

Securing future prosperity

Report To:	Greater Cambridge City Deal Executive Board	8 December 2016
Lead Officer:	Graham Hughes, Executive Director of Economy, Transport and Environment, Cambridgeshire County Council	

Western Orbital – Public Consultation Outcomes and Next Steps

Purpose

- 1 This report summarises the outcome of the consultation on possible future options for bus and cycle infrastructure improvements along the Western Orbital corridor. A summary of the public consultation response can be found in **Appendix 1** and full responses found in **Background Paper 1**. Links to Background Papers are provided on the final page of this report and online.
- 2 The initial public consultation in early 2016 formed part of the early strategic assessment of this scheme. The Western Orbital early assessment work has been undertaken because it may impact on other Tranche 1 schemes in particular, the Cambourne to Cambridge Better Bus Journeys project. Additional assessment included consideration of potential interventions to support sustainable bus access to Cambridge Biomedical Campus and to possibly enhance Park & Ride and Park & Cycle capacity in and around J11 of the M11 which is reported separately.
- 3 The Western Orbital may form part of Tranche 2 or 3 of the City Deal and the City Deal Executive Board will make a decision about the timing of the overall project when funding priorities are confirmed before 2020. Any decision that is made will need to include early strategic work engaging with Highways England on future plans for the M11.
- 4 The M11 is a Highways England asset. Highways England produces Route Strategies for improvements planned over 5-yearly periods. In the current 2015-20 period, Highways England plans to improve signage between M11 junctions 8 and 14, and other minor measures. There is no potential for further measures in the current period. The next Route Strategy priorities should be indicated in 2017and this is still under development. Early engagement with Highways England has suggested the following emerging themes:
 - Highways England does not support allowing buses (only) to use the hard shoulder between Junctions 11 and 13 (or elsewhere), because this would impact future plans for general hard shoulder running for all traffic
 - Future possible plans for the M11 could include further technology upgrades such as variable speed limits and also peak hard shoulder running when traffic conditions demand. At this time Highways England

have not suggested that further interventions along the M11 are a priority during future Route Strategies

- In terms of additional off road infrastructure as part of a future Western Orbital Highways England would insist that there was a gap of at least [8] metres between [the current edge of the tarmac or the top of the embankment] and the edge of a new bus-way, for safety and network protection issues
- 5. These issues may impact the Western Orbital because, if traffic were less congested along the Cambridge stretch of the M11 there may be less demand for buses, though (a) the problems at the junctions may remain, and (b) it's not clear in which 5-year period any managed motorway would be created if at all. In addition new highway capacity may eventually be filled up due to growth along the corridor. The impacts of a future managed motorway on both the M11 traffic conditions and the local road network would require additional transport modelling.
- 6. Given the connection of these M11 issues and the Western Orbital, it is recommended that the Executive Board awaits further Highways England's announcements to in 2017 and, in the meantime, continues to lobby it for a managed motorway early in the 2021-26 period if evidence suggests that such an intervention would be in line with the City Deal and local policy objectives.
- 7 As such the next steps will be to report to the City Deal Board in July 2017 on the following issues:

i) The strategic assessment of the potential for the integration of Western Orbital options with the Cambourne to Cambridge emerging options as required by the Executive Board in their decision on that scheme of 13th October 2016

(ii) The possibility of shorter term options to improve Park &Ride capacity and bus priority to encourage public transport access to Cambridge Biomedical Campus and Park and Cycle potential around J12
(iii) The interaction of any future Western Orbital scheme with possible future improvements to the M11 which may be implemented by Highways England during the City Deal period.

iv) All the above steps to take account of planning issues along the corridor.

