



**GREATER  
CAMBRIDGE  
CITY DEAL**

Securing future prosperity

**Report To:** Greater Cambridge City Deal Executive Board

8<sup>th</sup> March 2017

**Lead Officer:** Graham Hughes

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## **A1307 Three Campuses to Cambridge**

### **Purpose**

1. The Greater Cambridge City Deal (GCCD) is a unique opportunity to secure the future of Greater Cambridge as a leading UK and global hub for research and technology, support economic growth and enhance quality of life for people in Cambridge and South Cambridgeshire. The GCCD partnership aims to invest £1 billion in the infrastructure we need to connect new homes and jobs, so our city region can grow in a sustainable way, benefitting those who live, work and study in the area, and those who visit. It aims to bring about a step change in sustainable transport infrastructure and networks, ensuring employers have access to the skills they need and people in Greater Cambridge and Cambridgeshire benefit from the employment opportunities growth affords and accelerate delivery of 33,500 homes, with more housing people can afford, closer to new jobs. These changes will enable us to secure and share our city region's future prosperity.
2. The A1307 project is key to directly supporting the growth agenda as it connects the expanding South East Cambridgeshire cluster of biotech parks, including the Cambridge Biomedical Campus, Babraham Research Campus and Granta Park, as well as housing growth south of Cambridge and at Haverhill.
3. By providing significant improvements, particularly *reliability*, for journeys by sustainable transport modes to these key employment sites, the emerging preferred options for the A1307 Three Campuses to Cambridge project will directly deliver on the overarching vision of the Greater Cambridge City Deal – to secure sustainable economic growth and quality of life for the people of Cambridge and South Cambridgeshire.

### **Recommendations**

4. It is recommended that the Executive Board:
  - (a) Note the draft Consultation Report for publication on the GCCD website.
  - (b) Review the preferred options and approve further technical work to develop and refine the options, which improve public transport reliability, connectivity and access through park & ride expansion, proposals to deliver bus priority and increased cycling through improved infrastructure to support sustainable travel between homes and jobs, particularly:
    - i) Road safety enhancements between Linton and Horseheath.
    - ii) Improvements to signalised junctions and westbound bus lanes in Linton.
    - iii) Measures to improve bus journey times through Linton High Street.
    - iv) New and improved cycleways between Babraham and Great Abington / Granta Park.
    - v) A new park and ride site near the A11.

- vi) A new westbound bus lane between the new park and ride site and Hinton Way roundabout.
- vii) A new segregated bus route from the Babraham Road park and ride site to the Cambridge Biomedical Campus (CBC). Further work alongside future City Deal prioritisation work will determine if this route is to be on road or a new off road route;
- (c) Endorse a second public consultation exercise on the preferred options, to commence June 2017 and agree a delegation to finalise the consultation materials.
- (d) Approve a one-off spend of £25K to undertake some transport modelling, as part of pre Strategic Outline Business Case work on the dualling of the A1307 between Haverhill and the A11.

### **Reasons for Recommendations**

5. The emerging preferred options are expected to deliver key benefits - faster, more frequent and more reliable bus journeys to key employment destinations, particularly for commuters, and greater connectivity by public transport and cycling to and between key employment sites in SE Cambridgeshire to support the jobs growth ambition on the campuses. There is strong support for this approach from local employers and through the consultation.
6. Public consultation on the Preferred Options will run in parallel to continuing technical work, particularly where there is still more than one option being investigated, to better understand feasibility, constraints, road safety, landownership issues and so on, to be able to reach a single set of preferred schemes for detailed design. Following consultation, a business case will be prepared and approval then sought on the preferred option design to progress to implementation and statutory processes.
7. To understand the potential value for money that the preferred options package may deliver, a high level assessment of costs and benefits has been carried out. The early stage indicative assessment has focussed on benefits derived from potential journey time savings to bus users on the corridor, and suggests the package of measures would be likely to offer a Benefit Cost Ratio (BCR) in the range 1.5 - 2.0.

### **Background**

8. WSP|Parsons Brinckerhoff were appointed to identify a package of sustainable transport interventions for the A1307 corridor from Haverhill to Cambridge.
9. The preferred options have been developed following a first round of public consultation in summer 2016, stakeholder engagement, technical work looking at costs, constraints, environmental considerations and the steer of the Project Team and Project Board.
10. Subject to Executive Board approval in March - Key Decision 3 - Approval to design and consult on preferred options, we will then move in to Delivery Stage 3, including the preferred options consultation and then preparation of the detailed Business Case.
11. We have recently set up a Local Liaison Forum, which will have its first meeting in public on 20<sup>th</sup> February, (after the publication of this paper). In due course the minutes of this meeting will be made available at [www.qccitydeal.co.uk/LLF](http://www.qccitydeal.co.uk/LLF). The views and recommendations from the Forum will continue to feed in to scheme development and design.

