



**UNIVERSITY OF
CAMBRIDGE**
Estate Management

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Shire Hall, Castle Hill
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Dear Sirs,

Western Orbital Consultation – University of Cambridge response

The University welcomes the opportunity to comment on the Western Orbital proposals as part of the City Deal. As a long term institutional partner for the City and major employer in the region, the University feels it is vital that sustainable transport options are available, reliable, and affordable for our staff, students and visitors. The City Deal in particular is critical as it sets out to provide important infrastructure to link areas of housing growth with major employment generators throughout the City. In particular, as the proposed route is close to the University's West Cambridge and North West Cambridge sites, improvements to the public transport links to the south of Cambridge and the Cambridge Biomedical Campus will have significant benefits for University, and the City, in maintaining its position as a research leader for the country. In addition, combined with additional Park and Ride and Cycle facilities, the proposed route will encourage commuters to make that part of their commute by sustainable travel modes, therefore reducing congestion in central Cambridge.

In general, the University supports the Western Orbital proposals.

Background

The University has considered the impact of the proposed options on the University sites, particularly on the strategic employment and mixed-use development sites at West Cambridge (WC), North West Cambridge Development (NWCD) and Cambridge Biomedical Campus (CBC). The section below provides a description of these developments.

North West Cambridge Development (NWCD)

The North West Cambridge Development is the largest single capital project that the University of Cambridge has undertaken in its 800-year history. Outline planning permission was granted in February 2013 for the scheme, on the 150-hectare site of University farmland situated in between Huntingdon Road, Madingley Road and the M11.

The masterplan includes 3,000 homes (50% key worker housing, available for qualifying University and Colleges employees), 2,000 post-graduate student spaces, 100,000m² of employment space (estimated 4,350 employees), a local centre and community facilities including a primary school, nursery, doctors' surgery, supermarket and retail units.

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The North West Cambridge Development already makes provision for the Western Orbital on the public transport priority route, from Huntingdon Road to Madingley Road. This route will be complete in early 2017.

West Cambridge (WC)

Development at West Cambridge has been on-going since the 1960s and planning permission was granted in 1999 for the current framework for the site. The University of Cambridge is making plans to intensify development on the West Cambridge site, primarily as the University's centre for Physical Sciences and Technology. Plans for intensification have been supported by the Draft Cambridge Local Plan and have been the subject of a Statement of Common Ground between the City Council and the University.

A masterplanning process is currently underway which aims to create a high quality, well connected research environment that will support the University's and City's globally competitive position, whilst also creating opportunities to support the Cambridge Cluster with the commercialisation of knowledge through entrepreneurship and collaboration with industry. A new outline planning application will be submitted in 2016 for approximately 450,000m² employment floorspace (existing and proposed), for a total employment population of up to 15,000 employees.

Cambridge Biomedical Campus

In 1999, Addenbrooke's NHS Trust (now Cambridge University Hospitals NHS Foundation Trust), in partnership with the University of Cambridge and the Medical Research Council, first set out its vision for the future of the hospital site – a vision for the transformation of the site into the Cambridge Biomedical Campus. Outline planning permission was granted in 2009 for the development of 90 acres of land to enhance existing on-site activities as well creating space for commercial organisations. A strategic masterplan for the whole biomedical campus was published in 2010. The Campus currently has 2500 University staff, primarily based in the area of Life Sciences. Significant future development is planned on the campus resulting in additional staff and visitors to the site.

University of Cambridge response

The University has reviewed the Western Orbital proposals and the section below outlines the University's response.

The Vision

The University notes that the Western Orbital vision is to create a new, fast, reliable link for buses between west and south of Cambridge and notes the reference to the challenges of Uni4 bus times through Cambridge city centre. The University supports this scheme in principle; however there is a need to strengthen the vision that underpins this project and to demonstrate the significant benefits it could bring to Cambridge. The University considers that the vision should include reference the accessibility and connectivity benefits of linking key residential and employment sites and discuss the strategic benefits of linking with the A428 and the NWCD link road to provide an orbital route between the new Cambridge North train station and Cambridge Biomedical Campus. The congestion, environmental and economic benefits of this route should be further communicated to generate additional support for this initiative.

The University therefore considers that the vision and benefits of the Western Orbital need to be strengthened and developed in a wider strategic context to demonstrate the benefits that this project could bring to the City of Cambridge.

