

**Report to:** Greater Cambridge Partnership Joint Assembly

2 November 2017

**Lead officer:** Chris Tunstall – GCP Director of Transport

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### **A1307 Haverhill to Cambridge**

#### **1. Purpose**

- 1.1. The A1307 Haverhill to Cambridge corridor is one of the key radial routes into Cambridge. It suffers considerably from congestion during peak times, particularly at the Cambridge end, at the junction with the A11 and around Linton, the largest settlement on the corridor. There are also a number of large employment sites in this corridor including the Babraham Research Campus, Granta Park, and Cambridge Biomedical Campus. The road has also had a poor accident record in the past, particularly on the stretch around Linton and eastwards towards Horseheath.
- 1.2. The corridor has been identified by the Greater Cambridge Partnership Executive Board, as a priority project for the first five years of the programme delivering the City Deal.
- 1.3. In March 2017, the Assembly and Executive Board were asked to review preferred options for the A1307 project, which had emerged from public consultation in Summer 2016, approve further technical work to develop and refine the options, and to endorse a second public consultation exercise on the preferred options, to commence June 2017.
- 1.4. Shortly before the Joint Assembly and Executive Board meetings in March, the first Local Liaison Forum (LLF) meeting for this project was held, and the LLF provided its view that more work should be done on the options before consulting the public.
- 1.5. The views and concerns of the LLF were taken on board by the Assembly and Executive Board, and a decision made to delay public consultation to September 2017 while the options were developed with the LLF. As a result of this and continued work with the LLF, the public consultation is anticipated to start in February 2018.

#### **2. Key issues and considerations**

- 2.1. To develop the options a total of 5 workshops were held with the LLF. At the workshops, delegates (which included stakeholders from Addenbrookes, CPPF, Magog Trust, Trumpington Residents Association, Hills Road Residents Association, Babraham Road Residents Association, FECRA, and Save the Green Belt) were asked to first generate ideas. The ideas were then filtered down by officers into viable options for assessment.
- 2.2. The assessment was fed back to delegates at 3 workshops, each dealing with a section of the route. At these workshops, delegates were asked to score (from 0 – not all important, to 5 – very important) each option as to how important it was in achieving GCP objectives. The output of each workshop was an agreed score for

each group which were then averaged to generate a score for ranking. The options were ranked by the agreed score and by additional criteria applied by officers. The additional criteria included economic benefit, contribution to quality of life, contribution to connectivity, contribution to reducing congestion, contribution to reducing traffic, environmental impact, land take required, and contribution to improving road safety. Options that ranked low and were scored low by the LLF were then discarded. The options supported by the LLF were then assembled into 3 route strategies.

- 2.3. The shortlist of options was then taken back to the LLF in a final workshop on 6<sup>th</sup> September and delegates were asked to score each strategy in terms of its contribution to GCP objectives, the environmental impact, and the benefit to road safety and traffic management.
- 2.4. The options presented in March 2017 to the Assembly and Board have been developed as a result of this process. Some options have been dropped as they were not strongly supported by the LLF without impacting the benefits of the scheme. New options have been added that were suggested by the LLF and found to be beneficial. These changes are detailed in **Appendix A**.
- 2.5. The strategies address problems and issues along the whole route, but differ in terms of solutions at the western end. Strategy 1 proposes a segregated / off-road busway or other public transport intervention between the A11 at Granta Park and the Cambridge Biomedical Campus (CBC). This option was not presented to the Assembly in March 2017. Strategy 2 proposes online bus priority measures on the A1307 west of the A11 with a bus only road between Babraham Rd P+R site to CBC. This is similar to the options presented in March 2017. Strategy 3 proposes online bus priority measures on the A1307 west of the A11 all the way to the Fendon Road roundabout at Addenbrookes. This is similar to the options presented in March 2017.
- 2.6. In all strategies, interventions east of the A11 are the same.
- 2.7. At a meeting with the LLF on 26 September 2017 the 3 strategies were presented in a public meeting. The LLF resolved that all three strategies should be recommended to the Board for public consultation in February 2018. Officers will be recommending this to the Board.
- 2.8. The project has been officially titled A1307 Three Campuses to Cambridge, and is referred to as such on the GCP website and in consultation material. This is not inclusive of the section east of the A11 to Haverhill, nor inclusive of Haverhill. Adopting A1307 Haverhill to Cambridge is a more accurate representation of the project that does not favour any particular section, or any particular user group. Officers will be recommending this to the Board.

### **3. Options and emerging recommendations**

- 3.1. The three strategies are:

i) **Strategy 1:** Segregated / off – road busway from the A11 via Sawston to the CBC Campus connecting via the campus to the existing guided busway with a Park and Ride at the A11/A505 junction.

Indicative cost: £130m-145m, indicative economic benefits £280m - £320m. Has the greatest mode shift and greatest use of P+R.

ii) **Strategy 2:** A new Park and Ride site on the A1307 close to the A11 with on-highway bus lanes to Babraham Road Park and Ride site. From Babraham Road P+R site a bus only road would be constructed to the Cambridge Biomedical Campus (CBC).

