

Report to Cabinet Member for Transportation

Decision to be taken on or after 19th August 2019

**Decision can normally be implemented at least
3 working days after decision has been signed.**

Cabinet Member Report No. T23.19

Title: A40 London Road Corridor Improvements

Date: 9th August 2019

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Local members affected: Cllr. Lesley Clarke.
Cllr. Julia Wassell
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Summary

To address congestion and support economic growth a number of improvements along London Road were identified and formed part of a successful funding bid to Government in 2017.

Work has been underway since 2017 to introduce a number of the improvements set out in the funding bid to realise the benefits as soon as possible. This has included installation and preparatory works for a number of new corridor technologies public transport infrastructure and pedestrian crossing improvements.

The scheme has already delivered:

- Upgraded traffic signal equipment at junctions and crossings, allowing signal timings to better adapt to traffic flows and pedestrian demand.
- Traffic detectors installed in the road to sense traffic flows and queues, allowing traffic signals to adapt to the traffic conditions.
- Permanent Variable Message Signs (VMS) providing information to road users, such as queue times, road closures and parking space availability.



- Closed Circuit Television (CCTV) and Automatic Number Plate Recognition (ANPR) cameras improving safety, monitoring traffic flows and providing information to help manage incidents.
- Real Time Passenger Information (RTPI) units installed at bus stops providing up-to-date public transport information.

To help improve traffic flow and ease congestion, a number of junction upgrades are also proposed along the A40 London Road to complete the upgrade of the corridor to a full Urban Traffic Management Corridor, comprising;

- Gordon Road/A40 junction – modifications to roundabout, new pedestrian crossing and signal coordination
- Hatter's Lane/A40 – Carriageway widening for a bus lane to extend across the junction and new uncontrolled crossings
- Gomm Road/A40 junction – Removal of traffic island and inbound bus lane and optimisation of signals
- Ryemead Boulevard/A40 junction – Carriageway widening and removal of inbound bus lane and priority bus gate to facilitate extended two lanes inbound; right turn segregation and kerb realignment
- Gomm Road to Hammersley Lane to Rayners Avenue – Introduction of dedicated right turn lanes through removal and/or relocation of bus lanes

These junction changes formed part of a public engagement exercise and the purpose of this report is to set out the status of the project and recommendations for next steps to the Cabinet Member for Transportation.

Recommendations:

That the Cabinet Member:

- 1 approves the implementation of the scheme and junction modifications proposed as part of the A40 London Road Corridor Improvement project, subject to final modifications responding to representations from public engagement, as set out in this report.**
- 2 agrees to delegate to Head of Highways Infrastructure Projects and A40 Project Board authority to progress the implementation of A40 London Road Corridor Improvement project and award of a contract to Transport for Buckinghamshire.**
- 3 approves the implementation of Traffic Regulation Orders as set out in Appendix F of this report.**

A. Narrative setting out the reasons for the decision

- 1.1 Identified as a major growth area in Buckinghamshire, High Wycombe's transport links are critical to both the economy and an increase in population. With transport outlined as a key factor in delivering the County Council's vision of making the county 'a great place to live and work', targeted development of the A40 London Road corridor has been identified.

