



24 May 2016

To: Members of the Greater Cambridge City Deal Joint Assembly:

Councillor David Baigent	Cambridge City Council
Councillor Tim Bick	Cambridge City Council
Councillor Kevin Price	Cambridge City Council
Councillor Roger Hickford	Cambridgeshire County Council
Councillor Maurice Leeke	Cambridgeshire County Council
Councillor Noel Kavanagh	Cambridgeshire County Council
Councillor Kevin Cuffley	South Cambridgeshire District Council
Councillor Bridget Smith	South Cambridgeshire District Council
Councillor Nick Wright	South Cambridgeshire District Council
Claire Ruskin	Cambridge Network
Sir Michael Marshall	Marshall Group
Andy Williams	AstraZeneca
Anne Constantine	Cambridge Regional College
Helen Valentine	Anglia Ruskin University
Dr John Wells	Cancer Research UK Cambridge Institute

Dear Sir / Madam

You are invited to attend the next meeting of the **GREATER CAMBRIDGE CITY DEAL JOINT ASSEMBLY**, which will be held in **SOUTH CAMBRIDGESHIRE HALL, CAMBOURNE** on **THURSDAY, 2 JUNE 2016** at **10.00 a.m.**

AGENDA

PAGES

- 1. Election of Chairman**
To elect a Chairman of the Greater Cambridge City Deal Joint Assembly for 2016/17.
- 2. Election of Vice-Chairman**
To elect a Vice-Chairman of the Greater Cambridge City Deal Joint Assembly for 2016/17.
- 3. Apologies for absence**
To receive any apologies for absence.
- 4. Minutes of the previous meeting** **1 - 14**
To confirm the minutes of the previous meeting held on 12 February 2016 as a correct record.
- 5. Declarations of interest**
To receive any declarations of interest by Members of the Joint Assembly.

6.	Questions by Members of the public To receive any questions from members of the public. The standard protocol to be observed by public speakers is attached.	15 - 16
7.	Petitions To consider the following petitions received since the previous meeting of the Joint Assembly: <ul style="list-style-type: none"> - 'Save the trees and verges on Milton Road' – Charles Nisbet, Chairman of the Milton Road Residents' Association - 'Milton Road segregated cycleways' – Hester Wells - 'Petition to oppose the Histon Road schemes' – Philippe and Christine Lafon 	
8.	Cambridge Access and Capacity Study To consider the attached report.	17 - 50
9.	Histon Road bus priority, walking and cycling measures: report on initial consultation and selection of a preferred route To consider the attached report.	51 - 74
10.	Milton Road bus priority, walking and cycling measures: report on initial consultation and selection of a preferred route To consider the attached report.	75 - 100
11.	Cross City Cycling To consider the attached report.	101 - 106
12.	Cambridge to Royston Cycleway To consider the attached report.	107 - 110
13.	City Deal Urban and Environmental Design Guidance To consider the attached report.	111 - 122
14.	City Deal progress report To consider the attached report.	123 - 130
15.	City Deal Forward Plan To consider the Forward Plan for the City Deal Executive Board. The document is purposely marked with tracked changes to reflect updates since the last meeting.	131 - 134

Agenda Item 4



GREATER CAMBRIDGE CITY DEAL JOINT ASSEMBLY

Minutes of the Greater Cambridge City Deal Joint Assembly held on
Friday, 12 February 2016 at 2.00 p.m.

PRESENT:

Members of the Greater Cambridge City Deal Joint Assembly:

Councillor Tim Bick	Cambridge City Council (Chairman)
Councillor Roger Hickford	Cambridgeshire County Council (Vice-Chairman)
Councillor Dave Baigent	Cambridge City Council
Councillor Kevin Price	Cambridge City Council
Councillor Noel Kavanagh	Cambridgeshire County Council
Councillor Maurice Leeke	Cambridgeshire County Council
Councillor Kevin Cuffley	South Cambridgeshire District Council
Councillor Bridget Smith	South Cambridgeshire District Council
Councillor Nick Wright	South Cambridgeshire District Council
Sir Michael Marshall	Marshall Group
Claire Ruskin	Cambridge Network
Andy Williams	AstraZeneca
Anne Constantine	Cambridge Regional College
Helen Valentine	Anglia Ruskin University
Dr John Wells	Cancer Research UK Cambridge Institute

Members of substitutes of the Greater Cambridge City Deal Executive Board in attendance:

Councillor Ian Bates	Cambridgeshire County Council
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Officers/advisors:

Andrew Limb	Cambridge City Council
Mike Davies	Cambridgeshire County Council
Chris Malyon	Cambridgeshire County Council
Bob Menzies	Cambridgeshire County Council
Jeremy Smith	Cambridgeshire County Council
Stuart Walmsley	Cambridgeshire County Council
Aaron Blowers	City Deal Partnership
Tanya Sheridan	City Deal Partnership
Noelle Godfrey	Connecting Cambridgeshire Partnership
Adrian Cannard	Local Enterprise Partnership
Alex Colyer	South Cambridgeshire District Council
Graham Watts	South Cambridgeshire District Council

1. APOLOGIES FOR ABSENCE

There were no apologies for absence.