Benefits to the City of Cambridge

The University considers that creation of the Western Orbital link would have the following benefits:

- **Improved accessibility for NWCD residents to key employment sites:** The NWCD Travel Plan approved in 2011 predicted that approximately 10,000 trips would be generated per day to employment sites¹, some of which would benefit from reduced journey times using the Western Orbital route, which would make sustainable travel options more attractive.
- **Improved journey to work for employees working on the CBC, WC, NWCD and the Cambridge Science Park:** Approximately 6000 University staff currently work on these sites and a high number of these live in rural areas to the south, west and north of Cambridge which could use the Western Orbital route as part of their commute to work. The proposals would reduce journey times for employees commuting from rural areas to these sites, who often cite lack of public transport and large travel distances as key barriers to using sustainable travel modes. University staff could be encouraged to interchange at the

¹ NWCD Transport Assessment 2011

Park and Ride and Cycle sites and make the last mile to their workplace using the Western Orbital link or other routes. The University is supporting the implementation of the Western Orbital route through the implementation of the NWCD link road between Huntingdon Road and Madingley Road. Linked to the bus link through Darwin Green to the Cambridge Science Park and Cambridge North station, the Western Orbital would increase access to the CBC for communities from north Cambridge. The Western Orbital link will improve access from new housing growth sites on the southern fringe to the employment sites.

- **Improved connectivity between the CBC, WC and NWCD employment sites:** During the working day, University staff and students make trips between the CBC and WC for work purposes and this is likely to increase in the future as the sites grow and the interactions between scientific research in the physical sciences and life sciences increase.
- **Reduction in congestion and improving the environment:** Improving accessibility and connectivity is likely to encourage a shift from car-based trips into Cambridge to public transport and cycling, leading to a reduction in peak hour congestion, lower carbon emissions and improved local air quality.
- **Economic benefits:** Reductions in journey times around Cambridge as well as improved journey time predictability has the potential to attract additional investment to Cambridge, particularly on peripheral sites near the Western Orbital link, therefore leading to economic benefits for Cambridge.

The University considers that the scheme could have significant benefits to the City of Cambridge by improving connectivity and accessibility between residential and employment sites, with knock-on benefits on congestion, the environment and the economy.

Park and Ride/Cycle options and Barton Road cycling improvements

The following options are set out in the consultation:

- Option A: Park and Ride facility at Junction 11
- Option B: Park and Ride facility at Junction 11 and Park and Cycle at Junction 12 and cycling improvements on Barton Road
- Option C: Park and Ride facility at Junction 11 and Park and Ride and Park and Cycle at Junction 12
- Option D: Park and Ride facility at Junction 11 and Park and Ride and Park and Cycle at Junction 12 and cycling improvements on Barton Road

The University considers that each of these options has merit, as each would deliver sustainable travel options and would encourage rural commuters to interchange to sustainable travel modes on their commute into Cambridge. The University therefore supports all options presented; however it favours option D as this will have the largest impact on modal shift. If an off- road link on the eastern side of the M11 is taken forward, Park and Ride and Cycle facilities should be located on the eastern side of the M11 to allow for quick interchange.

The University is aware that introduction of parking charges at current Park and Ride sites has resulted in a reduction in usage. Any plans for additional Park and Ride sites need to consider the pricing strategy to encourage commuters and visitors to use these facilities instead of parking in Cambridge city centre. The University is also aware that Park and Cycle provision is currently offered at some of the existing Park and Ride sites at a cost of £10 per month. The usage of the current Park and Cycle lockers should be considered to inform future plans for Park and Cycle sites. Options for cycle hire at the Park and Cycle should be investigated to cater for occasional users.

The University notes that there are no proposals to improve bus connections on Barton Road. This should be considered to reduce the risk of delays to bus journeys from the proposed Park and Ride site caused by congestion.

The University supports options A, B, C and D in the proposals for creation of Park and Ride and Cycle facilities and improved cycle infrastructure on the Barton Road. The University favours option D as this would have the largest impact on modal shift.

Future University bus service route options

The Uni4 service currently connects Madingley Road Park and Ride with central Cambridge University sites and the CBC. The service currently provides 4 buses at peak times and 3 off-peak. In total 230,000 passenger trips are carried out per annum of which 125,000 (55%) are from University Card holders. The service is subsidised by the University and currently run by Stagecoach. Demand for the service currently fluctuates throughout the year with demand during holiday periods being at 60% of the term time level.

The University is currently reviewing the service, with a new service being launched in July 2016 which complies with the NWCD S106 obligations to provide a 20 minute frequency service on the Uni4 on Mondays to Fridays and at least a 30 minute frequency Saturday service. When employment uses are opened at NWCD (likely to be after 2020), there is a requirement for 10 minute frequency to the railway station/CBC to be delivered on weekdays. As the WC site expands and NWCD residents come to the site, passenger numbers will increase and potentially further passenger growth could be found if the Western Orbital route is used. The University may consider in the future whether some of these services could run as a shuttle along the Western Orbital route, which will be subject to a future review and tender process.

The University considers that the creation of the Western Orbital would increase demand for the University bus service between WC and CBC, which would have positive impacts in reducing congestion in the City of Cambridge.