- 1.2 The A40 is a strategic route which runs from London to Wales and runs parallel to the M40 in Buckinghamshire with junctions at Beaconsfield (J2), Loudwater (J3) and Handy Cross (J4). The A40 corridor is currently congested, resulting in unreliable journey times and it is anticipated that new developments nearby will impact congestion further. This section of the A40 corridor is also used as a diversion route for the M40 but has little resilience to cater for such diversions. In addition, this section of the A40 forms part of an Air Quality Management Area (AQMA) for High Wycombe.
- 1.3 In October 2017 it was announced that BCC's £4.13M bid to the National Productivity Investment Fund (NPIF) was successful. Alongside this, £2.511M of Local Transport Board funding was allocated as match funding. Funding was secured against 35 proposed schemes along the A40 corridor which aim to ease urban congestion, improve air quality, enable the future delivery of development sites and build resilience into the network. This will be achieved through a combination of local junction improvements and the introduction of new technology to allow smarter management of the corridor.
- 1.4 The main objectives of the project:
- ease urban congestion (improve journey times and journey time reliability)
 - unlock economic growth and job creation opportunities
 - improve air quality
 - improved ability to manage traffic flows on the A40 when there is an incident on the highway network
- 1.5 The scheme proposed in the NPIF bid was drawn from a number of studies undertaken on the corridor with the strategy to convert the route into a full Urban Traffic Management Corridor (UTMC).
- 1.6 The A40 Corridor Improvement project is made up of junction improvements and the introduction of new technology to reduce traffic delays and ease congestion. The installation of new, and upgrade of existing technology, will allow smarter management of flows (without unlocking latent demand) and the ability to manage traffic during incidents on the network. In combination, this will improve journey time reliability, smooth traffic flow (reduction in stops and starts) and reduce queuing; with an expected benefit to local air quality. The project is a corridor Intelligent Transportation System package which includes queue detection loops at various points, upgrading of pedestrian crossings, addition of CCTV and ANPR technology, additional VMS and additional links to the Urban Traffic Control (UTC) room. The full suite of proposed improvements is as set out in the scheme plan in Appendix A.
- 1.7 To determine the effectiveness of the proposed improvements, feasibility studies were undertaken on the proposals set out in the original bid to ensure the most effective solutions were being progressed. To further establish the benefits of these changes the scheme was tested in a micro-simulation transport model for the corridor.
- 1.8 The micro-simulation model of the A40 corridor using the software package VISSIM, was used as a platform to assess preferred scheme options from the feasibility assessments of the NPIF project improvements.
- 1.9 The impact of these scheme options was assessed using 2026 forecast traffic flows which were derived from a VISUM strategic model, and incorporate committed, local

plan and Reserve Site¹ growth. With the capability of the VISSIM model to provide a detailed representation of traffic conditions through the corridor, the model assessed future impacts of traffic infrastructure schemes, such as the proposed NPIF package.

- 1.10 The final modelling results (see table 1 below) show that the NPIF scheme offers a substantial benefit in journey time and journey time reliability along the corridor when assessing against both the committed and local plan growth, as well as the Reserve Site growth. These results provide confidence that when implemented, the NPIF scheme package will provide a benefit to the A40 corridor.

Table1: Summary VISSIM modelling results

Scenario	Weekday AM peak (7.30am - 8.30am)	Weekday PM peak (4.45pm - 5.45pm)	Saturday peak (10.30am - 11.30am)
Outbound (eastbound) journeys between Easton Street and the M40 roundabout	Journey times expected to decrease by 14 minutes and reliability improves by 24%*	Journey times expected to remain stable and reliability improves by 51%*	Journey times expected to increase slightly (<1 min) and reliability remains stable*
Inbound (westbound) journeys between the M40 roundabout and Easton Street	Journey times expected to decrease slightly (<1 min) and reliability improves by 52%*	Journey times expected to decrease slightly (approx 2 mins) and reliability improves by 25%*	Journey times expected to decrease slightly (1-2 mins) and reliability remains stable*

- 1.11 The junction improvements are programmed to commence in September 2019. Works are expected to be carried out for up to 10 months concluding by June 2020. To minimise delays and disruption, the construction programme will make use of off peak working and a combination of school holidays and overnight works where possible.

B. Other options available

- 1.12 Investigation was undertaken to establish the preferred option for 10 of the 35 schemes proposed within the original NPIF project. A feasibility study was undertaken at each site (as set out in Appendix B) aimed at improving safety, increasing capacity, normalising and reducing journey times along the A40. The study reviewed the original bid options against additional options identified in a scoping workshop held in January 2018, and reviewed and assessed each against a range of criteria covering economic, environmental and social impacts, resulting in a single recommended option for testing in the final transport model as set out in table 2.

Table 2 provides a summary of the recommended design options prior to the outputs from the VISSIM model.

