

Maidstone Joint Transportation Board: 7 December 2015

Is the final decision on the recommendations in this report to be made at this meeting?

Yes

Further details on the results of VISUM modelling on DS4

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|---------------------------------------|---|
| Final Decision-Maker | Maidstone Joint Transportation Board |
| Lead Head of Service | Rob Jarman Head of Planning & Development MBC Tim Read Head of Highways & Transportation KCC |
| Lead Officer and Report Author | Chris Berry Interim Team Leader Spatial Policy MBC; Steve Clarke Principal Planning Officer Spatial Policy MBC; Brendan Wright Senior Development Engineer KCC |
| Classification | Public |
| Wards affected | All |

This report makes the following recommendations to this Committee:

1. That the Board note the report and the progress made to-date

This report relates to the following corporate priorities:

- Keeping Maidstone Borough an attractive place for all -
- Securing a successful economy for Maidstone Borough -

Timetable

| Meeting | Date |
|--------------------------------------|-----------------|
| Maidstone Joint Transportation Board | 7 December 2015 |

Further details on the results of VISUM modelling on DS4

1. PURPOSE OF REPORT AND EXECUTIVE SUMMARY

1.1 This report follows on from the resolution to Item 121 of JTB meeting held on 04 November 2015 as follows;

“That the Board’s support be given to KCC and MBC officers to work jointly to provide a report with further detail on the results of VISUM modelling on DS4. This should give consideration to the following:

- Transport mitigation measures to support development. This should include consultation with bus and rail operators alongside methods to increase multi occupancy car use and;
- The phasing of new development.”

1.2 The report sets out progress to-date and identifies the next steps.

2. INTRODUCTION AND BACKGROUND

2.1 This report follows from JTB consideration of the results of VISUM modelling which were presented by Amey on 4th November 2015. VISUM modelling has been undertaken to support the preparation of the Maidstone ITS which identifies the transport infrastructure necessary to support the development proposed by the emerging Maidstone Borough Local Plan.

2.2 VISUM is a strategic highways model which tests alternative transport scenarios and their impacts in terms of travel time and distance. Increases in walking and cycling are reflected in an estimation of the number of car trips which may be removed from the road network due to changes in modal shift across the area.

2.3 This report notes the present status of the VISUM modelling undertaken so far, and presents the progress which has been made in several areas regarding mitigation of the impacts of the additional road trips that will be generated by development proposed in the emerging Local Plan. Transport mitigation may be categorised as; cycling and walking increases; public transport improvements, and highway junction improvements and each of these topics is discussed below.

2.4 A wide range of transport mitigation measures are being pursued simultaneously by MBC, KCC, transport providers and developers, in line with the ITS objectives of reducing transport demand, changing behaviours and promoting sustainable transport solutions to support Maidstone’s growth to 2031. Significant progress has been made in agreeing joint

initiatives for transport improvements in several modes and these are highlighted.

3. DS4 Modelling

- 3.1 VISUM modelling was first commissioned in 2012 to inform the preparation of the Local Plan at that stage, and the most recent run of the VISUM model, testing a scenario known as DS4, tested the latest 'objectively assessed need' for 18,560 houses throughout the Borough area. The allocation of the total number of new houses in the emerging Local Plan was supplied to consultants Amey between 1st and 9th October 2015.
- 3.2 A series of assumptions was proposed for the DS4 scenario, as follows:
- 18,560 new houses distributed as currently proposed by MBC
 - Agreed programme of highways improvements (see para. 6.1 below for further detail)
 - Typical 10 minute bus frequency
 - Discounting of walk/cycle trips to be based on a distance threshold of 5 km within the town centre
 - 50% increases in long stay parking charges
 - Removal of Park and Ride sites at Linton and M20 Jct 7.
- 3.3 The DS4 modelling work has focused on the AM peak period as this has enabled the busiest conditions on the highway network to be tested. Further, the DS4 scenario was tested with a Leeds Langley Relief Road (LLRR) (DS4a) and without (DS4b) and the results were presented at JTB on 4th November.
- 3.4 No further analysis has been presented on DS4 since the presentation of the results on 4th November and comparisons with the Do Minimum scenario previously modelled should be viewed in the context of the differential in assumed housing numbers.
- 3.5 A further run of VISUM could be undertaken to reflect the Do Minimum (DM) scenario with the full objectively assessed need figure of 18,560 houses and the new commercial and retail space planned. Although this would enable the results to be compared and contrasted on an equivalent basis, it is not expected to have any significant bearing on the previously reported DS4 findings. The timescales for undertaking a further model run and reporting to a future JTB would need to be agreed between MBC and KCC.
- 3.6 It should be noted that VISUM does not model the impacts of local junction mitigation and the list of highways improvements submitted, as noted in 3.2

