



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 future options for bus and cycle infrastructure improvements along the Western Orbital corridor. Further more detailed analysis of the public consultation response can be found in **Background Paper 1**. Links to all Background Papers are provided on the final page of this report and on [line](#).
- 3 This 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 have impact on other Tranche 1 schemes in particular informing the emerging work on the Cambourne to Cambridge Better Bus Journeys project.
- 4 Furthermore there is a separate but related consideration of a potential intervention to support sustainable bus access to Cambridge Biomedical Campus and to enhance Park & Ride capacity in and around J11 of the M11.
5. The Western Orbital may form part of Tranche 2 or 3 of the City Deal which has yet to be confirmed with government. The City Deal Executive Board will consider funding priorities for future Tranches in 2017. Given this and given that the early strategic assessment work includes engagement with Highways England on future plans for the M11 which are still under consideration, during the current scheme development stage, the focus is on ensuring that the Western Orbital work informs decision making on other projects rather than arrives at a recommended option.
- 6 As such the next steps will be to report to the City Deal Board in July 2016 on the following issues:
 - (i) The strategic assessment of 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 viability of shorter term options to improve P&R capacity at J11 in conjunction with bus priority at either/or both J11 and J13 to encourage public transport access to Cambridge Bio Medical Campus
 - (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.

7. Additionally further clarity and impact on planning issues along the corridor specifically those at J11 and the wider Submitted South Cambridgeshire and City of Cambridge Local Plans should form part of further strategic assessment work of the Western Orbital.

Recommendations

8. The Board is asked to:-
 - i. Note the responses to the consultation on the Western Orbital bus infrastructure improvement scheme, including the Park and Ride / Cycle options suggested and other comments received,
 - 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 on going City Deal programme to support related potential Tranche 1 schemes

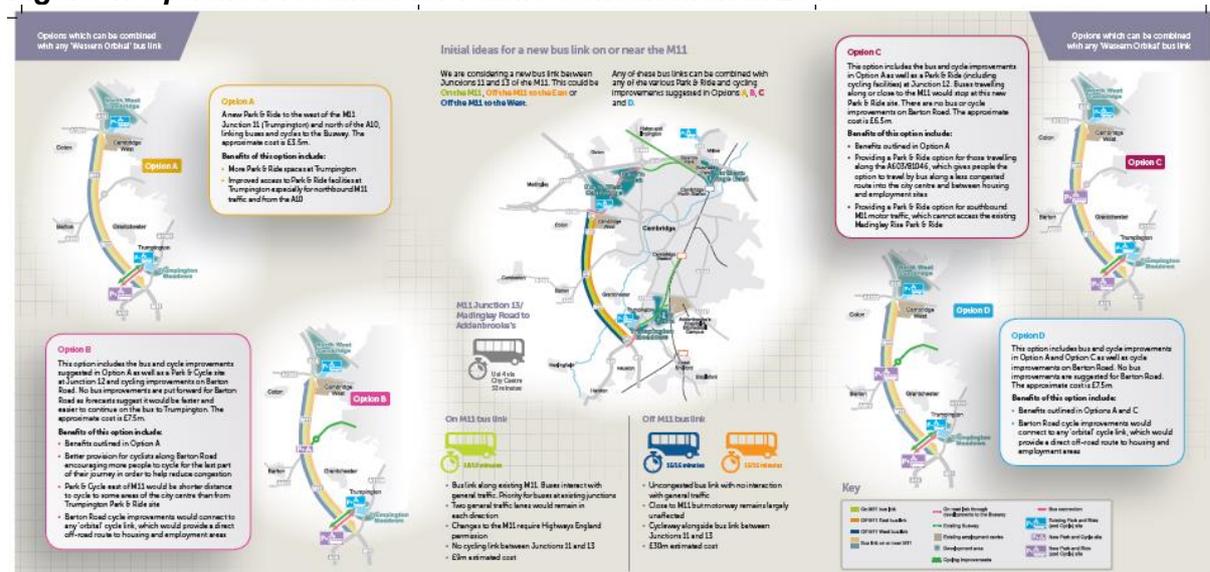
Reasons for Recommendation

- 9 To support the implementation of the City Deal programme.

Background

- 10 In December 2015, the Executive Board agreed to consult on four conceptual options for a Western Orbital bus link. These options had already undergone a feasibility assessment. The consultation used nominal 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 4 separate options being made up of a combination of new park and Ride site at Junction 11, a Park and Ride Site at Junction 12 and a Park and Cycle at Junction 12.