Councillor Tim Bick, Chairman, took this opportunity to welcome Councillor Kevin Cuffley to his first meeting of the Joint Assembly as a representative of South Cambridgeshire District Council.

2. MINUTES OF THE PREVIOUS MEETING

The minutes of the previous meeting held on 17 December 2015 were confirmed and signed by the Chairman as a correct record, subject to an amendment to minute number 7 in relation to the unanimous decision to recommend the addition of a criterion to assess environmental impact and design, making it clear that this was proposed by Councillor Kevin Price and seconded by Councillor Francis Burkitt.

3. DECLARATIONS OF INTEREST

Councillor Roger Hickford declared a non-pecuniary interest in minute number 10 as he was Chairman of the A1307 Steering Group.

4. QUESTIONS BY MEMBERS OF THE PUBLIC

Councillor Tim Bick, Chairman, reported that a number of people had registered to speak in relation to specific items on the agenda for this meeting. He therefore proposed that those questions be put at the relevant item.

The following questions did not relate to any items on the agenda for this meeting and were therefore asked and answered at this stage of proceedings, as follows:

Question by Dr Anthony Eva

Dr Eva asked the Joint Assembly to:

- ensure that transport infrastructure plans were rigorously tested against required CO₂e emission reduction targets for 2030 and beyond, and, in particular;
- look in more detail as to whether planning assumptions about the Cambridge City transportation mix in 2031 were compatible with required CO₂e emission reductions through 2030 and beyond.

Councillor Tim Bick, Chairman, stated that the City Deal's strategy in terms of transport related schemes sought to promote walking, cycling and public transport as much as possible. He agreed with the sentiments of the question in terms of the fuel used for public service vehicles.

Bob Menzies, Director of Strategy and Development (Cambridgeshire County Council) agreed that this was an important issue and stated that the assessment of carbon emissions was a valid point. He confirmed that lots of work was ongoing with the introduction of cleaner buses in Cambridgeshire, an initiative that was seeing vast improvements in CO₂e emissions.

In terms of planning assumptions, it was noted that a report on demand management measures in the city centre was scheduled to be considered by the Executive Board in June 2016 and would include reference to this issue.

Question by Councillor Markus Gehring

Councillor Gehring asked the Joint Assembly why demand management measures suggested at the call for evidence sessions could not be included as part of the ongoing consultation processes for specific transport infrastructure schemes, where they could be of some use.

He also raised concerns regarding the quality of the diagrams included in the consultation document for the Western Orbital corridor scheme. This followed the publication of the results for the Madingley Road corridor scheme, which he felt had not excluded the least favourite options.

Mr Menzies said that the call for evidence was part of a high level consultation on demand management. He reminded those present that the City Deal Executive Board had agreed at the outset of confirming the Tranche 1 programme that it wanted to engage with people on transport infrastructure schemes. Schemes were therefore being consulted upon at early conceptual stages to enable people to put forward their views very early on in the process. Preferred routes could then be established, taking into account the outcomes of the initial consultation process and more detailed work which could then commence.

In terms of demand management, Mr Menzies emphasised that nothing put forward as part of the call for evidence sessions had been ruled out and that all options were being considered. He reminded Members of the Assembly, however, that some further work would need to be undertaken to better understand the consequences of implementing some of the options.

Question by Jim Chisholm

Mr Chisholm referred to the call for evidence sessions and transport infrastructure schemes in general and asked whether it would be better to spend a smaller sum on leading edge technology, which could provide a proven benefit, rather than on schemes that were likely to encourage more cars into the city.

Tanya Sheridan, City Deal Programme Director, gave an assurance that everything submitted as part of the call for evidence would be looked at, with the outcomes reported to the Executive Board in June 2016.

Mr Menzies confirmed that the call for evidence and demand management outcomes would be delivered in parallel, where necessary.

Question by Mike Sargeant

Mr Sargeant asked whether Members of the Joint Assembly would join him on a visit to Milton Road to see the issues that had arisen from residents as a result of the Milton Road transport infrastructure scheme consultation. He reported that particular concerns to residents were:

- loss of the residential nature of the road, including trees and verges;
- rat running through the area due to prevention of turns.

Councillor Bick invited Mr Sargeant to put forward his invitation to Members of the Joint Assembly outside of the meeting.

5. PETITIONS

No petitions had been received.