above, provides inputs for the strategic analysis. It provides a strategic overview of movement patterns on the road network and the context for more detailed modelling at a local level and, in any case, detailed modelling for Headcorn, Lenham and Staplehurst is outside the VISUM cordon.

- 3.7 In addition to VISUM modelling, work has continued on individual junction capacity modelling to assess the impacts on affected junctions through developers' Transport Assessments. These are carefully checked and analysed to ensure that they provide a robust representation of the potential cumulative impacts of development and can enable appropriate mitigation measures to be identified where appropriate. Additional junction capacity assessment studies have also been commissioned by MBC for Linton Crossroads, Headcorn, Lenham and Staplehurst, which will be the subject of further dialogue with KCC to identify the scope of required improvements.
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4 Walking and Cycling

- 4.1 The Maidstone ITS includes a Walking and Cycling Strategy for the extensive improvement of walkways and cycleways throughout the Borough. MBC and KCC are continuing to work collaboratively to ensure the measures identified can form the basis for negotiations with developers and providers of facilities. The Walking and Cycling Strategy will be reported to a future JTB for approval.
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5 Public Transport

- 5.1 Recent positive meetings with Arriva and KCC have explored opportunities for the enhancement of bus services throughout the Borough, principally through the upgrade of longer distance radial routes, including Maidstone to Sittingbourne/Sheerness services which may be coordinated with a potential stop at M20 junction 7. Frequency and service quality improvements are being considered on the main radial routes into Maidstone (A26 Tonbridge Road, A249 Sittingbourne Road, A274 Sutton Road and A229 Loose Road). These will, where feasible, seek to achieve a 10 minute frequency on individual routes as this level of service offers scope to markedly increase bus usage.
- 5.2 Whereas it is recognised that individual bus ticket prices may seem relatively high for services in and around Maidstone, Arriva and MBC will work together to promote a range of group ticket pricing options to businesses and organisations to increase bus usage. Specific information

packs will be provided on bus travel and service improvements for new housing developments with the aim of raising the image of bus use and encouraging patronage, including for journeys to work.

- 5.3 Arriva will also promote, with MBC and KCC support, a mobile phone app for its services and investigate the potential of new technology to increase the availability of information on bus services. Enhancements of bus facilities such as free Wi-Fi are being introduced, with possible MBC and KCC support, which will also have beneficial impacts on the image of bus travel.
- 5.4 For the medium term, the Maidstone ITS promotes the improvement of terminal facilities in Maidstone town centre and at the town's railway stations to enable improved interchange for radial routes. A project team will be formed with Arriva to progress the specification, delivery and funding for an improved bus station at the Mall Chequers Shopping Centre where conditions for bus passengers are presently substandard.
- 5.5 The next stage of work to be undertaken in this area is to factor in the mitigation effects of these improvements on the transport network. Specific work will analyse the benefits of the increased services and initiatives and assess how these are likely to affect traffic levels and network conditions throughout the borough.

6 Highway Network Improvements

- 6.1 Key to the mitigation of transport impacts as envisaged by the ITS is the improvement of those parts of the highway network most affected by increases in travel demand. The identified package of highway improvements have been included in the assumptions for the VISUM modelling as noted above, and may be listed as follows:
 - A229/A20/A26 Bridges Gyratory
 - A20 junction improvements
 - A26 Fountain Lane/Hermitage Lane
 - A249 Bearsted Road roundabout
 - Bearsted Road/New Cut junction
 - A249 to New Cut dual carriageway
 - A20 Ashford Road/Willington Street junction
 - A229/A274 Wheatsheaf junction
 - A274 junction improvements
- 6.2 Funding towards many of the above improvements has already been secured through various sources, including contributions secured via Section 106 Agreements as part of planning approvals.