Figure 1: Options Presented for Public Consultation in 2016



- 11 The public consultation took place as part of the Department for Transport major scheme development method – Transport Assessment Guidance (TAG).

- 12 As part of the consultation 17,500 leaflets including the options map and reply paid survey were sent out to areas immediately in and around the corridor and 5,000 postcards signposting people to the online survey were sent out to a wider catchment area. The distribution area is set out in Background Paper 1. Eight consultation events were held over a three week period as follows:
- Newnham: Monday 22nd February 2016;
 - Harston: Tuesday 23rd February 2016;
 - Grantchester: Wednesday 24th February 2016;
 - Comberton: Wednesday 2nd March 2016;
 - Coton: Thursday 3rd March 2016;
 - Lucy Cavendish College Cambridge: Tuesday 8th March 2016;
 - Barton: Wednesday 9th March 2016; and
 - Trumpington: Thursday 10th March 2016.
- 13 The consultation material was also made available at a number of locations around the Greater Cambridge area including:
- Libraries;
 - Local schools;
 - Local outlets such as shops and pubs;
 - Park & Ride sites
 - Greater Cambridge City Deal website;
 - Greater Cambridge City Deal Twitter and Facebook (also via Facebook advert);
 - University of Cambridge staff webpage;
 - City Deal partner Council receptions: Shire Hall, South Cambridgeshire Hall, The Guildhall;
 - Leaflets and posters in community centres;
 - Letters and emails to stakeholders and landowners
 - Posters in City Centre locations
 - Bus advertising panels at bus stops and on-screen adverts on Park and Ride buses.
- 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 the 'following' the relevant Twitter account. A summary of how people heard about the consultation is set out in Background Paper 1.
- 15 In addition two stakeholder briefings were also held; one for councillors and one for stakeholders, community groups and interested parties. A community organised event was also held on the evening of Thursday 3 March. The project manager attended a Barton Parish Council meeting on the morning of Saturday 6 March. The project manager also gave a presentation to staff at Papworth Hospital, which will be relocating from its current Papworth Everard base to the Biomedical Campus from April 2018.

Considerations

- 16 The public consultation provided the opportunity for respondents to submit additional proposals. A collaborative planning workshop was held on 25th May 2016 with a number of stakeholders including Cambridgeshire County Council, Cambridge City Council, South Cambridgeshire District Council and an existing local Bus Operator. The detailed results of the public consultation were presented and discussed. The stakeholders agreed which of the items raised by the public consultation have been identified as out of scope of this project although they may be considered through other City Deal projects. Those within scope will be included in the ongoing option appraisal and

assessment before recommendation of a recommended option. Initial analysis is found in **Background Paper 2** and **Table 1** sets out a summary:

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

proposal	Initial Analysis and Next Steps
Link from M11 northbound carriageway / slip road directly to new Hauxton Park & Ride	Vehicular access to be considered further as preferred sites emerges.
Off-line link between Junction 11 Park & Ride sites (existing Trumpington and proposed 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.
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.
Location of Junction 12 Park & Ride and Park & Cycle	All proposed locations for a Park & Ride at Junction 12 will be assessed further
Connection of orbital route to Cambridge Science Park via Cambridge Northwest and Darwin Green	A link between Madingley Park & Ride, Cambridge North West, Darwin Green and the Science Park has been included in the S106 agreements for Cambridge North West. The connection to this approved link will be assessed further
Two-way cycle way over Junction 12 and along Barton Road into the City Centre	Depending on the preferred location for a Park & Cycle at junction 12, cycle improvements will include provision for crossing the M11
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.
Later or longer opening times of Park & Ride sites and services to accommodate shift patterns	No further action is required at this stage
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.
Unified Ticketing System	No further action is required at this stage
Connections to the A428 Scheme	Connections will be considered as preferred alignments for the Western Orbital emerge

- 17 The summary of other comments, including key stakeholder comments, are found in **Background Paper 2** and are provided in full in the Background Papers 3. 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.

- **Environmental Impacts**

A higher number of representations indicated support for a bus link on the M11. Greatest opposition was shown for an M11 off-road link, irrespective of which side of the motorway it was located. The primary rationale for this was environmental impacts such as impacts on orchards, wildlife sites and the green belt, or the noise impact on local residents.

