



**Report To:** Greater Cambridge City Deal Executive Board 3 March 2016

**Lead Officer:** Graham Hughes, Executive Director of Economy, Transport and Environment, Cambridgeshire County Council

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## **A1307 Haverhill to Cambridge: Approval to consult on transport improvement concepts**

### **Purpose**

1. This report sets out the high level transport improvement concepts which have emerged from initial study work undertaken on the A1307 corridor. It explains the background to the development of measures and seeks authority to undertake public consultation on these high level concepts to inform the development of preferred proposals.
2. A Consultation Strategy is appended to this paper. Following consultation, the information gleaned will be used in the assessment and appraisal of the options to allow a preferred set of measures to be presented for approval.

### **Recommendations**

3. It is recommended that the Executive Board:
  - a. Notes the findings summarised in this report and set out in the Draft Concepts Report.
  - b. Discounts from further consideration as part of the Greater Cambridge City Deal reopening the railway to Haverhill, providing a Busway all the way to Haverhill or major road interventions.
  - c. Approves for public consultation the illustrative concepts set out in this report to provide improved Park and Ride linked to Bus Rapid Transit between Fourwentways and Cambridge, and Cycling and Walking measures along the corridor.
  - d. Agrees to receive a report recommending a preferred set of measures, informed by public consultation and the conclusion of appraisal and assessment work in late 2016.

### **Reasons for Recommendations**

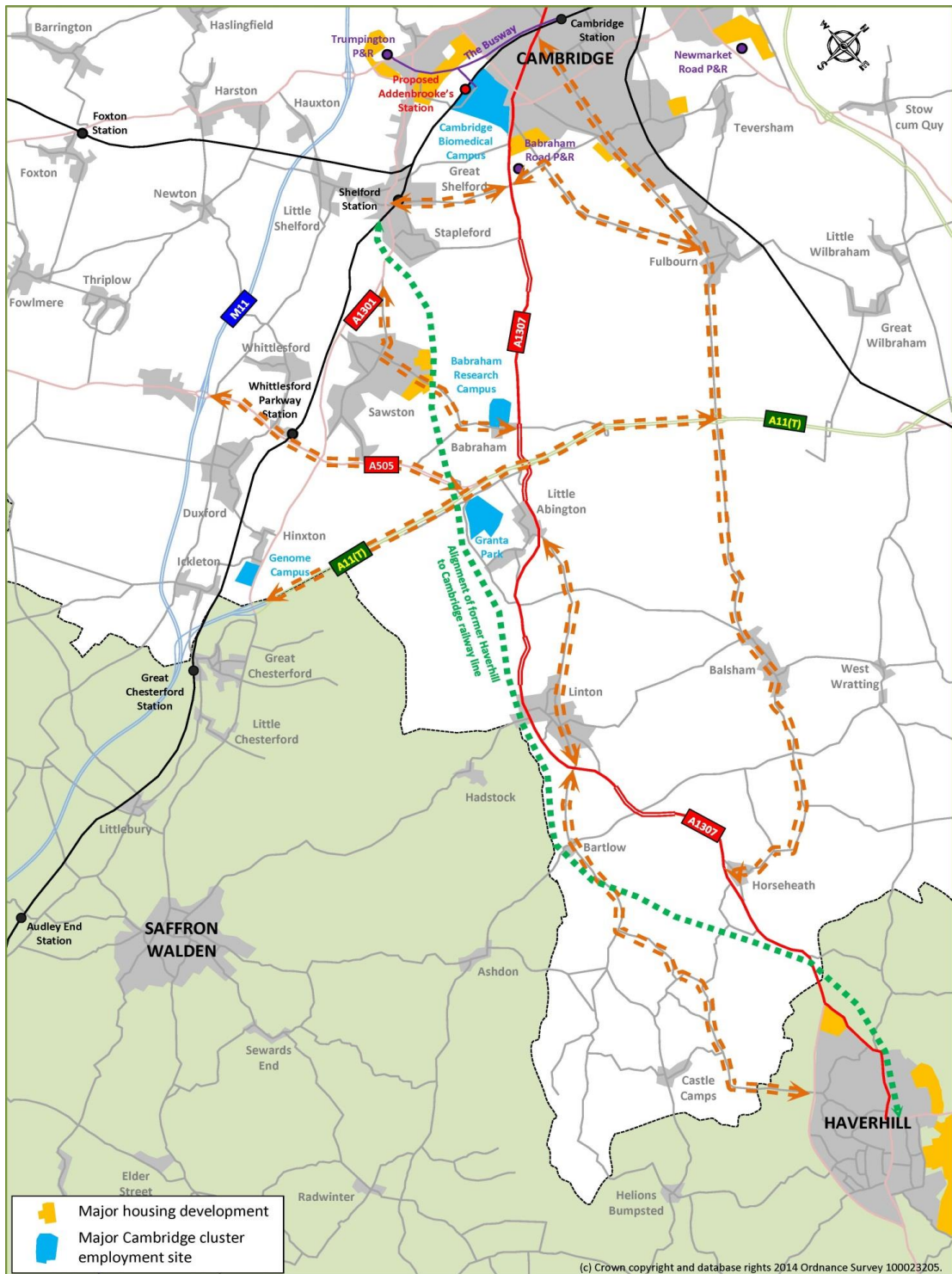
4. It was agreed at the Greater Cambridge City Deal Executive Board of 28<sup>th</sup> January 2015, that the A1307 corridor should form part of the City Deal Tranche 1 prioritised programme. Measures in this corridor support the City Deal aim of investing in transport infrastructure to achieve efficient, convenient and reliable movement between residential development and employment sites.