6. GREATER CAMBRIDGE CITY DEAL FINANCIAL MONITORING

Consideration was given to a report which provided the Joint Assembly with the City Deal Programme's financial monitoring position for the period ending 31 January 2016.

Chris Malyon, Chief Finance Officer at Cambridgeshire County Council, presented the report and referred Members to the summary of expenditure against the profiled budget for the period ending 31 January 2016. The following further points were noted:

- an appointment had been made to the Strategic Communications Manager vacancy, with the successful candidate scheduled to commence the new role on 29 February 2016;
- the Housing Development Agency would be operational from 1 April 2016.

Sir Michael Marshall asked whether any analysis had been undertaken at this stage on the level of return or anticipated benefit from the City Deal investment.

Bob Menzies, Director of Strategy and Development at Cambridgeshire County Council, reported that, in respect of transport infrastructure schemes, as each scheme developed they would have their own business case in place which identified a range of benefits and costs. He reminded Members that these would be used by the Government as part of the City Deal Programme's trigger mechanism.

The Joint Assembly **NOTED** the financial position as at 31 January 2016.

7. GREATER CAMBRIDGE CITY DEAL PARTNERSHIP BUDGET 2016/17

The Joint Assembly considered a report setting out the Greater Cambridge City Deal programme and operational proposed budgets for the 2016/17 financial year. It also provided the Assembly with an opportunity to consider the continued pooling of New Homes Bonus for 2016/17 and how unallocated resources should be utilised.

Chris Malyon, Chief Finance Officer at Cambridgeshire County Council, presented the report and highlighted the operational budget which set out the expenditure required to support the City Deal Programme. He highlighted two specific issues in relation to housing and intelligent mobility, as follows:

- there were significant stresses in the Greater Cambridge Housing market and a small amount of funding was sought to better understand the demands and to define distinct housing products that could potentially meet this need. Funding was also sought to develop new partnership models to tackle these issues. Once these studies had been carried out, they may indicate opportunities for further work and investment to tackle housing market issues, as well as create an improved supply chain;
- running in parallel with the existing hard infrastructure schemes which formed part of the City Deal programme, there was an opportunity to establish a workstream to deliver the first steps towards intelligent mobility with four interlinked work packages. These were in addition to the 'Smart City Platform' proposal.

Mr Malyon reported on the City Deal's pooled resource and stated that, although the New Homes Bonus position had been clarified for the 2016/17 financial year, there was uncertainty over the future of the funding stream. In agreeing the projected operational budget set out in the report, a sum of £7.8 million would remain uncommitted by the end of Tranche 1 of the City Deal Programme. He recommended that, given the uncertainty around the future of New Homes Bonus, it would be inappropriate for the Joint Assembly and Executive Board to consider making any commitments beyond the resource envelope that the City Deal had at its disposal. A briefing note on the New Homes Bonus, together with details of the Government's consultation into proposed changes to the funding stream, were appended to the report.

It was also highlighted that the level of funding received by Government for the first five years of the City Deal Programme, £100 million for Tranche 1, would be insufficient to cover the approximate £160 million of schemes included within it. Mr Malyon said that other funding streams, such as developer contributions, would need to be secured.

Discussion ensued by Members of the Assembly, further to which the following points were noted:

- consideration should be given to returning any unspent New Homes Bonus monies back to the three partner Councils. Mr Malyon responded by saying that this was an option the Executive Board could consider, although, in his view, he felt that it was too premature to make such a decision at this stage;
- there was a relatively high increase in budgets for central co-ordination and communications across 2016/17 and these costs should be kept to a minimum. It was noted that the Programme Director, having been in post for a few months, had identified the resources required in order to effectively deliver the programme which had previously relied on officers from the three partner Councils supporting the City Deal in addition to their respective jobs;
- there was an additional line in the budget for affordable housing, specifically for housing research. In view of the extensive experience both District Councils had in relation to the housing market, a question was asked as to what additional research may be necessary that the Council's officers would not be able to provide. Mr Malyon reported that the City Council had requested this additional piece of research, which was outside of the expertise that the Councils had at their disposal. The research would investigate new delivery models, given recent significant legislative changes, and establish their feasibility and practicality for the City Deal programme. A more detailed report on the outcomes of this specific investment would be reported into the Joint Assembly and Executive Board in due course;
- a more comprehensive explanation of the detail surrounding proposed spending in respect of the operational budget should be included. This was unanimously supported by the Assembly. Tanya Sheridan, City Deal Programme Director, agreed that further information would be included in future reports and explained that the original £210,000 effectively paid for three posts. These were the Programme Director, the Project Manager and the Strategic Communications Manager. A further increase of £281,000 would enable the City Deal to hire a graduate trainee to work on the economic and housing aspects of the programme, to employ a project/communications support officer providing administrative support to the programme across the three Councils, as well as ensuring provision for legal and other professional advice that may be required at various stages of the programme. This additional funding would also provide a relatively small budget for strategic communications;