- **Park & Ride Provision**

Feedback focused on specific locations proposed for a new Park & Ride site, with some representations stating they felt that Hauxton and Barton were too proximal to the city centre to be effective locations to address traffic flow. Foxton was nominated by a few to be more appropriate, with a number of benefits cited, including that it could intercept traffic before it reaches “pinch points” such as the main roads through Harston and further along the A10 towards the M11. The presence of the Foxton rail station was also reflected upon as an additional option for future travel which could also mitigate issues at Trumpington Park & Ride site with commuters to London. A suggestion was made to develop a Park & Ride site to the southwest of Barton, towards The Eversdens, to intercept traffic before it reaches the village.

Generally, the development of a new Park & Ride site was considered to be a sensible option. Some representations stated that the benefits would outweigh the negatives if a site was planned properly taking into account environmental concerns. It was noted that any Park & Ride site should provide effective cycling facilities, and that the route between it and the city centre should include a dedicated cycle route.

- **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.

- **Commuting by Car**

A number of respondents commented on existing significant issues regarding commuting into the 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. Connections to 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:

One representation cited a review into traffic along the A10 through Harston, which they stated demonstrated that Cass A vehicles formed the majority of road users (approximately 80% of those recorded). It also noted that traffic levels, unsurprisingly, increased significantly during weekdays.

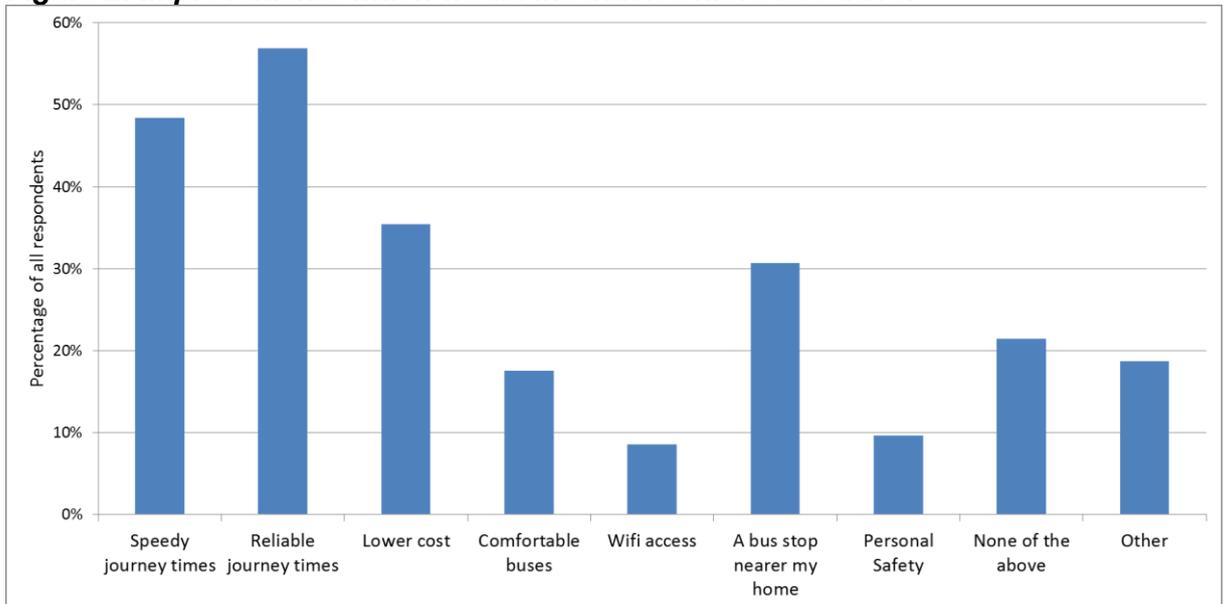
- **Cycling Provision**

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

Concerns were raised that the entrance routes into the city – specifically the challenges crossing the M11 slip-roads either from Barton or from Harston – made journeys very unsafe. Support for the orbital route and bus links focused on the inclusion of cycling facilities.