Recommendations

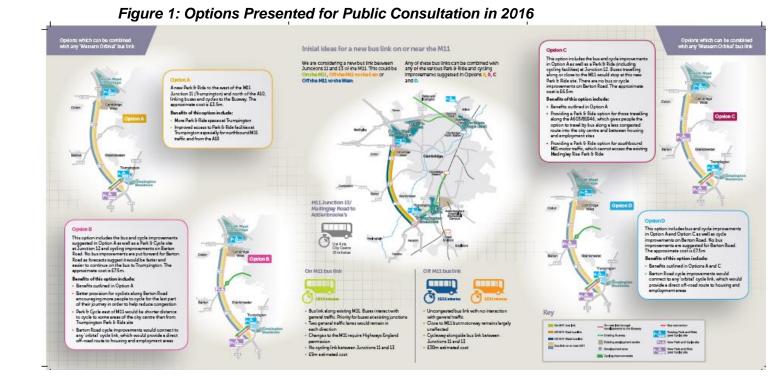
- 8 The Board is asked to:-
- i. Note the responses to the consultation on the Western Orbital bus infrastructure improvement scheme,
- ii Agree the next steps as set out in this report for the ongoing strategic assessment of the Western Orbital scheme as part of the City Deal programme to support related potential Tranche 1 schemes
- iii Agree to take a key role in working with Highways England to establish clear priorities along the M11 corridor and for these discussions to form part of the next report on the Western Orbital.

Reasons for Recommendation

9 To support the implementation of the City Deal programme.

Background

- 10 The Western Orbital is an important proposal within the Local Transport Plan (LTP) 2011-2026. The M11 corridor to the west of Cambridge directly is an area of housing and employment growth such as Cambridge Bio Medical Campus and West Cambridge. The Western Orbital could link up these areas of growth where there is currently no direct public transport link. There is already provision for further future connectivity via segregated bus infrastructure through the North West Cambridge and Darwin Green developments, via the guided busway at Orchard Park toward Cambridge Business Park and Cambridge North Station creating an extensive high quality public transport network to the west, north and south west of Cambridge. As such the Western Orbital specifically supports the following City Deal objectives
 - Support the delivery of new homes
 - Support access to key employment locations and job creation
 - Enhance local public transport infrastructure and potentially support additional investment from third parties
- 11. Possible Park and Ride and Park and Cycle sites in locations along the corridor could support modal shift to buses and cycling by intercepting traffic travelling toward Cambridge along the A10 south and A603 as well as traffic travelling north along the M11.
- 12. In December 2015, the Executive Board agreed to consult on four conceptual options for a Western Orbital bus link. These options had already undergone an early feasibility assessment. The consultation used routes, ('On Line', 'Off line West' and 'Off line East') in order to engage the public as widely as possible with the issues and link them to the key City Deal transport objectives. The routes were then considered with combinations of new Park & Ride site at Junction 11, a Park & Ride Site at Junction 12 and a Park & Cycle at Junction 12.



- 13 As part of the consultation 17,500 leaflets were sent out to towns and villages in the surrounding study area and 5,000 postcards signposting people to the online survey were sent out to a wider catchment area. The consultation material was also made available at a number of locations around Cambridge and the surrounding area. A series of briefings and public exhibitions were held for the general public, stakeholders, Members and other interested parties.
- 14 In terms of Facebook and Twitter, the main objectives were toward raising awareness of the consultation through the use of links and also informally through 'likes' and 'following' the relevant Twitter account. A summary of how people heard about the consultation is set out in **Appendix 1**.

Considerations

15 The public consultation provided the opportunity for respondents to submit additional proposals. Those within scope will be included in the ongoing option appraisal and assessment as set out in this report. **Table 1** sets out a summary:

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Proposal	Initial Analysis and Next Steps
Additional direct link from M11 northbound carriageway / slip road directly to new Hauxton Park & Ride (if this is a preferred option)	Vehicular access to be considered further as preferred option for additional P&R capacity emerges.
Alternative off-line link between Junction 11 Park & Ride sites (existing Trumpington and option for new site at Hauxton).	Link to be considered along with pedestrian and cycle connections and how the connection will integrate with Trumpington Meadows. Green Belt policy will be taken into consideration when highlighting a preferred option. Service operations between the two sites will also be considered.
Alternative connections across M11 using existing agricultural bridge at Junction 11	Further assessment of the agricultural bridge will be undertaken as well as alternative options for crossing the M11 for buses, pedestrians and cyclists if relevant to preferred option for P&R capacity
Alternative potential location of Junction 12 Park & Ride and Park & Cycle	All proposed locations for a Park & Ride at Junction 12 will be assessed further as part of considering if a new P&R should be provided
Additional connection of orbital route to Cambridge Science Park via North West Cambridge and Darwin Green	A link between Madingley Park & Ride, North West Cambridge, Darwin Green and the Science Park has been secured in the S106 agreements for North West Cambridge. The connection to this approved link will be assessed further
Additional two-way cycle way over Junction 12 and along Barton Road into the City Centre	Depending on identification of and the preferred location for a Park & Cycle at junction 12, cycle improvements will include provision for crossing the M11
Alternative to allow Park & Ride cars to share bus infrastructure	Vehicular access to be considered further as preferred sites emerges. Discussions with Highways England would be required.