- 6.3 The schedule attached as Appendix A provides an updated breakdown of the monies that have been secured to date towards a range of schemes across the Borough, with substantive funding already in place to help secure the provision of many of the key highway improvements. MBC and KCC will continue to work together to ensure that any shortfalls in available funding are met in order to safeguard the deliverability of the ITS package and further work will be undertaken to identify how this should be prioritised.
- 6.4 Further detailed modelling work in support of planning applications for new development will also ensure that all locally important mitigation measures are accounted for in any assessment of impact.
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7. Phasing new development

- 7.1 JTB requested an indication of the phasing of new development and how it may affect transport mitigation measures. The principal quantum of development is the provision of 18,560 new houses in the period between 2011 and 2031, and a significant proportion of this figure has already been constructed, granted planning permission, or is the subject of a resolution to grant permission subject to S106 agreement.
- 7.2 As at October 2015, a total of 8874 units have been constructed or consented since 2011 which leaves approximately 9700 houses to be provided within the emerging Local Plan period. The phasing of development is subject to a wide range of external influences which are beyond the influence of the regulatory authority.
- 7.3 The progress of development will be subject to review as part of the Local Plan process.
- 7.4 The first review of the Local Plan will also provide the opportunity to consider the need for further strategic highway provision. By this time the necessary feasibility and business case work in support of the Leeds Langley Relief Road will have been completed, thus enabling MBC and KCC to identify the potential timescales and specifications of such provision and determine whether specific projects should move forward as a specific Local Plan policy.
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8. Next Steps: Communication and Implementation of the Decision

- 8.1 Further work by KCC and MBC will be undertaken to refine the proposals and establish the priorities for intervention and actions as follows, to be reported to this Board in January 2016
- Assess the impact of increased bus service quality and frequency on the transport network.
 - Report of the project team on the proposed improvements to the town centre bus station.

- Prioritisation of the delivery of junction improvements

9. Cross cutting issues and implementation of the decision

| Issue | Implications | Sign-off |
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| Impact on Corporate Priorities | The adoption of the ITS will assist in the delivery of the Council's corporate priorities | Head of Planning & Development |
| Risk Management | A key risk to the Local Plan programme relates to the Council's ability to provide a package of sustainable transport measures | Head of Planning & Development |
| Financial | The cost of VISUM modelling to date has been funded jointly by MBC and KCC The cost has been met from the existing budget | Section 151 Officer & Head of Finance & Resources |
| Staffing | N/A | Head of Planning & Development |
| Legal | The draft ITS is being produced as part of the robust evidence base for the emerging Local Plan | Team Leader (Planning) Mid Kent Legal |
| Equality Impact Needs Assessment | An integrated transport strategy that tackles transport challenges through a combination of modes will take into account the needs of all groups including those without access to a car. An alternative strategy reliant on highway improvements will not promote equal access to employment, services and social opportunities and is likely to lead to increased social exclusion amongst lower income groups in particular | Policy & Information Manager |
| Environmental/Sustainable Development | The implementation of an integrated transport strategy to promote sustainable travel where possible will encourage a reduction in single occupancy car travel and in turn a reduction in congestion and carbon emissions relative to a 'do minimum' situation. An | Head of Planning & Development |

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| | alternative strategy reliant on highway improvements is likely to generate more traffic than the additional capacity provided, increasing congestion and carbon emissions. | |
| Community Safety | N/A | Head of Planning & Development |
| Human Rights Act | N/A | Head of Planning & Development |
| Procurement | Consultants are used to prepare specialist or technical evidence to support the local plan and are appointed in accordance with the Council's procurement procedures | Head of Planning & Development & Section 151 Officer |
| Asset Management | N/A | Head of Planning & Development |

10. Appendices

Appendix 1: Highway improvements table