Indicative cost: £42m-46m, indicative economic benefits £165m - £180m

iii) **Strategy 3:** A new Park and Ride site on the A1307 close to the A11 with on-highway bus lanes to the roundabout at the front entrance to Addenbrooke's Hospital. Indicative cost: £39m-44m, indicative economic benefits £145m - £165m. Least mode shift and least use of P+R.

- 3.2. Plans showing these are listed in **Appendix B.**
- 3.3. Each of the strategies provide for improved bus journey times between Haverhill and CBC, cycling improvement between the A11 and CBC, improvement of the junctions at the Gog Farm Shop and Granhams Road, enhancement of Babraham Road P+R site, and an underpass to improve safe connectivity for non-motorised users near Wandlebury.
- 3.4. All three strategies include: westbound and eastbound bus-lanes at Linton, junction improvements at Linton Village College, Linton High Street, B1052, and Bartlow Road, safety improvement between Linton and Horseheath, signalisation of Hildersham High Street junction and conversion of the bridge over the A11 for cycle use.
- 3.5. The two park and ride sites identified at Babraham and Great Abington, included in the options approved in March, are not large enough, as a result of increased forecast demand, and emerging policy that new strategic P+R sites should be big enough for expansion to 3000 spaces.
- 3.6. The two existing proposed sites should be excluded from further consideration. One site at Babraham is constrained by a high pressure gas transmission pipeline with an exclusion zone limiting land available. The other, reserve, site at Little Abington would result in significant impact on the landholding leading to the business becoming unviable and potential loss of 55+ jobs. Neither site is suitable for a park and ride site of between 2000 and 3000 spaces.
- 3.7. Potential P+R sites in the vicinity of the A11, A1307 and A505 are being evaluated before consulting with landowners. Shortlisted sites will be included in public consultation, and the shortlist will be brought to the Board for approval prior to public consultation at the 8<sup>th</sup> February 2018 meeting.
- 3.8. The Combined Authority (CA) has a planned, but currently unfunded, study of the A505 in its forward programme as a joint study between the County Council and the CA. This may possibly proceed in 2018/19, and is understood to be focussed on providing additional highway capacity. Officers are aware that the Mayor will also be considering light rail between Haverhill and Cambridge, and an options appraisal to consider the viability of all rapid mass transit alternatives is currently being undertaken jointly by the Combined Authority and Greater Cambridge Partnership.
- 3.9. The LLF are keen to see smaller scale lower cost measures implemented as quickly as possible. The measures east of the A11 which are common to all strategies can be delivered independently of the measures west. This means a decision on which Strategy does not delay implementation of improvements between the A11 and Haverhill.
- 3.10. Officers are liaising with Highways England regarding conversion of the Slough Footbridge over the A11 to cycle use, and use of the River Granta underbridge for equestrians. Highways England are very supportive and may be able to provide partial funding from a budget for improving cycle links adjacent to the strategic road network.
- 3.11. All works proposed are within the Cambridgeshire County Boundary, but officers will continue to liaise with Suffolk County Council and Haverhill Town Council.

### Comparison of Strategies:

	Strategy 1	Strategy 2	Strategy 3
<b>Cost</b>	£130m to £145m	£42m to £46m	£39m to £44m
<b>Economic Benefit</b>	£280m to £320m	£165m to £180m	£145m to £165m
<b>Benefit Cost Ratio</b>	2.2	3.85	3.75
<b>LLF Ranking</b>	1	2	3
<b>Completion Date</b>	2022	2020	2020

Notes on table:

1. Cost includes 44% Optimism Bias and is current cost.
2. Economic benefit does not include wider economic benefits
3. Benefit Cost Ratio is based on costs and benefits discounted to present value
4. Benefit Cost Ratio is based on optimistic growth assumptions that exceed current committed development. This includes aspirations at the Cambridge Biomedical Campus and 5000 new homes in Uttlesford.
5. LLF Ranking is based on the “score” given to the strategy by LLF members
6. Strategy 1 completion date includes the busway. On-highway elements could be completed by the end of 2020. The date of 2022 is based on no delay arising from competing infrastructure proposals.

## **4. Next steps and milestones**

### **4.1. The Executive Board will be asked to:**

- Approve the project title being changed to A1307 Haverhill to Cambridge
- Note the revised options resulting from working with the LLF
- Note the increased cost of the strategies in excess of the £39m previously estimated as a result of additional options
- Approve the withdrawal of existing park and ride proposals
- Approve public consultation on the three Strategies to start in February 2018
- Delegate authority to the Transport Director to approve public consultation materials
- Approve environmental surveys to be carried out starting in January 2018 in order to hit seasonal windows for species
- Note officers intention to appoint a consultant in March 2018 to commence preparatory work for submitting a planning application in September 2018
- Authorise officers to progress the design and planning of lower cost works within the public highway, not requiring consents, for early delivery

### **4.2. Subject to the decisions made at the Executive Board meeting in November, further technical work and consultation preparation will continue over the winter, with a full public consultation exercise planned for February 2018. Preferred Option Selection and development of the Outline Business Case is planned for Spring 2018 and the Outline Business Case in support of a preferred Strategy prepared by July 2018. More programme information is provided in **Appendix C**.**

## **5. Recommendation to Joint Assembly**

### **5.1. Joint Assembly is asked to comment on the progress and the approach being recommended to the Executive Board.**

## Appendix A - Changes to Scheme from LLF Consultation

Options presented in March 2017 that have now been dropped

Linton High Street measures to improve flow of buses	Not strongly supported by the LLF and Linton PC. Working with Linton PC on alternatives
Hinton Way "Hamburger"	Not strongly supported by the LLF. Consideration will be given to alternative ways of providing for bus priority at Hinton Way roundabout.

