To: Maidstone Joint Transportation Board

By: Tim Read, Head of Transportation

Date: 9th October 2013

Subject: Maidstone Bridges Gyratory Capacity Improvements

Classification: Information item (for discussion)

Summary: Kent County Council (KCC) has progressed outline design work on a proposed capacity improvement scheme for the Maidstone Bridges Gyratory, at the request of the Informal Member Group on the Integrated Transport Strategy. This report updates Members on progress to date and provides the Joint Transportation Board with an opportunity to comment on the emerging proposals.

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1. Background

1.1 At the meeting of the Joint Transportation Board (JTB) on 23rd January this year, Members endorsed the establishment of an Informal Member Group (IMG) on the Integrated Transport Strategy (ITS). The IMG agreed that the revised ITS should include measures to increase highway capacity at strategic junctions in and around Maidstone and asked officers to focus initially on the Bridges Gyratory in the town centre, which suffers from severe peak time congestion and poor air quality.

2. Design review

2.1 In June of this year, KCC commissioned its new Technical and Environmental Services Contractor, Amey, to review previous design and transport modelling work on a potential junction capacity improvement scheme for the Bridges Gyratory.

2.2 The proposed scheme (which is depicted at Annex 1) involves the provision of two additional northbound traffic lanes and associated traffic signals on the east bank of the River Medway. This would remove the need for through traffic on the A229 to traverse both the Broadway and St Peter's Bridges, thereby easing congestion throughout the intersection. The scheme was previously valued at approximately £4.4 million (based on 2009 prices).

2.3 Amey's review of the previous design work has concluded that the proposed layout changes remain a viable option in the context of land availability and the information received to date from Statutory Undertakers. It is also Amey's view that a previously disregarded 'reduced lane width option' (depicted at Annex 2), which avoids the need to relocate the electricity substation, should be reconsidered.

2.4 A preliminary traffic modelling exercise has been undertaken, using 2013 traffic data, to update the baseline situation and confirm that the proposed scheme continues to offer operational and capacity improvements for the local highway network. The results indicate similar benefits to the previous modelling exercise, including:-

- An overall increase in junction capacity of 15%, with an overall reduction in delay of approximately 25% in both the AM and PM peak hours;

- A reduction in average journey time delays on the principal northbound A229 route (Bishops Way to Fairmeadow) of approximately 30 seconds per vehicle in the AM peak hour and 60 seconds per vehicle in the PM peak hour;

- A reduction in average journey time delays between the A20 Broadway and the A229 Bishops Way of approximately 74 seconds in the AM peak hour and 10 seconds in the PM peak hour; and

- A reduction in average maximum queue lengths of approximately 15% in the AM peak hour and 20% in the PM peak hour across the whole junction.

2.5 A revised scheme cost estimate of approximately £4.8 million has been calculated (based on 2013 prices), which represents a saving from the previous estimate at current values. It is notable that the cost of relocating the electricity substation has reduced by some 45% based on advice received from UK Power Networks, although Amey has recommended increases to previous estimates for fees, survey costs, preliminaries, risk and contingency. It should also be recognised that all costs at this stage are subject to detailed design, safety audit, surveys and further information from Statutory Undertakers.

3. Next steps

3.1 The design review has demonstrated that the proposed scheme remains viable, both in terms of operational benefits and deliverability. Subject to Members' views, it is therefore KCC's intention to commission detailed design work, which will include topographical, structural and safety investigations as well as further traffic modelling for all road users.

3.2 By progressing the scheme through its detailed design stage, the County Council will be in a far stronger position to bid for external funding for the project, including future rounds of the Government's Local Pinch Point Fund and capital allocations arising from the new Single Local Growth Fund.

3.3 Regular liaison will continue with Maidstone Borough Council colleagues to ensure that the scheme complements current and planned regeneration and environmental health projects in the lower High Street and along the River Medway.

Recommendations

Members are asked to note the report.

Background documents:

None

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