Alignment of new orbital bus link

It is noted that three options for the physical alignment of the route have been proposed, either on the M11 or immediately to the west or east. The University supports the proposal for creation of a new bus link off the M11, to ensure the bus route is not affected by congestion and to ensure bus times are predictable, which will encourage a higher proportion of car drivers to use public transport for commuting and travel between University sites.

The University is concerned that provision of a bus link along the M11 would require buses to interact with general traffic on the M11 and at Junctions 11 and 13 and therefore the buses will still experience delay, particularly in peak hours. The University understands that bus priority measures at the junctions would be put in place; however high levels of queuing in peak periods may reduce the effectiveness of these measures. It is recognised that provision of a link off the M11 has higher construction costs; however this would ensure that journey times would remain relatively the same throughout the whole day, leading to greater use and therefore commercial bus operators are more likely to have an interest in operating on this route. The off road route will also require less construction on the M11 and therefore would reduce closures on the M11 during construction.

The Western Orbital consultation material shows the eastern off-road route in diagrammatic form, running east of the M11, to the west of the University's West Cambridge site. The University is in support of this route being to the east of the M11, which would connect the West Cambridge site with the key employment and residential sites on the Western Orbital route, fulfilling a key objective of the City Deal. The outline planning application will be submitted for a total employment population of up to 15,000 employees on this site and therefore this site will be a large trip generator. As a consequence, there is a need to ensure this site is well connected to an efficient sustainable transport network. The Western Orbital link could run from Madingley Road along High Cross through the site next to the West Forum.

Providing a route to the east of the M11 would also allow cyclists to travel between the WC site and junction 11 on an off-road segregated cycle track, therefore providing a safe cycle route between the NWCD and the CBC. If this route is taken forward, the proposed Park and Cycle and Ride sites at Junction 12 and 13 should also be located to the east of the M11 to avoid any increased construction costs for a bridge crossing the M11.

Linking the off-road route through the West Cambridge site would also require fewer bus priority measures at Junction 11 of the M11, thereby lowering construction costs and minimising any delays to bus services caused by congestion on the A428.

The University is willing to engage with the County Council on this route, which is already in existence and could cater for bus users, cyclists and pedestrians, maintaining highways in University ownership.

The University therefore proposes that the Western Orbital route should run to the east of the M11 and through West Cambridge site.

Links with the A428 proposals

In response to the A428 consultation, the University commented that the proposals should be considered in a coordinated approach with the Western Orbital proposals and required further detailed discussions before being able to support a specific option. The University stated that a radial option that runs through the West Cambridge site would be more aligned to overall City Deal objectives and would connect nearby villages and housing growth sites with the major employment area. If this option is taken forward, the University considers that there is a significant opportunity to link the A428 radial bus route with the Western Orbital route through the West Cambridge site at the West Forum. Linked with a new Park & Ride facility at Madingley Mulch, both schemes in combination would have significant accessibility improvements for the University's staff commuting

to WC and CBC and reduce travel time. There would also be scope for coordinating a bus service from the new Madingley Mulch Park & Ride site direct to the CBC, with an interchange at the West Forum.

The University therefore proposes that the Western Orbital route and A428 should link through the West Cambridge Site at the West Forum and an interchange facility should be considered.

Links with the Cambridge Access Study

The University considers that these proposals are considered in a coordinated approach alongside the City Centre Access Strategy, to ensure that bus movement between Junction 11 of the M11 and the Cambridge Biomedical Campus is fast and reliable.

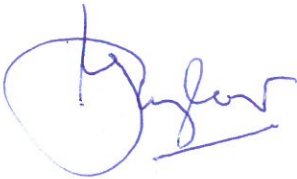
The University therefore proposes that Cambridge Access Study considers the link between J11 of the M11 and the Cambridge Biomedical Campus.

Conclusions

In conclusion, the University supports the Western Orbital proposals and considers that:

- The vision and benefits of the Western Orbital need to be strengthened and developed in a wider strategic context to demonstrate that benefits that this project could bring to the City of Cambridge.
- Options A, B, C and D each have merit in the creation of Park and Ride and Cycle facilities and improved cycle infrastructure on the Barton Road. The University favours option D, as this would have the largest impact on modal shift.
- The creation of the Western Orbital would increase demand for the bus service between WC and CBC, which would have positive impacts reducing congestion in the City of Cambridge. The preferred approach is for the route to run off line to the east of the M11 and Park and Ride/Cycle facilities should run on the eastern side to allow for interchange.
- The route should run through the West Cambridge site along High Cross by the West Forum.
- The Western Orbital route and A428 should link through the West Cambridge Site and an interchange facility is imperative to link the two routes.
- The Cambridge Access Study should investigate improvements in bus movement between J11 of the M11 and the Cambridge Biomedical Campus.

Yours faithfully,



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