



OFFICER REPORT TO LOCAL COMMITTEE (MOLE VALLEY)

M25 JUNCTION 9B

3 DECEMBER 2008

KEY ISSUE

To consider a proposal from the Highways Agency to install permanent part time traffic signals on the exit slip road of the M25 at junction 9b where it meets the A243 Kingston Road / Leatherhead By-pass and A244 Oxshott Road roundabout.

SUMMARY

Traffic queuing on the slip road at the M25 exit junction 9b regularly tails back onto the motorway, predominantly during the morning peak, converting lane one into an extension of the slip road; the queue can develop for up to a mile before the junction. The motorway has four lanes at this location and although gantry signs indicate a speed reduction in advance of any queue to warn drivers, the extended queue represents a significant hazard.

With our consent the Highways Agency undertook a temporary trial of part time traffic signals on the slip road where it meets the A243 roundabout during the spring this year to gauge the impact on both the motorway and the County Council's highway network. The trial was considered a success notwithstanding the A243 northbound queues into the roundabout were longer than normal, albeit with only an average of 8 seconds being added to the journey time.

Following the trial the Highways Agency developed an option for permanent part time traffic signals for the exit slip road at junction 9b and this is the proposal under consideration.

The recommendation is to support the Highways Agency's traffic signal proposal and enter into an Agreement pursuant to Section 4 of the Highways Act 1980 to enable the Highways Agency to undertake all necessary work associated with the proposal.

OFFICER RECOMMENDATIONS

The Local Committee (Mole Valley) is asked to agree that:

- (i) The Highways Agency proposal for permanent part time traffic signals on the exit slip of the M25 at junction 9b be supported; and
- (ii) Authority is delegated to the Head of Highways, in conjunction with the Chairman, to enter into an Agreement pursuant to Section 4 of Highways Act 1980 with the Highways Agency to facilitate the installation of the traffic signal proposal.

1 INTRODUCTION AND BACKGROUND

- 1.1 Vehicles regularly queue in lane one of the M25 for up to one mile before the exit at junction 9b, the tail back, which occurs predominantly during the morning peak, creates a hazard for all motorists using the M25 and this exit. The queues develop when vehicles seeking to leave the motorway at junction 9b are impeded by other traffic circulating on the A243 roundabout and or when the A243 northbound roundabout exit towards Kingston (Malden Rushett) is congested. The hazard could potentially create a major incident on the M25 as drivers seek to minimise their delay and avoid the congestion.
- 1.2 The Highways Agency, who manages the motorway network for the Department of Transport, is keen to reduce congestion and improve journey times and safety for drivers.
- 1.3 With our consent the Highways Agency installed a trial of part time traffic signal installation on the exit slip road at junction 9b in the spring this year to evaluate their impact on both the motorway and the County Council's highway network. The trial was considered a success notwithstanding the A243 northbound queues into the roundabout were longer than normal, albeit with only an average 8 seconds being added to the journey time.
- 1.4 The Highways Agency developed an option for a permanent part time traffic signal installation for the M25 exit slip road at junction 9b based on the data collected during the trial installation (Highways Agency report appended **Annex A**).
- 1.5 The Highways Agency is now seeking the County Council's support and agreement to the installation of a permanent part time traffic signal scheme on the exit slip road to the M25 at junction 9b following the successful trial undertaken in the spring this year.

2 ANALYSIS

- 2.1 The temporary part time traffic signals overcame queuing on the motorway slip road, by interrupting vehicle flow on the roundabout gyratory creating controlled gaps for vehicles to exit the slip road. The controlled gaps generated by the signals also allowed vehicles from A244 Oxshott Road easier passage onto the roundabout improving conditions for these vehicles. The traffic signals had a neutral effect on A243 Kingston Road southbound making no noticeable difference to the flow. Longer queues were generated on the A243 Leatherhead By-pass northbound; however, following an analysis of the observed vehicle queues northbound, before and during the trial, the average additional journey time observed amounted to an average of 8 seconds.

2.2 Following the trial the Highways Agency presented four possible scenarios that would achieve the desired objectives and provide for the swift introduction of a permanent part time traffic signal installation this financial year 2008/09 (**Annex A**):

- Option 1 – Three lanes on the roundabout gyratory approach to the M25 slip road signals, with the A243 northbound signed and lined as it is currently.
- Option 2 - Three lanes on the roundabout gyratory approach to the M25 slip road signals, with the A243 northbound signed and lined as a full two-lane approach.
- Option 3 - Two lanes on the roundabout gyratory approach to the M25 slip road signals, with the A243 northbound signed and lined as it is currently.
- Option 4 - Two lanes on the roundabout gyratory approach to the M25 slip road signals, with the A243 northbound signed and lined as a full two-lane approach.