5. Initial technical work has identified a number of high level concepts that are proposed to be taken forward for public consultation. The consultation will help with the selection of a preferred set of measures for detailed development. Further concepts have been considered, but are not recommended to be taken forward due to their:
  - not addressing the problems in the corridor, or
  - not being deliverable in City Deal timescales, or
  - not being affordable or justifiable in financial terms at this time.

### **Background**

6. The need for transport improvements on the A1307 corridor is set out in the Third Cambridgeshire Local Transport Plan (LTP3), the LTP: Long Term Transport Strategy and in the Transport Strategy for Cambridge and South Cambridgeshire. WSP|Parsons Brinkerhoff were commissioned to undertake initial study work to consider the wider transport requirements on the corridor and identify interventions that might be delivered through City Deal. The study area is shown in Figure 1.

**Figure 1 The Haverhill to Cambridge Corridor**



The A1307 is shown in red and various routes that interact with it for trips into Cambridge and to major employment sites on the corridor shown in orange.

7. The study area is between the edge of Cambridge (Addenbrooke's Hospital) and the junction of the A1307 with the A1017, north-west of Haverhill. Housing growth is clearly identified at either end of the corridor, on Cambridge's southern fringe and at Haverhill. Major expansion of employment is planned at the Cambridge Biomedical Campus, Babraham Research Campus, Granta Park, and at the Genome Campus.
8. The A1307 road between Haverhill and Cambridge is over 20km in length and suffers from congestion during peak periods at the Cambridge end, at the junction with the

A11 (Fourwentways) and around Linton. This causes unreliability in journey times. There are a number of other travel and transport issues along the corridor such as road safety hotspots and in places, a lack of joined up high quality pedestrian and cycle infrastructure.

9. WSP|Parsons Brinkerhoff's initial Audit Report provides further detail on transport conditions on the corridor and can be accessed from:  
<http://www.cambridgeshire.gov.uk/citydeal/info/2/transport/1/transport/12>.
10. Committed and future growth in the corridor includes:
  - Haverhill – up to 4,260 homes (2009-2031).
  - Granta Park – up to 3,200 new jobs.
  - Babraham Research Campus – up to 1,000 new jobs.
  - Cambridge Biomedical Campus – around 6,000 new jobs in the next 3-5 years, with further growth to follow.

Other proposals have recently been publicised, such as by the Wellcome Trust, that will need to be considered as both they and the City Deal proposals are developed.

### Project Objectives

11. The project has the following key objectives:
  - a. To identify a variety of options which will improve the reliability, safety and speed of movement along this corridor, and ultimately reduce the number of vehicles driving into the city of Cambridge to include:
    - i. Rail option (the re-opening of the Haverhill to Cambridge section of the Colchester to Cambridge line)
    - ii. Segregated Bus rapid transit options (such as busway).
    - iii. Bus priority options.
    - iv. Road capacity / performance improvements.
    - v. Additional Park & Ride / interchange capacity.
  - b. To investigate whether combinations of schemes will provide the greatest benefit
  - c. To ensure provision for cyclists and pedestrians is inherent in all proposals (and where appropriate, consideration of other non-motorised users, such as equestrians).
  - d. To generate options capable of holding traffic levels at today's levels in Cambridge
  - e. To consider the potential for enhancing the environment, streetscape and air quality in this corridor
  - f. To assess the impacts on existing residents and highway capacity for each option
  - g. To identify areas along the corridor, and measures, where safety for all modes of travel can be improved
  - h. To improve the connectivity with surrounding villages and places of employment along the corridor