### **Consultation results**

12. The key headlines from the first public consultation exercise are set out below. The key points that have emerged from the consultation are that there is strong support for improved public transport services including park and ride and pedestrian and cycling improvements amongst employers and the public in the area. The recommendations noted above, therefore incorporate these as key elements of the proposed strategy going forward.

- 1489 officially logged responses.
- A total of 83% of respondents supported or strongly supported the idea of improving the bus, cycling and walking links in the A1307 area.
- The majority of respondents come from the areas covered by the CB22, CB21 and CB1 postcode districts (the settlements along the route between Cambridge and the South Cambridgeshire villages bordering Haverhill).
- 53% of respondents identified themselves as car users, closely followed by cyclists (33%) and walkers (28%).
- 58% of respondents travel along the A1307 either daily or some weekdays, with 56% traveling during the day-time.
- The most popular travel destination was Cambridge City Centre (42%), 23% was Addenbrooke's, and 17% travel to Linton.
- Work (53%) and leisure (52%) were the usual purposes of respondents' trips.
- 54% of respondents thought that reliable journey times would make taking the bus a better alternative mode of transport, with quicker journey times making up 49%.
- 63% strongly supported or supported the proposed expansion of Babraham Road Park and Ride, with the proposed A11 Park and Ride receiving 61% support/strong support.
- 50% of respondents supported or strongly supported the 'On Highway' Babraham Road Park and Ride to Addenbrooke's/Cambridge Biomedical Campus bus link, with 54% supporting or strongly supporting the 'On Highway' Granta Park to Addenbrooke's/Cambridge Biomedical Campus bus link.
- 55% of respondents supported or strongly supported bus improvements in Linton.
- Respondents supported or strongly supported the 'Off Highway' cycling options, with 64% for Three Campuses to Cambridge.

### **Considerations**

13. There are two key principles which underpin this project, and are key to understanding the benefits:
  - (a) The project needs to be considered as a package of measures, with each part of the package addressing key problems/issues on a particular section of the route, and which together deliver significant improvements for sustainable travel.
  - (b) New and improved bus services which are faster, more reliable and more direct, serving more and different destinations along the route.
14. To set out clearly the preferred options, the A1307 route has been split geographically into sections. Public consultation feedback, high level transport modelling, summary costing and outline constraints have been considered.
15. The geographical sections are:
  - Haverhill to Linton
  - Linton Village
  - Linton to Granta Park and Babraham Village
  - A11 Park and Ride
  - Babraham Village to Hinton Way
  - Hinton Way to Addenbrooke's / Cambridge Biomedical Campus
16. It is important to note that the preferred options presented here have only been subject to high level modelling, costings and constraints work, and there is a great deal more detailed work still to be undertaken. Some of this is planned in parallel to the preparation of the second consultation exercise, and some will form part of the detailed design.
17. At this stage, for some sections of the route, there is the potential for more than one option to be considered, and it will be for further consultation, discussions with landowners and bus

operators, and further technical work on environmental, ecological, heritage, safety, economic and financial factors, to determine the final options to go forward for full business case and detailed design. This will then be subject to GCCD Executive Board approval.

18. As for all City Deal schemes, funding is being drawn from developments in the surrounding area. The A1307 proposals in Linton, for example, are being partly funded from applications in Linton for housing developments, and in particular relating to changes to the signal junction of the A1307 with Linton Village College, and the Linton High Street study to reduce bus journey times.
19. Executive Board attention should also be drawn to two key pieces of work which potentially bring risk and may influence the A1307 schemes going forward, but as yet have not drawn conclusions. These are:
  - Running the options through the Cambridge Sub Regional Model V2 (CSRM2) – which is still being validated. Modelling to date has been in the older version of the transport model, although up to date traffic data has been used where possible. This may impact upon the BCR figures.
  - The implications and impacts from other City Deal workstreams, for example, the emerging City Access work or the proposals for more widespread parking controls in Cambridge - this work may influence demand for park and ride, for example; and the Western Orbital scheme which could create the opportunity for bus services linking west Cambridge to the A1307 corridor via the CBC.
20. In response to a challenge of the robustness of the traffic data used in the development of the high level options, in March 2016, the GCCD Executive Board agreed to new traffic surveys being undertaken. An expansive set of traffic surveys recorded data in autumn 2016. This data has been used by WSP|PB in the preparation of the preferred options, but the full analysis produced in a report format, is still being completed and will be published on the GCCD website in March 2017.

## **Options**

21. In their Preferred Options Report, WSP|PB have recommended a number of preferred options which form a package of schemes covering the study area, split by sections as set out in Paragraph 15. The recommended preferred options are summarised in paragraph 29.

### *Discounted options following the initial consultation*

22. The discounted options from the 'initial ideas' consultation in summer 2016 are:
  - The longer off highway bus only road and associated off road cycleway from Granta Park to the CBC which had less public support and greater environmental impact. The recommended option on the section between Babraham Village and Hinton Way can be provided within the current highway boundary, minimising potential impacts on the Gog Magog hills.
  - The long distance off road cycleway between Granta Park and Haverhill was assessed as less likely to be used by commuters and therefore offered less of a contribution to the City Deal objectives.