2.3 Option 4 comprising:

- M25 slip road part time traffic signals,
- Two lanes on the roundabout gyratory at the signals, and
- Two fully utilised lanes signed for all vehicles on the A243 By-pass northbound,

provides the Highways Agency with a workable solution and mitigates the effects of the trial on the County Council's network, A243 Leatherhead By-pass northbound.

By reorganising the available road space on the A243 northbound approach to the roundabout into two lanes signed for all vehicles, additional capacity is introduced for most drivers reducing overall queue lengths and with less need for inappropriate and potentially dangerous weaving manoeuvres.

2.4 Although the development of a third lane on the roundabout gyratory at the signals is desirable (Option 2) and would provide further network capacity, the existing configuration of the roundabout precludes its immediate introduction until work is undertaken to address the concerns of safety audit.

2.5 Option 4 is considered the appropriate choice; the Highways Agency, recognising the importance of Option 2, has secured funding to investigate measures required to implement this option but beyond the committed funding for this financial year.

2.6 The Highways Agency will need to enter into a Section 4 Agreement pursuant to the Highways Act 1980 with the County Council before they can install the traffic signals. The Agreement will contain a requirement for the Highways Agency to maintain the traffic signal system and associated street furniture, meet the County Council's fees connected with the design and implementation of the project, and pay a commuted sum for the County Council to maintain the signing, road markings and

high friction surfacing. Consideration will also be given to wording associated with deactivating the installation if at any point it is agreed its performance is detrimental to the County Council's network.

3 OPTIONS

- 3.1 Initially the Highways Agency considered undertaking extensive traffic modelling of the junction, however, the practical trial of part time traffic signals evolved as simpler and more effective at providing useable conclusive results. After the trial the Highways Agency presented 4 options (**Annex A**) for a permanent traffic signal installation.
- 3.2 Option 4 is considered the appropriate choice with Option 2 being investigated with future Highways Agency funding (see 2.0 Analysis above).

4 CONSULTATIONS

- 4.1 The Highways Agency undertook the trial with our consent.
- 4.2 The Highways Agency consulted the Police, who are extremely concerned about the risks associated with junction 9b slip road vehicles queuing back onto the M25; the Police noted the trial signals mitigated that risk enormously by facilitating free-flowing traffic.
- 4.3 The Highways Agency received supportive enquiries to their Highways Agency Information Line during the trial.

5 FINANCIAL IMPLICATIONS AND VALUE FOR MONEY

- 5.1 The Highways Agency will fund the installation and future maintenance costs of the traffic signal equipment. The County Council will recover fees associated with the consideration of this project, plus a commuted sum for future maintenance of the signs, lines and high friction surfacing required.

6 EQUALITIES AND DIVERSITY IMPLICATIONS

- 6.1 There are no specific equalities and diversity implications associated with this proposal.

7 CRIME AND DISORDER IMPLICATIONS

- 7.1 There is the potential for induced red light running with the traffic signals, otherwise there are no specific crime and disorder implications associated with this proposal.

8 CONCLUSION AND RECOMMENDATIONS

- 8.1 The Highways Agency concluded a successful trial of part time traffic signals on the M25 slip road at junction 9b reducing congestion, with improved journey times and safety for drivers with minimal or neutral impact on the County Council's highway network.
- 8.2 The recommendation is to agree to support the Highways Agency's request to introduce permanent part time traffic signals (Option 4 paragraph 2.3 above) on the exit slip road at junction 9b this financial year 2008/09, acknowledging the Highways Agency will also investigate measures to implement Option 2 (paragraph 2.4 above) from committed future funding.
- 8.3 The County Council will enter into a suitable Section 4 Agreement of Highways Act 1980 with the Highways Agency to enable the signal installation, with all necessary associated work, etc. before the work can commence.

9 REASONS FOR RECOMMENDATIONS

- 9.1 There is a very real possibility of a significant motorway incident occurring on the M25 mainline as a consequence of traffic queuing to leave the motorway in the vicinity of or at the exit slip road to junction 9b.

10 WHAT HAPPENS NEXT

- 10.1 The Head of Highways enters into a suitable Section 4 Agreement (Highways Act 1980) with the Highways Agency to install and maintain the traffic signals, the Agreement to include recovery of our fees associated with the project, together with a commuted sum for future maintenance of the signs, lines and anti-skid surface on the A243 roundabout and its approaches.

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BACKGROUND PAPERS: None

ANNEX A

Highways Agency Report

M25 Junction 9b