Options added since March 2017 proposed by the LLF and Stakeholders

Busway via Sawston	<p>A busway running along the route of the old railway line between the A11 at Granta Park and the CBC campus. This option was previously examined as a busway to Haverhill. The revised option avoids the high cost of crossing the A11 and the costs of the extension to Haverhill, by limiting construction to the section having the highest usage.</p> <p>The route is close to significant population centres at Sawston, Stapleford and Great Shelford and would provide good access from a P+R located close to the A11. The routing close to the A505 widens the area benefiting from investment and results in a greater mode shift and traffic reduction than other options.</p> <p>It is not predicated that such a busway would need to be guided, and through routes to the existing guided busway can be provided without this section needed to be guided. Proposal of a busway does not preclude other public transport interventions such as light rail or trams.</p>
Eastbound bus lane on approach to All	The existing dual carriageway approach to Four Wentways at Babraham is proposed for reduction to single lane as a Local Highway Improvement part funded by Babraham Parish Council. On the approach to the roundabout the closed lane would be converted to a bus lane.
Eastbound bus lane on approach to Linton	Previously omitted, further work shows a moderate benefit from a peak hours only bus lane using one lane of the dual carriageway section. In combination with implementation of the bus lane, it will be possible to make signs and markings changes to improve safety of the Dalehead Foods access.
Improve B1052 Junction	Modelling showed little delay or capacity problems at this location, but it is proposed to add a bus lane on approach and implement a bus gate. Existing visibility is poor and this may create a problem if approaching buses obscure faster traffic. It is

	<p>proposed to consider signalling this junction in combination with the bus gate and signalling the High Street junction to improve flow of buses and traffic through Linton.</p>
Roundabout at Bartlow Rd	<p>Modelling shows reduced delay, and improved access to the A1307 and better access to Linton for buses. Combined with a Rural Travel Hub the option has potential to improve access to public transport. There is potential for safety improvement by having a traffic calming effect.</p>
Conversion of Dual to Single carriageway at Wandlebury	<p>Westbound only for safety and environmental reasons. While other dual sections were proposed for making single by the LLF, officers concluded that this would reduce the amount of relatively safe overtaking and incur cost without significant benefit.</p> <p>At Wandlebury, making the westbound carriageway single reduced land take from the Magog trust in a sensitive area, and contributed to reduced speed on approach to the blind summit.</p>
NMU Underpass at Wandlebury	<p>To provide safe connectivity for non-motorised users. IAN195/16 "Cycle Traffic and the Strategic Road Network" issued in late 2016 by the DFT recommends grade separation of non-motorised users where traffic exceeds 6000 veh/day and speeds are between 40 and 50mph. The location meets these criteria. The alternative of a signal crossing at grade has been considered, but the crossing location close to the blind summit at Wandlebury would be likely to create a safety problem.</p>
Rural travel hub at Linton	<p>Linton PC advise that they believe that a number of vehicles parking in Linton are doing so to catch the bus. They would like to introduce parking restrictions in presently uncontrolled areas. In addition, the removal of some on-street parking will assist in the passage of buses through Linton. A Rural Travel Hub will improve access at Linton to the X13 service and provide for displaced parking for spaces removed or restricted in Linton.</p> <p>This proposal would be subject to further work and public consultation.</p>

**Appendix B - Accompanying Documents**

Strategy 1 Route Plan - PDF document

Strategy 2 Route Plan - PDF document

Strategy 3 Route Plan - PDF document

## **Appendix C - Programme**

The outline programme for Strategies 2 and 3 is:

- July 2018 - Authorisation to Proceed to Design
- Sept 2018 - Submit Planning Application
- Dec 2018 - Publish Orders
- Autumn 2019 - Public Inquiry if needed
- Early 2020 - Start Construction
- Late 2020 - Works Complete

The outline programme for Strategy 1 is:

### **On-Highway Works**

- July 2018 - Authorisation to Proceed to Design
- Sept 2018 - Submit Planning Application
- Dec 2018 - Publish Orders
- Autumn 2019 - Public Inquiry if needed
- Early 2020 - Start Construction
- Late 2020 - Works Complete

### **Busway**

- July 2018 - Authorisation to Proceed
- Spring 2019 - Publish TWA Order
- Autumn 2019 - Public Inquiry
- Spring 2020 - Secretary of State decision
- Early 2021 - Start Construction
- Late 2022 - Works Complete

Assumes no delay caused by A505 study and Combined Authority LRT proposals.

Assumes guided busway or tram solution requiring a Transport and Works Act Order