Do Something (DS)** model, which includes additional LPR development allocations and schemes. This helps to identify the transport hotspots and design appropriate mitigations to ease traffic congestion. An interim model in the forecast 2027 has also been developed. The model also did a sensitivity test for Teynham to help us see how adding an alternative route could help the existing road network flow more efficiently. (Appendix II.)
- 2.4 The key model assumptions are outlined as follows:
- 1 The **RC** scenarios only include committed developments and transport schemes in future years. The **DS** scenario included the committed and all additional development (including windfalls) and schemes associated with the LPR.
 - 2 As the LPR is aimed to assess development proposals and not a road scheme, there should not be any overall growth constraint locally, countywide, or regionally. As agreed, the National Trip Ends Model (NTEM) growth factors were applied to the model external area.
 - 3 The TRICs rates were adopted to derive the demand for local housing and employment development, differentiated by geographic locations including Swale town centres (Sittingbourne, Faversham and Isle of Sheppey) and rural areas.
 - 4 Goods vehicle growth for **Light Goods vehicles (LGV)** and **Heavy Goods vehicles (HGVs)** was updated by the DfT's 2018 **Road Traffic Forecast (RTF 2018)**
- 2.5 The trip rates in the model and in the draft Transport Strategy are already ambitious (15%) and in Kent currently only 9% of journeys made under 2.5km are done by walking so Swale needs to start implementing the active/sustainable travel agenda aggressively for our preferred development strategy to work.
- 2.6 The report sets out the results of the modelling work and shows there are challenges for the Local Plan Review to work through, including a number of hotspots of congestion across Swale on both the motorway, strategic and local networks. You can see from the table 7-6 on pages 60 – 61 of the report in Appendix I that many junctions are at significant overcapacity which will lead to congestion and impacts on air quality, often in areas already with **AQMAs**. (Air Quality Management Area's.) The paper in Appendix III sets out the key results

from the modelling for the borough, including traffic flows, network delays and congestion, network statics, journey times.

- 2.6 Further analysis of the problem junctions will need to be undertaken to consider whether there are mitigations that could be undertaken to overcome the congestion issues arising or whether there are junctions where there is limited or no capacity for improvement. Mitigations would relate to both increasing the capacity of junctions and/or whether higher modal shifts could be achieved with major public transport. Following this assessment, there would then need to be a view taken as to whether the level of development proposed cannot be mitigated and therefore cannot be accommodated or whether there are any alternative distribution of sites feasible without resulting in congestion spots across the highway network which can't be mitigated.
- 2.7 Of particular concern, are the potential issues surrounding the key strategic highway network junctions and their capacity to accommodate development and the ability and timing for any potential improvement works to provide sufficient capacity, noting that many of these junctions are sensitive to development proposals across the sub region, particularly within neighbouring districts e.g. M2J7 and M2J5/A249 junctions. There are some impacts showing in the modelling on neighbouring districts which will need to be discussed at our regular duty to cooperate meetings. These include with both Ashford and Canterbury
- 2.7 A Local Plan Inspector will normally accept a level of increase in congestion as a result of Local Plan allocations at the Examination in Public but will need to see initiatives from the Council and the promoters of the allocations on how this will be minimised, especially through modal shift. However neither, they, nor National Highways (previously Highways England) or KCC Highways will accept negative impacts on safety. This further illustrates the need to take ambitious steps towards greater modal shift and promote more active travel across the borough.
- 2.10 The model does not factor in Covid-19 and working from home and the impacts that may have on travel patterns as statistically reliable data is not yet available but as 44.4% of Swale's resident based workforce worked in occupations where it is considered least likely to be able to work substantively from home between July 2020 – June 2021, compared to 36.7% in SE England (NOMIS, Office for National Statistics) this may not have a significant impact on traffic levels in Swale. The occupational and sector profile of the Swale economy is such that the impacts of Covid-19 on Travel to Work Patterns may not be as affected as many other parts of the Country. However, a significant number of journeys to work in Swale come from outside of the Borough. Looking at the workplace jobs in the Borough, there is again a bias towards those sectors which might be considered less likely to be able to accommodate home working – as high as 74.4%, higher than both regional and national averages. Whilst the occupational profile within these sectors may also impact on the propensity towards more flexible working, the nature of the commercial business space is very much orientated towards 'blue collar' occupations.

