A1307
Haverhill to Cambridge

LLF Meeting 26 September 2017
A1307

The Story so Far

Study to look at sustainable transport interventions, seeking to sustainably accommodate economic growth in A1307 corridor.

- Initial Concepts – 2015-2016
- **First Public Consultation – June 2016**
- Options Development – Autumn 2016
- Options Report & First LLF – Feb 2017
- **Executive Board asked for LLF Workshops – March 2017**
- LLF Ideas Workshop – April 2017
- LLF Options Workshops – June to September 2017
LOCAL LIAISON FORUM – Shaping Proposals

A series of LLF workshops have been undertaken to generate, develop and prioritise options for the A1307 corridor:

6th April – Ideas Generation Workshop: 210 comments & questions

12th, 15th & 20th June – Option Scoring & Prioritisation Workshops

6th September – Workshop to review emerging strategies shaped by previous workshops

26th September – LLF meeting
LOCAL LIAISON FORUM - Options Considered

A1307 Haverhill to Cambridge - Proposed Options

KEY
- New Bus Lane
- New Busway via Sawston
- New Bus Link to CBC
- Existing P&R Site
- New P&R Site
- P&R Expansion
- NMU Crossing
- Existing NMU Paths / Roman Road
- New / Enhanced Pedestrian / Cycle Path
- Proposed NMU Path
- Existing Rail Station
- Tidal Flow Option
- Conversion of Dual Carriageway
- New / Enhanced NMU Bridge
- New NMU Underpass
- Crossing Enhancement
- New Roundabout
- Proposed "Hamburger" Roundabout
- Signal Upgrade
- Speed Management Measures
- One-Way Street
LOCAL LIAISON FORUM – Scoring of Options

- LLF Members were asked to score the options against GCP objectives in terms of importance to achieving those objectives.
- LLF scores were fed into an assessment that included:
  - Contribution to GCP Objectives
  - Traffic Benefit
  - Land take
  - Environmental Impact
  - Safety
- The total scores were used to identify the highest priority options, with the lowest scoring options dropped.
- Traffic modelling was used to test the three emerging transport strategies for a future year of 2031 considering all known growth in the study area.
DEVELOPING THREE TRANSPORT STRATEGIES

The majority of options suggested by the LLF have been included in at least one of the three strategies proposed.

The shortlisted options which scored well were grouped into three strategies:

**Strategy 1** - A11 to CBC off-highway busway via Sawston with P&R at A11

**Strategy 2** - On Highway bus lanes + A1307 P&R + Babraham Rd P&R to CBC busway link

**Strategy 3** - On Highway bus lanes + A1307 P&R

All strategies contain the **same options east of A11** as illustrated on the display boards.
2031 Peak Period Travel patterns with and without improvements A11 to CBC and City:

**Strategy 1**

- Peak trips to *Addenbrooke’s / CBC* from study area:
  - BEFORE: 5%, AFTER: 4%
  - BEFORE: 34%, AFTER: 40%
  - BEFORE: 46%, AFTER: 51%

- Peak trips to *CBC & Central Cambridge* from study area:
  - BEFORE: 3%, AFTER: 3%
  - BEFORE: 30%, AFTER: 31%
  - BEFORE: 51%, AFTER: 67%

**Strategy 2**

- Peak trips to *Addenbrooke’s / CBC* from study area:
  - BEFORE: 5%, AFTER: 6%
  - BEFORE: 39%, AFTER: 40%
  - BEFORE: 46%, AFTER: 51%

- Peak trips to *CBC & Central Cambridge* from study area:
  - BEFORE: 3%, AFTER: 4%
  - BEFORE: 31%, AFTER: 33%
  - BEFORE: 51%, AFTER: 65%

**Strategy 3**

- Peak trips to *Addenbrooke’s / CBC* from study area:
  - BEFORE: 5%, AFTER: 5%
  - BEFORE: 45%, AFTER: 50%
  - BEFORE: 55%, AFTER: 56%

- Peak trips to *CBC & Central Cambridge* from study area:
  - BEFORE: 3%, AFTER: 3%
  - BEFORE: 31%, AFTER: 33%
  - BEFORE: 51%, AFTER: 64%
Bus Journey Times

The proposed interventions are expected to reduce bus journey times between A11 & CBC as follows:

**Strategy 1**

- **Before:** 20 minutes
- **After:** 8 minutes

**Strategy 2**

- **Before:** 20 minutes
- **After:** 10 minutes

**Strategy 3**

- **Before:** 20 minutes
- **After:** 9 minutes
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**P&R usage**

With the proposed A1307 strategies in place it is predicted that Park and Ride demand west of the A11 will significantly increase:

<table>
<thead>
<tr>
<th>Scenario 2031</th>
<th>Strategy 1</th>
<th>Strategy 2</th>
<th>Strategy 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total P&amp;R spaces needed close to A1307 (A505 in case of Strategy 1)</td>
<td>3586</td>
<td>3341</td>
<td>2905</td>
</tr>
<tr>
<td>Total Existing spaces</td>
<td>1458</td>
<td>1458</td>
<td>1458</td>
</tr>
<tr>
<td>New Spaces Required</td>
<td>2128</td>
<td>1883</td>
<td>1447</td>
</tr>
</tbody>
</table>

Existing Spaces: **1458 at Babraham Road P&R**
2031 with Strategy 1 - Busway via Sawston

Key Benefits of Strategy 1 Include:

- Dedicated free flow bus and cycle corridor with reliable journey times for bus – able to avoid congestion
- Significant transfer from car to public transport and active travel modes from study area:
  - 40% reduction in car use to CBC and 35% reduction to Cambridge City
  - 55% increase in Public Transport use to CBC and 31% increase to Cambridge City
- Substantial uptake of Park and Ride usage in the corridor (more than double)
- Provides benefit to A1307 and A1301 corridors
- Can Future-Proof this option for other modes (bus/light rail)

Cost in the region of £130m-£145m
Estimated ‘Benefit Cost Ratio’ of 2.2
Economic return approx. £280m - £320m
2031 with Strategy 2 - On Highway + CBC Link

Key Benefits of Strategy 2 Include:

Priority to buses with improved journey time reliability
Reallocation of road space to minimise land take and environmental effects
Good levels of transfer from car to public transport and active travel modes:
  • 30% reduction in car trips to CBC and 33% reduction to Cambridge City
  • 40% increase in public transport to CBC and 27% increase to Cambridge City
Good uptake of Park and Ride usage in the corridor (almost double)

Cost in the region of £42m-£46m
Estimated ‘Benefit Cost Ratio’ of 3.85
Economic return approx. £165m - £180m
Key Benefits of Strategy 3 Include:

- Priority to buses with improved journey time reliability
- Reallocation of road space to minimise land take and environmental effects
- Good levels of transfer from car to public transport and active travel modes:
  - 20% reduction in car use to CBC and 28% reduction to Cambridge City
  - 25% increase in Public Transport to CBC and Cambridge City
  - >70% increase in Park and Ride usage

Cost in the region of £39m-£44m
Estimated ‘Benefit Cost Ratio’ of 3.75
Economic return approx. £145m - £165m
Summary of key points:

- All strategies significantly reduce car travel between key locations along the routes, including Haverhill to Cambridge by increasing bus travel.
- Additional Park & Ride capacity is required and this could be in more than one location, but access from A11 and A505 is also key as well as from the A1307.
- The dedicated and more segregated busway strategy provides wider traffic relief to more routes, such as the A1301 as well.
- Improved connectivity and opportunity to transfer from car to bus is a crucial element to support the City Access proposals.
- Cycling and walking will also be improved for a range of journeys.
- Reducing car traffic will improve journeys for all.
- Localised junction changes help to improve safety.
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Feedback from previous LLF workshop (6th September)

- **Total Score**
  - Strategy 1: 185
  - Strategy 2: 120
  - Strategy 3: 122

Strategy 1 received the highest score in all assessed categories, including greatest environmental and land-take impact.

Strategies 2 & 3 received broadly similar scores, with Strategy 2 marginally higher than Strategy 3.
Next Steps

Moving forward, we propose to continue developing and assessing the three shortlisted strategies over the next 6 months - with indicative timescales as follows:

**Today** - review the outcome of the LLF workshops

**November 2017** - Executive Board Meeting to decide on recommended Strategy to take forward to Public Consultation

**December 2017** - Further development of the recommended Strategy components

**February 2018** - Public consultation on the recommended Strategy

**Spring 2018** - Preferred Strategy Selection and develop the Business Case

**July 2018** - Assembly and Executive Board decision if to proceed to next stage
END