### **Considerations**

12. WSP|Parsons Brinkerhoff's Draft Concepts Report and its appendices can be accessed from the Greater Cambridge City Deal website  
<http://www.cambridgeshire.gov.uk/citydeal/info/2/transport/1/transport/12>.
13. Included in the Appendices to the Draft Concepts Report are a number of supporting reports providing additional high level information on road, rail and bus rapid transit options for the corridor, which are not recommended for taking forward for consultation, or indeed as part of the City Deal programme.

14. The potential for congestion to worsen is significant in this corridor, with considerable development planned at both ends, as well as expansion of the high-tech cluster in the middle.
15. An initial budget estimate of £39M was allocated to this project from the first tranche of City Deal funding by the Executive Board in January 2015.
16. The assessment work to date is in line with the Department for Transport technical scheme appraisal methodology (known as WebTAG).

This approach:

- Allows for clearly unfeasible options to be sifted out at an early stage;
- Allows for early public consultation;
- Avoids abortive work on detailed design for proposals which are clearly unacceptable;
- Provides a robust basis for identification of preferred option(s);
- Ensures that the shortlisted schemes are all potentially deliverable from a technical perspective.

### **Options assessment**

#### Discounted strategic options

17. The Project Brief and objectives set out that comprehensive road capacity, rail and Bus Rapid Transit (BRT) options should be explored as part of this study, along with smaller scale interventions targeted at problem areas on the corridor.
18. Three major transport interventions were subject to a high level assessment to understand estimated costs and likely benefits in terms of passenger numbers, journey time improvements and vehicle flows. These were:
  - **Reopening the railway line between Haverhill and Cambridge.**  
Capital cost £390-650M. Benefit to cost ratio assessed as 0.59 – 0.99, representing poor value for money. Costs much higher than the £39M City Deal allocation.
  - **Introducing a Bus Rapid Transit route between Haverhill and Cambridge.**  
Capital cost £150-200M. Benefit to cost ratio assessed as 1.27, representing low value for money. Costs much higher than the £39M City Deal allocation.
  - **Several road options, including dualling and provision of a Linton bypass.**  
Capital cost £15-£100M. Benefit to cost ratios assessed as 0.26 – 0.3, representing poor value for money. Costs of dualling options much higher than the £39M City Deal allocation.
19. The high level assessment of these three strategic interventions concluded that there is not a viable business case for them in the context of the City Deal programme, or in the South Cambridgeshire Local Plan period to 2031.
20. While there is considerable public interest in re-opening the railway line even at its higher value the benefit to cost ratio is significantly lower than that for other rail projects being pursued such as Cambridge North station, the Wisbech line re-opening, Soham station, and East-West Rail.
21. Although it is not proposed to continue with these options as part of the City Deal, they may be viable in the future under different development scenarios and would need to be re-considered at that time.

### Concept shortlist

22. As set out in the Draft Concepts Report, a long list of measures was drawn from a variety of sources, including the Project Team, stakeholder engagement, previous work in the area and site visits.
23. Alongside the assessment of the major scheme options, the long list of measures was subject to further assessment and sifting against the project objectives, and refined to produce a 'Concept short list'.
24. These 'concepts' have been developed to address the issues noted above and to meet the Project Objectives set out in paragraph 11. Given the poor business case for major interventions in the corridor these focus on the area between the A11 at Fourwentways and Cambridge, in order to provide alternatives to the car for those travelling to Cambridge or to the major employment sites in this area.
25. The concepts largely fall into three major themes. These are:
  - a) Park and Ride
  - b) Bus Rapid Transit
  - c) Walking and cycling

A fourth category covers public realm, road safety and bus stop accessibility measures.
26. Figures 2 and 3 detail and show the full concept short list, and further detail is included in Chapter 5 of the WSP|Parsons Brinkerhoff [Draft Concepts Report](#).