Scheme Name/Number	Description	Actions Taken	Recommendation
Site 5 Bassetsbury Lane Puffin Crossing	Brand new Puffin type signal controlled pedestrian crossing, including detection loops that can record ATC data to be installed	Pedestrian count undertaken & reviewed indicating low pedestrian crossing demand.	Remove from scope.
Site 9 Hatter's Lane Roundabout Upgrade	Extend the bus lane through the A40/ Hatter's Lane/ Pinions Rd roundabout	Progressed with feasibility, provided 4 options	Option 1

¹ Reserve Site developments – The Reserve Sites are agreed releases of land contributing towards meeting local housing needs. The housing numbers assumed in the model are indicative and subject to change as development briefs are submitted to the council.

Scheme Name/Number	Description	Actions Taken	Recommendation
Site 11 Micklefield Junction Upgrade	Removal/reshaping of existing traffic islands to improve flow across the junction. Inclusion of crossing facilities for pedestrians.	Progressed with feasibility, provided 4 options	Option 5B
Site 12 Ryemead Way Crossing	Link existing Toucan controlled pedestrian crossing to main junction and link to UTC control room, including detection loops that can record ATC data	Pedestrian count undertaken & reviewed	Bid proposal
Site 15 King's Road Right Turn Ban	Right turn ban into King's Road and A40 to avoid traffic build up	Turning Counts undertaken & reviewed indicating limited junction starvation caused at Gomm Road.	Remove from scope
Site 16/17 Gomm Road Junction Upgrade	Junction widening, providing more/safer crossing facilities for pedestrians, upgrading traffic phasing and junction layout.	Progressed with feasibility, provided 5 options	Option 2
Site 18 Gomm Road to Hammersley Lane Bus Lane Removal	Removal of bus lane between Gomm Road and Hammersley Lane to improve utilisation of carriageway	Proposal reviewed.	Bid proposal
Site 20 Hammersley Lane to Rayners Avenue Bus Lane Removal	Relocation of bus lane between Hammersley Lane and Rayners Avenue to improve utilisation of carriageway	Progressed with feasibility	Bid proposal
Site 23 Rayners Avenue to Station Road Bus Lane Removal	Removal of bus lane between Rayners Avenue and Station Road to improve utilisation of carriageway	BCC public transport officer advised this change would have a significant negative impact on bus journey times.	Removed from scope
New site: Gordon Road Junction Upgrade	Removal of zebra crossing west of junction. Constructing of signalised pedestrian crossings. Conversion of roundabout to signalised crossing (option 2 and 3 only)	Progressed with feasibility, provided 3 options	Option 3B

1.13 In addition to the NPIF scheme bid options set out above, a potential improvement to the Micklefield Road exit on to the A40 was highlighted for investigation as part of the original NPIF bid, but caveated that it was unlikely to be implemented within the project timescales due to the need to acquire third party land. With support from the Local Member since 2017 this scheme has nevertheless been pursued as a potential future opportunity. The Local Transport Board recently met and approved the use of project budget on progression of this improvement, subject to the land acquisition and works being completed by March 2021.

1.14 The Micklefield Road exit onto the A40 has a very narrow 2 lane approach, leading to driver frustration and vehicles mounting the pavement to exit the junction, raising safety concerns. In addition, this arm of the junction has a large amount of pedestrian footfall, particularly school children, but does not have a controlled pedestrian crossing. The solution identified for the junction therefore, was the installation of a staggered puffin style pedestrian crossing and road widening to provide a longer two lane approach. Design work has been undertaken and used to identify the land extents required to provide this improvement. Negotiations are currently ongoing to acquire this land with the intention that the junction improvements can be progressed as soon after.

C. Resource implications

1.15 In October 2017, £4.13M National Productivity Investment Fund was secured against 35 proposed measures along the A40 corridor. Alongside this, £2.511M of Local Transport Board funding was allocated as match funding.

1.16 Table 3 below sets out the funding sources, expenditure to date and project budget. It is important that the project is delivered within the available resource envelope set out below, as any expenditure in excess of this will need to be funded from the County Council's capital programme.