3 Proposals

- 3.1 It is proposed that the strategic transport modelling undertaken is noted and included as part of the Council's evidence base to inform the Local Plan Review.
- 3.2 It will be necessary to undertake a detailed review of the key 'problem' junctions highlighted in the report alongside advice and views from KCC Highways and National Highways.
- 3.3 This assessment would be used to inform any modifications to the preferred development strategy put forward in the Regulation 18 consultation and may involve 'duty to co-operate' sessions with our neighbouring authorities to understand the potential implications across the sub region.
- 3.4 Alongside the preparation of the draft Local Plan Review document, the draft Transport Strategy will also be reviewed in conjunction with Kent Highways. The Transport Strategy will set out Swale's aspirations for improving travel and mobility in Swale and deal with some of the issues arising from this transport model. The Strategy will provide a framework to guide the development of transport-based improvements and interventions within Swale for the Plan period. It will need to be updated with more specific and costed improvements now that the modelling work is complete, especially in relation to sustainable and active travel measures.
- 3.5 Ultimately, further transport modelling runs may be required to inform the establishment of an agreed development strategy and the sites to be included. Those runs may include testing options to demonstrate whether any particular sites are not feasible from a transportation perspective or whether a level of development is not sustainable within the highways and transportation network available within the Borough deliverable within the Local Plan Review period.

4 Alternative Options

- 4.1 The Strategic Transport Modelling is a technical document and is open to challenge on the assumptions and assessment arising to consider the robustness of the evidence presented. The work reported in this paper has been prepared with assistance from KCC and with input from National Highways and future work will progress with their full involvement.
- 4.2 The Council's next step is to progress to a Regulation 19 Preferred Options consultation later in the year. Further modelling and transport assessment work will need to be undertaken to inform the Council's evidence in support of its development strategy and distribution of development.
- 4.3 Not progressing with this work would undermine the Council's need to review its Local Plan and ultimately, the current Adopted Local Plan would become increasingly more out of date and could subject the Authority to challenges for

ad hoc and unplanned developments which would become increasingly more difficult to defend against.

5 Consultation Undertaken or Proposed

- 5.1 The strategic transport model is a technical piece of evidence base so has been shared with KCC Highways and National Highways (previously Highways England) for comment. It will form part of the suite of documents that are consulted on at the Regulation 19 stage of the Local Plan Review.

6 Implications

Issue	Implications
Corporate Plan	This Local Plan supports the priority of the Council to build the right homes in the right places and supporting quality jobs for all.
Financial, Resource and Property	The costs for the production of the Local Plan can be met from existing budgets. Extra funding may be required from both S106 monies and from the Council itself for sustainable and active travel initiatives.
Legal, Statutory and Procurement	Preparation of the local plan review is a priority of the Council and is being prepared in accordance with the relevant legal, statutory and procurement frameworks.
Crime and Disorder	None identified at this stage.
Environment and Climate/Ecological Emergency	The Local Plan will be supported by its own Sustainability Appraisal and Habitats Regulation Assessment at each key stage in decision making, but the evidence base does not require individually. The Local Plan actively seeks to deliver policies and proposals to reduce and mitigate the effects of climate change.
Health and Wellbeing	None identified at this stage although the Local Plan Review itself will seek to deliver policies and proposals that contribute to corporate objectives for health and wellbeing in the borough.
Safeguarding of Children, Young People and Vulnerable Adults	None identified at this stage.
Risk Management and Health and Safety	None identified at this stage.
Equality and Diversity	None identified at this stage, although the Local Plan Review itself will be subject to equality impact assessments at key stages as advised by the policy team.

Privacy and Data Protection	None identified at this stage.
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7 Appendices

7.1 The following documents are to be published with this report and form part of the report:

- Appendix I: SWECO Swale Local Plan Forecasting Report
- Appendix II: SWECO Swale Local Plan Forecasting Report – Teynham Sensitivity Test
- Appendix III: Project Centre’s Model Summary Note

8 Background Papers

None