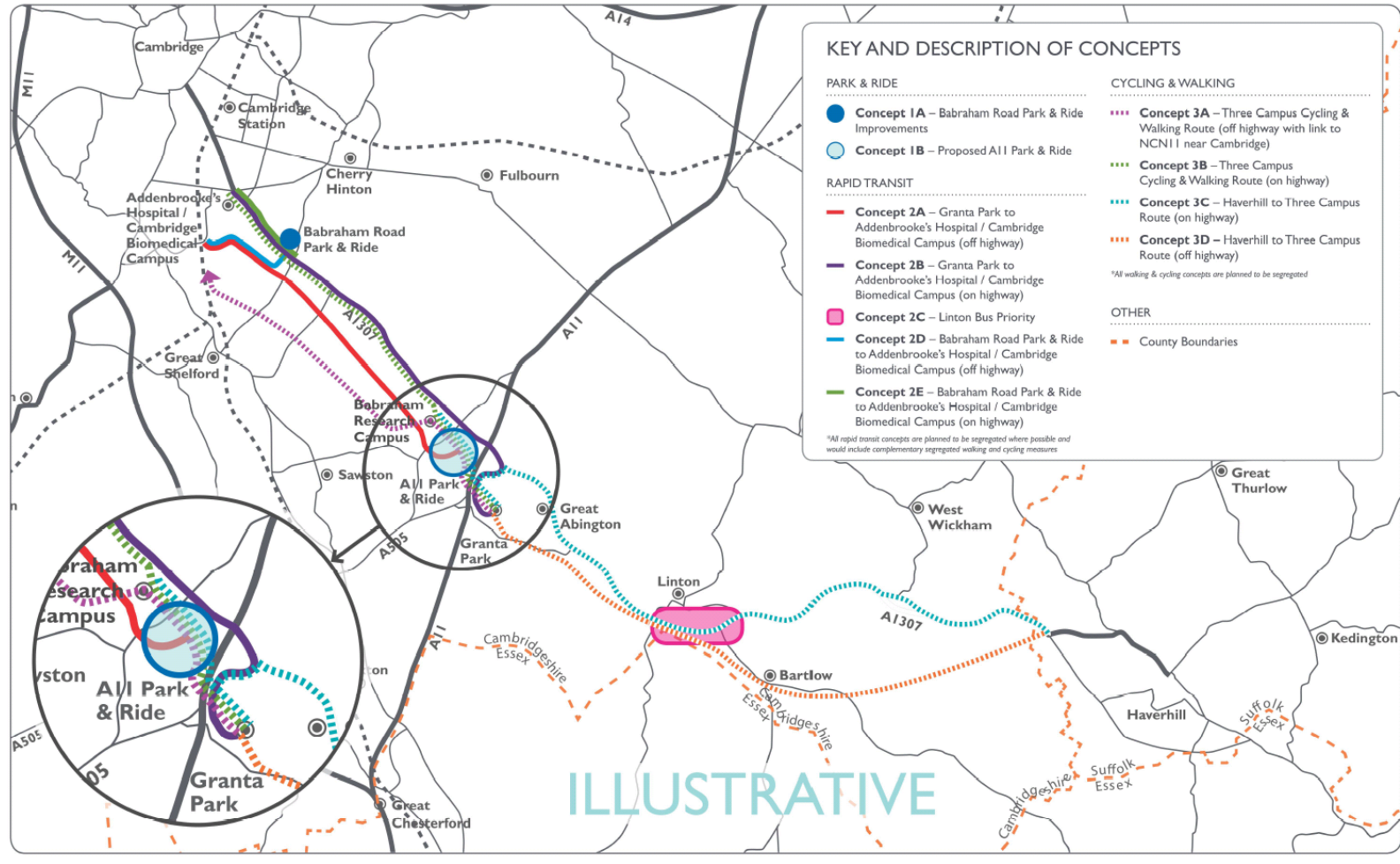
**Figure 2 Summary of concepts for the A1307 Haverhill to Cambridge corridor**

Identification	General Description
<b>Park &amp; Ride</b>	
Concept 1A	Babraham Road P&R improvements
Concept 1B	Proposed A11 P&R
<b>Bus Rapid Transit</b>	
Concept 2A	Granta Park to Addenbrooke's (off highway)
Concept 2B	Granta Park to Addenbrooke's (on highway)
Concept 2C	Linton bus priority
Concept 2D	Babraham Road P&R to Addenbrooke's (off highway)
Concept 2E	Babraham Road P&R to Addenbrooke's (on highway)
<b>Cycling &amp; Walking</b>	
Concept 3A	Three Campus cycling & walking route (off highway with link to NCN11 near Cambridge)
Concept 3B	Three Campus cycling & walking route (on highway)
Concept 3C	Haverhill to Three Campus route (on highway)
Concept 3D	Haverhill to Three Campus route (off highway)
<b>Other Schemes – Public Realm &amp; Road</b>	
Public realm improvements	