Table 1: Impact of Public Consultation: Items for consideration / to be taken forward

Proposal	Initial Analysis and Next Steps
Later or longer opening times of Park & Ride sites and services to accommodate shift patterns	No further action is required at this stage
Additional and/or alternative Multi-storey Park & Ride provision at Trumpington Park & Ride	Further assessment into the buildability and practicality of a multi-storey Park & Ride site will be carried out as part of the ongoing assessment
Unified Ticketing System	No further action is required at this stage
Connections to the A428 Scheme	Connections will be considered as preferred alignments in the next stage of assessment in particular focusing on the operational and cost benefit issues associated with different connection options

16 Other comments, including key stakeholder comments, are found in **Appendix 1** and are provided in full in **Background Paper 2.** The following provides a brief summary of the main points raised and is not exhaustive. The comments are organised by subject area under which they will be considered in the ongoing technical assessment process. Officers have provided an initial response to each of the main points raised

• Environmental Impacts

A higher number of representations indicated support for a bus link on the M11 with reason given due to the possible environmental effects of an off line options. **Officer Response:**

At this early stage of scheme development further desktop environmental assessment is being undertaken. That will identify possible impacts at a high level and reflect these in Benefit Cost Ratio. Should in the future, a single option be recommended for further detailed design that will consider any specific impacts and how they can avoided or mitigated.

• Park & Ride Provision

Some representations stating they felt that potential P&R locations at Hauxton and Barton were too close to the city centre to be effective in addressing traffic flow. Foxton had some support with a number of benefits cited, including that it could intercept traffic before it reaches "pinch points" further along the A10 towards the M11 with potential Park & Ride at the railway station. A suggestion was also made to develop a Park & Ride site to the southwest of Barton, towards The Eversdens to catch traffic before it reaches the village. Environmental concerns were also cited as well as the need to ensure cycling connectivity. **Officer Response:**

The sites identified in the consultation have been based on optimising transport planning considerations – intercepting traffic thus maximising patronage at the most beneficial points from different directions and ensuring effective and efficient bus operations from the sites. P&R sites too far out will be very costly to operate and will require more bus priority to support them. Detailed assessment of the P&R sites including the benefits of extending the capacity of the existing P&R at Trumpington forms part of the ongoing project development work.

• Existing Bus Routes

Challenges around existing bus routes and services were raised, with some requesting that existing problems be resolved prior to any new developments

being made. Some noted that a complete overhaul of bus service provision around Cambridge might be necessary.

Officer Response

Bus operational issues do not directly fall within the infrastructure project scope. However, officers are currently undertaking further work into understanding the future bus network given the additional developments to the west of Cambridge. This work will feed into to ongoing project development. The evidence from bus operators is that congestion does remain a significant barrier to operating effective bus services and that measures to increase bus priority will support improved bus reliability and frequency as evidenced by the Cambridgeshire Guided Busway.

• Commuting by Car

A number of respondents commented on existing significant issues regarding commuting into Cambridge by car from the west of the city. Some cited traffic reports and surveys to evidence problems with traffic flow went beyond the 'catchment' within the M11. Difficulties in traffic flow along the A14 and A428 were cited as having a knock-on effect on traffic entering Barton, and having more effect than any new housing developments:

Officer Response

The Western Orbital is considering interventions which will address the range of traffic issues to the west of Cambridge and to identify public transport interventions which can encourage modal shift from cars into buses and cycling. Modelling is being undertaken to allow for assessment of how specific proposals can reduce traffic levels. Consideration of the overall impacts of the Cambourne to Cambridge bus scheme and the City Centre Access scheme will be integral to this assessment.