### *Whole corridor Road / Rail / Bus Rapid Transit options*

23. As agreed at the GCCD Executive Board meeting in March 2016, reopening the railway or introducing a bus rapid transit route between Haverhill and Cambridge were discounted from consideration as part of the A1307 Three Campuses to Cambridge scheme.
24. Further consideration of a major road intervention – dualling of the A1307 between Haverhill and the A11 – is being pursued separately by the A1307 Strategy Board which is convened

by the Haverhill Chamber of Commerce. Pre Strategic Outline Business Case work for the A1307 dualling scheme has been commissioned jointly by Cambridgeshire County Council and Suffolk County Council on behalf of the A1307 Strategy Board.

25. As part of this commission, the GCCD Executive Board is asked to approve a one-off spend of £25K to undertake transport modelling for the A1307 Strategy Board, following the commitment to 'modelling assessments' made at the March 2016 meeting.

Recommended preferred options

26. Subject to further technical work and liaison with key stakeholders, the preferred options are as follows, based on the geographic sections of the route as noted in paragraph 15:

*Haverhill to Linton*

- Road safety enhancement between Linton and Horseheath.

*Linton Village*

- Public realm enhancements for reducing congestion within Linton High Street.
- Improvements to signal timings at Linton Village College and integration of traffic signals and the pedestrian crossing near the High Street junction. Installing MOVA signal control at the Village College junction will optimise capacity and could offer a 10-13% improvement in junction efficiency and reduction in delay.
- New west bound bus lanes on the approach to the High Street junction.

*Linton to Granta Park and Babraham Village*

- New/improved cycleways between Babraham/Babraham Research Campus and Great Abington/Granta Park, including improvements to the existing footbridge over the A11 to improve access and meet equalities legislation, and crossing arrangements near Hildersham.

*A11 Park & Ride*

- A new park & ride site to the south of the A1307 either east or west of the A11 junction (in addition to Babraham Road park and ride site). Transport modelling has been used to inform the preferred options work to date. For the park and ride options, modelling suggests that coupled with westbound bus priority measures, a 33-36% increase in park and ride patronage at a new A11 site could be achieved, but that the network could be adversely affected by the removal of the existing park and ride at Babraham Road, and the recommendation is therefore to retain the existing site too. The westbound bus priority measures have assumed buses could have an increase in speed of 30%, with a potential service frequency of 10 buses per hour

*Babraham Village to Hinton Way*

- Widening of the existing A1307 carriageway to create a new on-highway westbound bus lane, where feasible, between the proposed A11 park and ride and Hinton Way roundabout. Safety improvements at the junction with The Gog Farm Shop and Haverhill Road and new bus priority through the roundabout at Shelford Bottom.

*Hinton Way to Addenbrooke's / Cambridge Biomedical Campus*

- A segregated bus route from Babraham Road Park & Ride to the Cambridge Biomedical Campus (CBC) site. This could be on road or off road and it is proposed that further work alongside the development of future City Deal schemes determines the best approach. There is huge travel demand generated by the Biomedical Campus - patients, visitors and staff – and enabling all of these groups to access the different parts of the site by sustainable transport will be critical. If the existing mode shares are applied to the 6,000+ expected new employees at CBC, this could create additional demand for 1,680 bus trips per day and 1,980 cycle trips (each way). For these reasons, at the current time it is recommended that options for bus priority /

segregated access to the campus are kept open, and further consideration is made informed by the next round of public and stakeholder consultation, additional technical work on the options and further work with the Cambridge University Health Partners to understand in more detail how future changes on the campus site might offer opportunity for more effective bus routeing through the site.

- Improved pedestrian and cycle access from Babraham Road park and ride to CBC and this needs to be considered alongside the choice for the bus route.

27. The preferred options are shown diagrammatically in the “A1307, Three Campuses to Cambridge: A quick guide to the next steps” handout appended to this report, and are discussed in detail in the Background Papers noted below and available at [www.gccitydeal.co.uk/A1307](http://www.gccitydeal.co.uk/A1307).

### **Implications**

28. 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 and other resources***

29. The A1307 project continues to work within the City Deal approved budget.

#### ***Staffing***

30. The City Deal Team is resourced to continue with the A1307 project.

#### ***Climate Change and Environmental***

31. The A1307 project is active in an environmentally sensitive and heritage rich area, and these sensitivities will continue to be an important consideration as the project progresses.

### **Consultation responses and Communication**

32. The public and stakeholders have been consulted at a first round of consultation in summer 2016, and we are seeking approval to undertake a second round of consultation on the emerging preferred options in early summer 2017.

### **Background Papers**

A1307 Haverhill to Cambridge Consultation Report  
A1307 Haverhill to Cambridge Draft Preferred Options Report  
A1307 Haverhill to Cambridge Draft Preferred Options Report Executive Summary

These papers are available at: [www.gccitydeal.co.uk/A1307](http://www.gccitydeal.co.uk/A1307)

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