Bus stop accessibility improvements	
Bus service improvements	
Road safety improvements	

Figure 3 Map showing concepts for the A1307 Haverhill to Cambridge corridor

## A1307 (HAVERHILL TO CAMBRIDGE) CORRIDOR – CONCEPT SHORT LIST





## Costs

27. At this stage of project development it is not possible to provide more than an indicative cost range for each concept, as shown in Table 5.1 of the Draft Concepts Report. These indicative costs illustrate that:
- The Park & Ride concepts, new bus lanes / bus improvements through Linton, on highway rapid transit links, cycling and walking improvements, bus stop accessibility and road safety improvements could be funded within the initial project budget estimate.
  - The off highway rapid transit concepts would be likely to require additional funding.
28. At the next stage in the scheme development process, a full assessment would need to consider a number of other costs, such as land purchase and compensation claims.
29. The more expensive options would not be deliverable in Tranche 1 of the City Deal programme, in terms of both available funding and programme, but it is recommended that these are not discounted as options for consideration for this corridor at this stage as they could be delivered early in Tranche 2. The arbitrary funding structure of City Deal should not constrain the consideration of solutions for the corridor.
30. As set out in the Project Objectives, we will need to understand which combination of measures will provide the greatest benefit. This work is planned to be undertaken following the first stage of public consultation, and before the selection of a preferred option.

## Traffic modelling

31. Modelling work of the concepts has been undertaken using the current Cambridge Sub-Regional Model (CSRM) and associated SATURN highway model. This has been supported by other data sources, including traffic counts, 2011 Census information, bus journey time and Traffic Master data.

## **Programme**

32. Timescales for the project through to consultation on preferred options are detailed below.
- **First round of public consultation, from June 2016.**  
Consult to inform further assessment and appraisal of Concept shortlist.
  - **Complete the assessment and appraisal of concepts, autumn / winter 2016.**  
Work informed by the results of the first round of public consultation.
  - **Recommend preferred option(s), February / March 2017.**  
The Executive Board will be asked to agree a preferred option or options to be developed in greater detail prior to a second round of public consultation.
  - **Consult on preferred option(s) from June 2017.**
33. A detailed programme for the further stages of scheme development and delivery will be developed and shared based on the preferred option(s) that emerge from further technical work following the first round of public consultation. Depending on the types of schemes and measures emerging as a preferred option(s), it is likely that there will be a number of different delivery timescales within the overall A1307 delivery programme. As noted in paragraph 29, it is likely that some schemes would not be deliverable in Tranche 1, but could be delivered in Tranche 2.

## **Consultation and Engagement**

34. A Project Team including colleagues from Cambridge City Council, South Cambridgeshire District Council and Suffolk County Council have been involved in the issues identification, options development and sifting exercises.
35. In July 2015, three informal high level stakeholder drop-in sessions were held at Linton Village Hall, Babraham Research Campus and Granta Park to seek stakeholder views on the issues and problems for traffic and travel in the A1307 corridor. Feedback from these sessions, along with views from senior figures at the Cambridge Biomedical Campus has informed the process for identifying schemes and measures.
36. The appendix to this report sets out a process for a first round of public consultation. It can be summarised as follows:
  - Key stakeholder briefing sessions
  - Local and wider Member engagement
  - Staffed public exhibitions at key venues along the corridor, including project information being made available at community venues, on relevant bus services and at the Babraham Road P&R site.
  - A focus on encouraging on-line responses to facilitate a more cost and time efficient exercise.
37. Subject to GCCD Executive Board approval, consultation will commence in June 2016.

### **Key emerging issues**

38. Ahead of proposed consultation, the following key issue is brought to the attention of the Executive Board.

#### Discounted options

39. There is strong support among local Members, action groups, and local residents in Cambridgeshire and over the county border in Suffolk, for both major road and rail solutions for the A1307 corridor. These were assessed as having poor (Benefit to Cost Ratio less than 1.0) value for money.
40. At this stage the consultants have only undertaken a high level assessment of the major road, rail and Bus Rapid Transit options, but given the results noted above and in paragraphs 17-19, there is considered to be little merit in undertaking further detailed assessment of them within the City Deal programme.

### **Implications**

41. 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***

42. The scheme development and implementation is funded from the City Deal funding stream.

#### ***Legal***

43. There are no significant implications at this stage.

#### ***Staffing***

44. There are no significant implications at this stage.

***Risk Management***

45. A full project risk register forms part of the Project Plan.

***Equality and Diversity***

46. There are no significant implications.

***Climate Change and Environmental***

47. The proposed measures have the potential to reduce congestion and improve air quality in the longer term through encouraging a shift towards sustainable transport modes.