Cycling Provision

Many of the written representations indicated that that the provision of good cycle routes were key, alongside good facilities. Cycleways segregated away from main roads were supported, as were the development of safer routes for horse-riding and pedestrians.

Officer Response

Cycling forms a key part of the Western Orbital considerations and all options would be assessed in relation to the extent to which they enhance cycling provision along the corridor and to/from key sites for housing and employment. Similarly provision for horse riding and pedestrians would also be assessed.

- 17 In summary, these issues while significant do not raise any new issues which would have otherwise fallen outside the ongoing assessment/ development of the scheme.
- 18 Key consultation messages
 - Over 64% of respondents supported the need for public transport improvements along the corridor
 - Over 67% of respondents felt it was important or very important that cycling and pedestrian facilities are improved within this scheme
 - Greatest support was given for Option A (On M11) (61.8% supporting or strongly supporting),
 - Option B (east of M11) received 53.4% supporting or strongly supporting.

- Greatest opposition was shown for Option C (west of M11), with 43.1% opposing or strongly opposing.
- The majority of respondents supported the concept of Park & Ride, with the greatest support expressed for a new Park & Ride site at the Junction 11 exit of the M11 (70.9% of respondents supported or strongly supported this option).
- Over 70% supported a Park & Ride and/or a Cycle and Ride at Junction 12.

Next Steps

- 19 The public consultation forms part of the ongoing strategic assessment of options. The public consultation has generated new and alternative proposals which will help inform this process. This process is in line with the Department for Transport Assessment Guidance which is part of the City Deal Assurance Framework.
- 20 As set out in the report to the City Deal Executive Board of December 2015 and confirmed as part of the decision of the Board on 13th October 2016, the primary reason for early development work for the Western Orbital is to ensure that the current Tranche 1 scheme decisions are made with a full understanding of the interaction with a future Western Orbital. The current congestion issues on the M11, plans of the Highways England to address them and the extensive expansion of the Cambridge Biomedical Campus also inform the short term considerations related to the Western Orbital.
- As such 3 key considerations should now form the main focus of ongoing assessment work for a future Western Orbital Scheme:
 - a) The direct impact of the Western Orbital Scheme with the route alignment which may emerge from the Cambourne to Cambridge Better Bus Journey Schemes. In particular this would focus on
 - I. the potential for direct off line links between the 2 schemes and the transport/environmental benefits/costs
 - II. the potential for direct on line links between the 2 schemes
 - III. the direct issues within the West Cambridge site and Madingley Road which may impact both schemes
 - IV. The overall economic impacts of different options for both schemes using both the conventional Benefit Cost Ratio and the wider Gross Value Added approach already highlighted within the Cambourne to Cambridge Corridor
 - V. These assessments should be completed by July 2017 at which time the Board is programmed to make a final decision on options for detailed consultation on the Cambourne to Cambridge Better Bus Journey Schemes.
 - b) Ongoing communication with Highways England (HE) in terms of their developing proposals for the M11 motorway. The current HE programme runs to 2020 and in this plan they intend to upgrade the signage on the M11 Cambridge section and review junction operations. There is no current provision within the HE programme (known as a Route Investment Strategy) for either a more extensive technology scheme (involving variable speed limits) or for hard shoulder running although this could form part of a the next or a future

programmes beyond 2020. It is currently estimated that HE will provide further clarity on longer term measures to be taken on the M11 during 2017 when their next Route Investment Strategy is set out and the City Deal will seek to engage at the highest levels with HE to influence this process.