Table 3: Funding sources, expenditure and project budget

	17/18 (Actual)	18/19 (Actuals)	19/20 (Budget)	20/21 (Budget)	Total (£)
DfT NPIF	-	1,891,579.97	2,241,420.03	-	4,133,000.00
LTB design	64,905.41	-	-	-	64,905.41
LTB construction	-	-	-	2,446,294.59	2,446,294.59
Total (£)	64,905.41	1,891,579.97	2,241,420.03	2,446,294.59	6,644,200.00

1.17 Expenditure to date has comprised professional fees for feasibility and modelling studies and design work, as well as approximately £0.9M for enabling works and technology improvements (crossing refurbishments, CCTV, ANPR and VMSs). These works have been undertaken within the original budget.

1.18 Future works, concentrating on the remaining project elements, including the main junction works at Gordon Road, Gomm Road, Hatter's Lane and Micklefield Road, is predicted to be within budget, but further work will be done to refine scheme estimates and agree a target cost for the works and a project board decision will be taken in due course to authorise.

D. Value for Money (VfM) Self-Assessment

1.19 The Benefit Cost Ratio (BCR) for the scheme as set out in the original NPIF bid was determined from the monetised transport user benefits of the scheme, and scheme costs. The scheme cost is based on the costs of the entire transport package in this corridor (£5,903,961, rebased to 2010 at £4,648,317). The benefits are accrued from the junction improvements and journey time savings for vehicles travelling the full extent of the corridor (rebased for 2010 estimated as being £22,094,889.84). **The scheme BCR is therefore 4.75, representing very high value for money.**

1.20 The proposed scheme has been subject to a series of cost reduction exercises through review of both the design (early contractor involvement, risk workshops, programming, value engineering etc.) and pre-construction stage (restricted working hours, traffic management plan review and construction cost reviews). Further opportunities to reduce costs will be explored as the programme develops.

1.21 Effectiveness – The proposed scheme design has been subject to feasibility study, informal key stakeholder engagement, a statutory formal consultation process, design reviews and safety audits to ensure the scheme is safe, effective and fit for purpose.

1.22 Economy – The scheme proposed will provide reduced journey times along the A40 and improved journey time reliability. It is well recognised that these outputs support economic growth and employment opportunities.

E. Equalities and Diversity

- 5.1 Under section 149(1) of the Equality Act 2010 (EA 2010) the County Council must, in the exercise of its functions have due regard to the need to:-
- eliminate discrimination, harassment, victimisation and other conduct prohibited by the EA 2010;
 - advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
 - foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
- 5.2 Relevant protected characteristics are: age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation.
- 5.3 The improvements already carried out and those being proposed as described in this report will address congestion along London Road and, in doing so, support a growing economy and throughout the implementation of the scheme the County Council is having due regard to the duty under section 149(1) of the EA 2010.

F. Legal implications

- 1.23 The consultations that have been carried out meet with BCC's guidance on minimum periods for consulting with the public (4 weeks).
- 1.24 A Traffic Regulation Order consultation for bus lane and parking amendments has been carried out alongside the wider scheme engagement, with notices placed along the A40 (London Road) route. This consultation followed DfT best practice and guidance, providing the opportunity for residents, stakeholders and statutory consultees to send in any feedback or comments regarding the scheme (see Appendix C).

G. Property implications

- 1.25 Works for the majority of the scheme proposals are to be undertaken on the public Highway, with two exceptions:
1. Hatter's Lane bus lane widening requires the termination of small areas of BCC leases with two adjacent businesses and extending of the highway boundary to undertake the works (see Appendix D). Notice to amend/terminate these leases has been served; and

2. The widening of Micklefield Road will require the acquisition of land (see Appendix E). Negotiations have commenced with both landowners affected.

H. Unitary Council

- 1.26 The Council is working collaboratively with colleagues at Wycombe District Council on the A40 project. There is representation on the project boards from WDC with the Wycombe Major Projects (WDC Cabinet and senior officers) meeting also regularly updated on the projects.

I. Other implications/issues

- 1.1 None

J. Feedback from consultation, Local Area Forums and Local Member views

- 1.2 The consultation for the A40 London Road Improvements started on Friday 14th June and closed on Friday 12th July 2019, involving a public exhibition (Thursday 20th June), c2,500 leaflets delivered to local residents and businesses and promotion through local media, social media and e-bulletins.