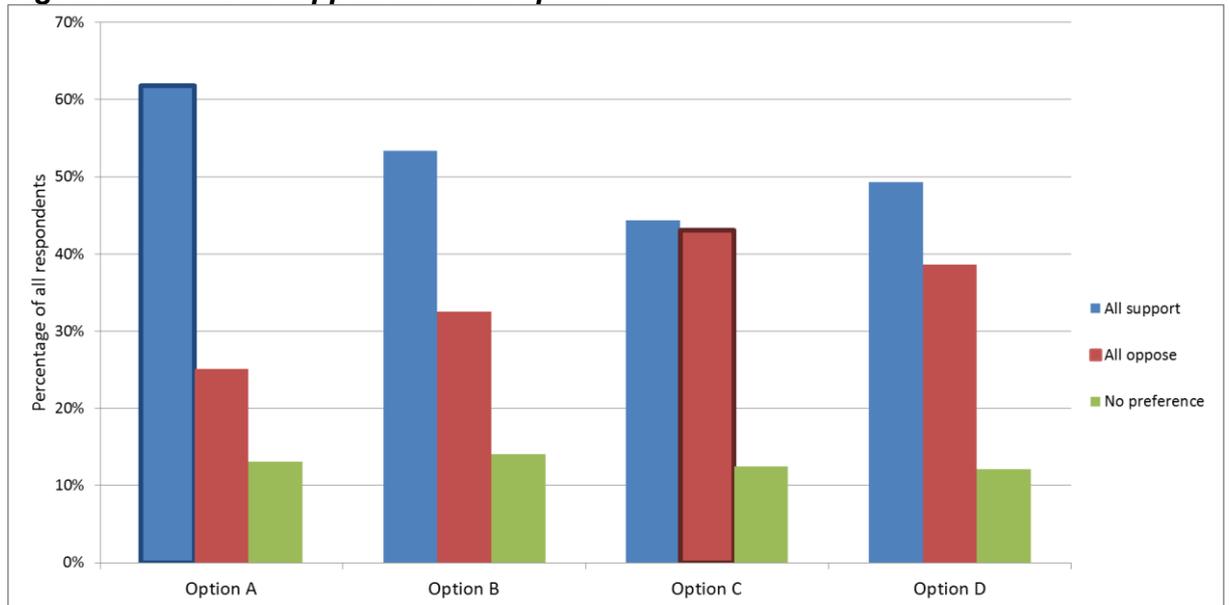
- 18 In summary, whilst important, these issues do not raise any additional new risks or constraints which would otherwise fall outside the ongoing appraisal and assessment methodology.
- 19 Over 51% of respondents indicated their usual mode of travel was by car as a driver. Over 45% indicated they would cycle and 25% travel on foot. The public were asked what would incentivise them to use the bus or use it more often. The responses are summarised in **Figure 2**.

Figure 2: Improvements which would incentivise more bus travel



- 20 Most respondents agreed that the provision of fast, reliable and frequent journeys was most likely to persuade them to make use of buses. This is consistent with surveys of passengers on the Busway and the recent A428 Better Bus Journeys Cambourne to Cambridge Public Consultation. .
- 21 Over 67% of respondents felt it was important or very important that cycling and pedestrian facilities are improved within this scheme
- 22 **Figure 3** summarises the overall levels of support for each option based only on the quantitative analysis.

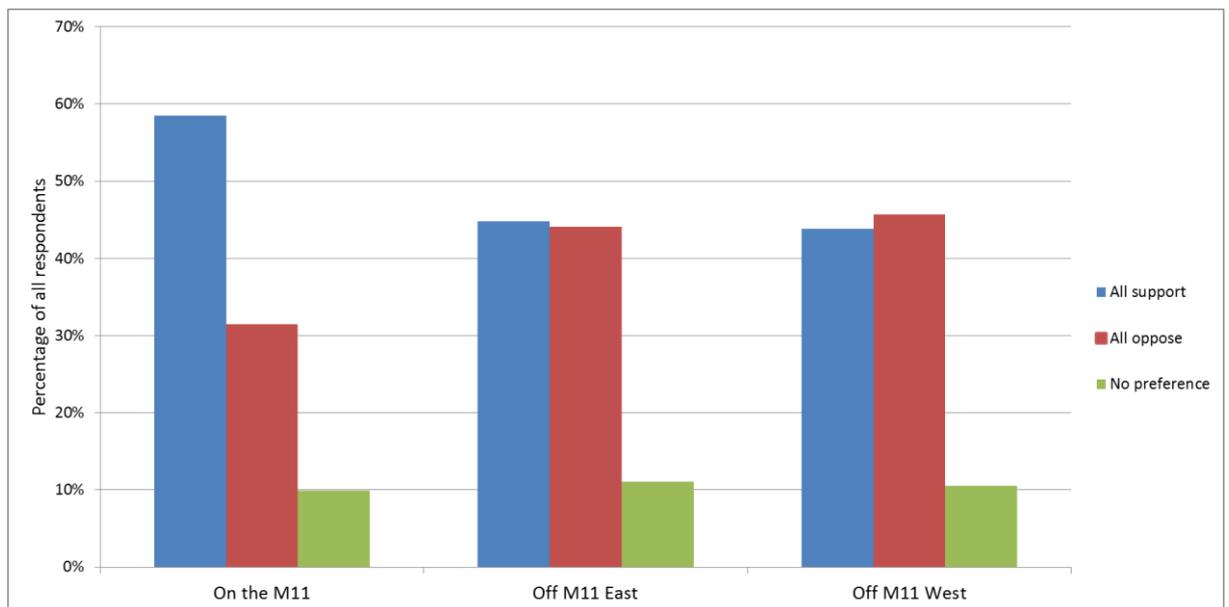
Figure 3: Levels of support for each option