***Community Safety***

48. The options presented should help to reduce road casualties and improve road safety in the A1307 corridor.

**Background Papers**

WSP|PB Draft Stage 1 Audit Report

WSP|PB Draft Stage 2 Options Report

<http://www.cambridgeshire.gov.uk/citydeal/info/2/transport/1/transport/12>.

Local Transport Plan 3

[Local Transport Plan \(LTP\) - Transport plans and policies - Cambridgeshire County Council](#)

Long Term Transport Strategy

[Long term transport strategy - Transport plans and policies - Cambridgeshire County Council](#)

Transport Strategy for Cambridge and South Cambridgeshire

[Cambridge City and South Cambs transport strategy - Transport plans and policies - Cambridgeshire County Council](#)

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## **APPENDIX: SUMMARY OF PUBLIC CONSULTATION PLAN**

### **AIMS**

To engage with key stakeholders, the public and all interested parties in the consultation on high level concepts for improved sustainable travel conditions along the A1307 corridor.

To ensure that messages reach the widest audiences, that all voices are heard and that channels are enabled for excellent 2-way communications.

To provide unbiased, appropriate, timely, and clear information in plain English on the transport improvement concepts proposed for the corridor.

### **ENGAGEMENT**

Public Consultation is planned to run between June and July 2016, subject to Executive Board approval, including:

- Briefings for local representatives including Parish Councils
- Briefings for key stakeholders, including interest groups and businesses
- Press release/social media/web presence using [www.greatercambridgecitydeal.co.uk](http://www.greatercambridgecitydeal.co.uk)
- Online survey/questionnaire
- Staffed public exhibitions at venues along the A1307 corridor
- Information displays in shelters at bus stops along the corridor
- Direct mail/e-mail, schools' parent-mail
- Information in libraries, GP surgeries and other places of interest with passing trade
- Work with local schools and colleges
- Post-consultation
- Analyse results
- Advertise outcomes through website, press release, direct mail/e-mail, local newsletters and magazines, social media.

### **KEY MESSAGES**

The key messages for the A1307 corridor will be layered over the background of the vision for the Greater Cambridge City Deal (GCCD) as a whole. The vision will be a strong part of the consultation information so that people know how this project fits with other priorities for the City Deal.

- The GCCD brings together 5 organisations in a ground-breaking new partnership to create the conditions necessary to unlock the economic potential of Greater Cambridge.
- The City Deal aims to secure hundreds of millions of pounds of additional funding for investment in transport infrastructure to support high quality economic, employment and housing growth over the coming decades. £100m of funding will be made available in the five years from April 2015. If certain conditions are met, we will be able to secure up to a further £200m from April 2020 onwards and up to a final £200m from April 2025 onwards.
- Significant new investment for transport infrastructure will be brought to the area through the Greater Cambridge City Deal. Funding will be used to make it easier to get to work, and to move between the business and research centres. More sustainable transport

methods will be prioritised by increasing road space for pedestrians, cyclists and public transport users and enabling more people to use public transport for at least some of their journey.

- The City Deal will aim to deliver the development strategy for Greater Cambridge contained in the submitted Cambridge and South Cambridgeshire Local Plans and the supporting transport infrastructure identified in the Transport Strategy for Cambridge and South Cambridgeshire.
- The City Deal will provide a huge boost for the local economy, and will kick start development and the creation of jobs by significantly improving accessibility and journey times.
- The Haverhill to Cambridge improvements aim to deliver high quality passenger transport, in terms of reliability, frequency and speed, complemented with good quality cycling and pedestrian facilities.
- High quality sustainable transport improvements will improve access to the major employment sites in the corridor and into Cambridge.
- The consultation is the start of the delivery process and there will be further opportunities to comment as the project is taken forward.

### **ONLINE QUESTIONNAIRE/SURVEY**

A questionnaire will be provided which will seek views for respondents using a sliding scale of support to assess how well each project objective is being met. This will inform a future process to bring together the best combination of measures as a coherent preferred option.

### **STAKEHOLDERS**

The consultation will seek to ensure that all users of the A1307 corridor have the opportunity to have their say. Whilst the use of online techniques will be the main focus for responding, the consultation process will need to be sufficiently flexible to respond to the needs of those with disabilities.