- 1.3 In total there were 125 responses to the consultation, with a number of comments and suggestions. An analysis of the responses received through the consultation has been undertaken and is presented in the consultation summary in Appendix F. The key issues raised along with the steps taken to investigate and address where appropriate are summarised below:

1.4 Cock Lane Junction:

Concern: *Regular junction blocking and lack of time for vehicles to exit.*

Response: *The better coordination of signals and optimisation of timings will improve conditions for Cock Lane meaning that more vehicles will be able to exit the junction.*

Action/Amendments To The Scheme: *Extra attention will be paid to the Cock Lane junction during the signal validation and testing phase of the project to ensure that the expected improvements are realised. A yellow box junction is to be demarcated across all 4 lanes of the A40 at the Cock Lane junction to deter motorists from blocking this junction.*

1.5 Micklefield Road Junction:

Concern: *The scheme does not address the queuing and safety concerns at the Micklefield junction arising from motorists mounting the pavement.*

Response: *Due to the need to complete the project according to the scheme's funding rules the Micklefield widening was not part of the original scope of the project. However, a design has been produced for the widening of Micklefield Road and provision of a lengthened dual lane approach. Negotiations are ongoing to seek acquisition of the land*

required and whilst this work may not be completed within the timescales of this project, it is our intention to continue to pursue these improvements and implement as soon as possible.

Action/Amendments To The Scheme: *Pursue acquisition of land on Micklefield Road with objective of introducing lane widening on approach to junction.*

Concern: *A significant delay is caused by the lane designation from Ryemead Boulevard. Consideration should be given to changing the right lane to straight ahead and right and the left lane to left only.*

Response: *The delays being caused to the left turners is because of the junction blocking from vehicles merging from two lanes to one eastbound. Nevertheless we have reviewed the transport modelling and agree with this recommendation to change the lane priority to a left only lane and a right and straight ahead lane.*

Action/Amendments To The Scheme: *The proposal to change priority on Ryemead Boulevard has been accepted and the design updated accordingly with updated lane markings and signage.*

1.6 Laurel Drive:

Concern: *Why isn't a right turn lane being provided for Laurel Drive?*

Response: *Initial observations indicated that the number of right turners did not justify a dedicated right turn lane. However, due to the strength of representation on this matter the project team will review this position and determine if any changes are required.*

Action/Amendments To The Scheme: *Further work is being undertaken to determine the need and impact of providing a right turn lane to Laurel Drive, the Project Board will be updated on the results and a decision will be taken on amendment of the scheme to follow.*

K. Local Member comments

- 2.1 All Local members were emailed a draft copy of the report.
- 2.2 A response was received from Councillor Julia Wassell confirming that she was in support of the scheme subject to specific mention of the inclusion of signage at Ryemead Boulevard to indicate change in priorities.

L. Communication issues

- 2.3 As there is a high level of local interest in this scheme and potential for congestion and delays during construction, it will be important to keep local residents and

stakeholders updated on future plans and progress. A communications plan has been developed to ensure that information and e-bulletins are shared in a timely fashion, the project's website will be regularly updated with relevant information and activities concerning the project as well as the use of social media, press releases and on-site variable message signs.

M. Progress Monitoring

- 2.4 During the construction stage, it is anticipated that the Project Manager will be updated on day to day activities regarding the delivery plan, reporting to the A40 London Road Project Board regularly against project milestones and project progress. A programme of pre and post scheme monitoring evaluation will be undertaken to determine the effectiveness of the scheme in meeting the project's objectives.

Background Papers

Appendix A	Scheme overview plan
Appendix B	Feasibility report
Appendix C	Traffic Regulation consultation report
Appendix D	Hatter's Lane highway widening plan
Appendix E	Micklefield Road widening plan
Appendix F	Consultation summary

Your questions and views

If you have any questions about the matters contained in this paper please get in touch with the Contact Officer whose telephone number is given at the head of the paper.

If you have any views on this paper that you would like the Cabinet Member to consider, or if you wish to object to the proposed decision, please inform the Democratic Services Team by 5.00pm on 16th August 2019. This can be done by telephone to 01296 382343 or email democracy@buckscc.gov.uk.