23 Over 64% of respondents supported the need for public transport improvements along the corridor. Respondents were then asked to identify how far they supported or opposed three locations for the potential bus link:

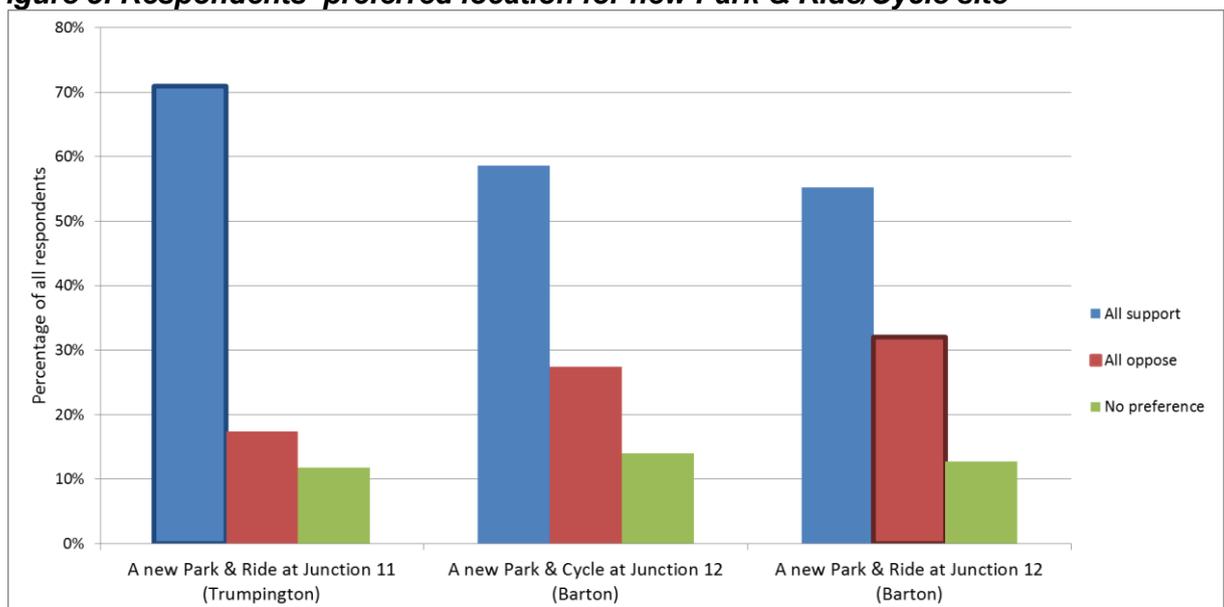
- On the M11
- Off M11 East
- Off M11 West

Figure 4: Degree of support for proposed locations



- 24 Overall, greatest support was given for Option A (On M11) (61.8% supporting or strongly supporting), followed by Option B (east of M11) (53.4% supporting or strongly supporting). Greatest opposition was shown for Option C (west of M11), with 43.1% opposing or strongly opposing.
- 25 Further analysis of the location of respondents by postcode and their support or opposition to each option has been undertaken with details provided in Background Paper 1. This analysis suggests that levels of opposition to proposals may reflect concerns about how a potential scheme could impact the immediate area in which people live.
- 26 Respondents were asked to consider the creation of two new Park & Ride or Park & Cycle sites as part of the Western Orbital development. A specific location was illustrated at Junction 11 and a catchment area was illustrated at Junction 12.
- 27 All three initial ideas were supported by the majority of respondents, with the greatest support expressed for the development of a new Park & Ride site at the Junction 11 exit of the M11 (70.9% of respondents supported or strongly supported this option). Greatest opposition was expressed for a new Park & Ride site at the Barton exit of the M11 (32.0% opposed or strongly opposed this).