- c) Separate consideration of the potential for phased implementation of a future scheme including specific focus on J11 of the M11 to meet for the aspirations of the City Deal Executive Board to support public transport access to the Biomedical Campus. This specific intervention is discussed in a separate report to this meeting of the Executive Board. Such potential phased implementation would include the following
 - A full business and implementation plan (as set out in separate report on this agenda)
 - A full appraisal of the case for a Park & Ride capacity increases at Trumpington
 - A full appraisal of a new Park & Ride to the west of the M11
 - A full appraisal of a new connection between any Park & Ride to the west of the M11 and any new bus priority infrastructure at J11 of the M11
 - A full appraisal of other shorter term measures which may support the successful operation of a bus slip road at J11, including those at J13
- A full consideration of the case for a Park and Cycle site around J12 of the M11.
- 23 Additionally, a number of planning considerations should also be fully accounted for in further Western Orbital work. In particular these are:
 - The outcome of examination of the South Cambridgeshire and Cambridge submitted Local Plans
 - Status of any planning applications around western corridor
- Finally given that the wider economic assessment of benefits also forms part of the City Deal assurance framework and that the consideration of Gross Value Added has been a key consideration for the Cambourne to Cambridge scheme, continued wider economic evaluation of the overall benefit of both schemes should continue to ensure that the City Deal objectives around growth and economy are adhered to in further decision making on both the Cambourne and Western Orbital schemes.
- 25 It is not currently proposed to recommend a "preferred option" for the Western Orbital as a scheme, but rather to continue to ensure that the full costs and benefits of the Western Orbital options (on line or off line) are known as the timetable for further consideration of options for the Western Orbital is set in the context of the following issues
 - Further clarify on the Highways England future Route Strategies for the M11 during 2017
 - Tranche 2 prioritisation for the City Deal programme in 2017
 - Cambourne to Cambridge decision making in early 2018
 - Governmental funding decisions for Tranche 2 in 2019
- 26 On the basis of these key impacts, a final Western Orbital option recommendation is not currently advisable until 2019 to allow for full considerations of these issues to be factored in. It is recognised that should any

of the key dates set out in Para 25 change, this could further influence the timing of a recommendation for the Western Orbital.

27 In this context the next step for the project is set out in **Table 2**.

Table 2: Next Step and target dates

Next Step	Target Completion Date
Report to GCCD Board on detailed assessment of the following key issues	July 2017
 A full detailed assessment of the Western Orbital options in relation to the Cambridge to Cambourne Better Bus Journey Scheme 	
 A full detailed assessment of the case for proceeding with any short term intervention at J11 (and supporting measures) including P&R capacity enhancements 	
 Update on further engagement with Highways England on their developing plans for M11 	
Tranche 2 prioritisation decisions by the City Deal partnership	December 2017
Cambourne to Cambridge decision on option for statutory approval	March 2018
Government decision on Tranche 2 funding	2019
Western Orbital full option recommendation	2019

Options

- 28 The recommended approach is for officers, now informed by the public consultation, to undertake further strategic assessment of the Western Orbital scheme. This assessment will support the development of early related City Deal schemes informed by Highways England and planning considerations.
- 29 The Executive Board may decide to stop any further assessment work on the Western Orbital given that it is a not a Tranche 1 scheme. This would not allow for a full assessment of its impacts on other Tranche 1 schemes and therefore reduce the strategic oversight the Board may wish to have when making decisions on those other schemes.
- 30 The Executive Board may decide to request that officers recommend a preferred option for the Western Orbital in 2017. This option would allow for full integration of the Western Orbital scheme into the Cambourne to Cambridge Better Bus Journeys scheme with benefits in terms of reduced development costs and improved timescales. However, given that the Western Orbital is not a Tranche 1

funded scheme, this may pre-empt wider considerations on future City Deal Tranches.

Implications

31 In the writing of this report, taking into account financial, legal, staffing, risk management, equality and diversity, climate change, community safety and any other key issues, the following implications have been considered: -

Financial

Resources are allocated as part City Deal Tranche 1 for early scheme development

Staffing

Project management undertaken by the Cambridgeshire County Council Major Infrastructure Delivery team.

Risk

A project risk register has been developed.

Background papers

Western Orbital - Cambridgeshire Research Group

Summary of all representations

All written comments received via email, post, social media and exhibitions

These background papers can be viewed via the following link:

http://www.gccitydeal.co.uk/citydeal/info/2/transport/1/transport_projects_and_consultations/ 8

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