Figure 5: Respondents' preferred location for new Park & Ride/Cycle site



Work undertaken since Public Consultation

- 28 Additional technical work has been undertaken to support the Strategic Outline Business Case (OBC) for the A428 Cambourne to Cambridge Better Buses Journeys (A428 Scheme), as the area of influence and connectivity between the two schemes. This work has included tasks such as:

- Policy Review
- Existing Demographics
- High-Level Constraints Assessment
- Further Park and Ride Site Location refinement
- Public Transport Feasibility
- First Principles Assessment of Potential Options

- Frequencies and Journey Time Assessment
- Review of Scheme interaction with A428 Better journeys Cambourne to Cambridge.
- Potential impact on public transport service patterns

29 The report presents a ‘first principle’ assessment of the advantages and disadvantages of the considerations for the Western Orbital running on the M11 or an off line alignment from Junction 13 to Junction 11.

On M11 running

- Advantages – less environmental impact, does not rule out future off line investment, lower cost, quicker implementation
- Disadvantages – does not provide bus priority, segregation, journey time reliability or resilience, not strategically consistent with A428 scheme approach in terms of public transport quality and wider economic growth objectives, relies on interaction with HE network, no cycling benefits.

Off line alignment

- Advantages – offers potential for strategic high quality segregated bus corridor combined with A428 using new bus bridge, offers greatest public transport benefits and support for economic growth, separate from HE network, high quality new cycling link
- Disadvantages – environmental impact is highest with busway and P&R interventions, highest financial cost, longer implementation

Next Steps

30 The public consultation forms part of the ongoing strategic assessment of options. As anticipated the public consultation has generated new and alternative proposals which will help inform this process.

31. As set out in the report to the City Deal Executive Board of December 2015 and as confirmed as part of the decision of the Board on 13th October 2016, the primary reason for early development of 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 Bio Medical Campus, also inform the short term considerations related to the Western Orbital.

32 As such 3 key considerations should now form the ongoing assessment work for a future Western Orbital Scheme:

- a) The direct impact of any Western Orbital Scheme with the potential specific 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 online links between the 2 schemes
 - III. the direct issues within the Cambridge West 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 liaison with Highways England (HE) in terms of their developing proposals for the M11 motorway. The current HE business plan runs to 2020 and in this plan they do intend to upgrade the signage on the M11 Cambridge section and review junction operations. There is no current provision within the HE business plan (known as a Route 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 subsequent business plan. It is currently estimated that Highways England will provide further clarity on longer term measures to be taken on the M11 during 2017 when their next Route Strategy is set out and the City Deal will seek to engage at the highest levels with HE to influence this process.
- c) Separately 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 Bio-Medical 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 extension at Trumpington
 - A full appraisal of a new P&R to the west of the M11
 - A full appraisal of a new connection between any P&R 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
- 33 Additionally, a number of planning considerations should also be fully accounted for in further Western Orbital work. In particular these are:
- Status of planning applications around J11 of the M11
 - The examination of the South Cambridgeshire and City of Cambridge submitted Local Plans
- 34 Given that the Western Orbital does not form part of the Tranche 1 of the City Deal programme, and that further Tranche prioritisation decisions are yet to made, and given the need to obtain further clarity on the points (a,b,c) in Paragraph 32 above and planning considerations in Paragraph 33, it is not proposed to within the current scheme development stage to arrive at a Recommended 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 (online or offline) are known as the Board considers decisions related to the Paragraph 33.
- 35 In this context the next step for the project is set out in **Table 2**.

Table 2: Next Step and target date

Next Step	Target Completion Date
Report to GCCD Board on detailed assessment of the following key issues <ul style="list-style-type: none">- 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	July 2017

Options

- 36 The recommended approach is for officers, now informed by the public consultation to undertake further strategic assessment of the Western Orbital options to support the development of early related City Deal schemes informed by Highways England and planning considerations.
- 37 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 scheme and therefore reduce the strategic oversight the Board may wish to have when making decisions on those other schemes.
- 38 The Executive Board may decide to complete request officers to recommend an 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 consequent benefits in terms of reduced development costs and improved timescales. However given that the Western Orbital is not a Tranche 1 funded scheme, this would pre-empt wider considerations on future City Deal Tranches.

Implications

- 39 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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