- anticipated external funding streams should be identified so that it was better understood where additional funding was coming from and how much it was likely to be. It was noted that a significant amount of external funding would be made available through developer contributions, such as through Section 106 Agreements or the Community Infrastructure Levy. Mr Malyon was reluctant to highlight the amount required through these funding streams as this could potentially negatively impact negotiations with developers. Various other grant funding opportunities would be available to the City Deal and, although there was no specific programme to share with the Assembly or Board at this stage, Mr Malyon agreed to set out a broad expectation of where that additional funding may come from;
- more information should be provided on the apparent slippage of some transport infrastructure schemes. Bob Menzies, Director of Strategy and Development at Cambridgeshire County Council, responded by explaining that the start and finish dates in the report related to construction rather than when schemes would be paid by. Transport infrastructure schemes were complex in terms of the comparison between construction finish dates and the date that a scheme finished being paid for. He cited examples of land transfers that sometimes took years to complete and in some cases were still ongoing once schemes had been completed and opened for use. In terms of the A1307 scheme, there had been an initial delay in the reporting cycle but it was noted that this should not delay the scheme in accordance with the originally anticipated delivery timescale. The Joint Assembly agreed that reconciliation in respect of the apparent slippage of some schemes should be made available to make this clearer.

The Joint Assembly **RECOMMENDED** that the Executive Board:

- (a) Noted the briefing note appertaining to the future of New Homes Bonus.
- (b) Approved the budgetary provision for the 2016/17 operational budget, subject to more information being made available on the further spending items, including the City Deal Programme's staffing structure.
- (c) Requested that more detailed proposals be brought forward in respect of the additional investment in Housing and Intelligent Mobility.
- (d) Approved the provisional profiling for the remainder of Phase 1 of the programme, subject to the inclusion of reconciliation in respect of the apparent slippage of some schemes.
- (e) Agreed that the unallocated New Homes Bonus pooled resource be retained to facilitate the successful delivery of Phase 1 of the programme.
- (f) Considered a further report on the strategy for the redistribution of unallocated monies before the end of the year.

8. **A428/A1303 BETTER BUS JOURNEYS SCHEME - PUBLIC CONSULTATION OUTCOMES AND NEXT STEPS**

The Joint Assembly considered a report which summarised the outcome of the consultation on high level options for bus and cycle infrastructure improvements along the Cambourne to Cambridge corridor.

Stuart Walmsley, Head of Major Infrastructure Delivery at Cambridgeshire County Council, presented the report and highlighted that the public consultation had generated significant public interest including 2193 survey responses, 8 letters and 123 email submissions and key stakeholder representations. A petition had also been received with over 3600 signatures opposing Option 1 South, with other responses outlining significant support for transport improvement along the corridor. He referred to background documents set out in the report which contained detailed analysis of the consultation responses and a summary of representations received.

Mr Walmsley said that this had been a very thorough piece of work which had provided significant engagement with members of the public at an early stage of this scheme. He reflected on the fact that officers had worked very closely with Parish Councils and said that this needed to continue.

A number of hybrid schemes, made up of aspects of the options originally published with the consultation, and some alternative options had been submitted as part of the process. A further piece of work would now commence to analyse these hybrid and alternative options from a technical perspective.

Mr Walmsley highlighted concerns expressed in the consultation responses regarding environmental impact and agreed that this was an important issue, adding that officers were exploring an engineering solution conscious of the fact that it was a green corridor. He said that, as the scheme progressed to the next stage, issues relating to environmental impact would become much clearer, together with ways in which these could be mitigated. Mr Walmsley emphasised that officers took environmental impact issues very seriously.

Councillor Tim Bick, Chairman, invited Lynn Hieatt to ask a question she had given notice of in relation to this item. She reflected on numerous complaints and criticisms of the consultation document in terms of perceived bias in the questions, absence of detail and a lack of clear invitation to put forward alternatives. In the comments and written submissions she said that there were 100 instances of the word 'misleading', 92 instances of the word 'biased' and 42 instances of the word 'flawed' and asked whether she had missed the section in the report that mentioned these perceived flaws. She added that it would be a positive message from the City Deal, and a step in improving the process in future to everyone's benefit, if some acknowledgement were to be added in the report that things went wrong with this consultation and asked whether this would be the case.

Mr Walmsley reiterated that this was a thorough piece of work which required a lot of engagement with stakeholders, interested parties and members of the public facilitated online and through social media, as well as through traditional means of consultation. He made the point that a number of alternative options had been submitted as part of the responses received. Mr Walmsley added that the consultation had provided people with an opportunity to put forward their views on a number of conceptual options, whether that meant supporting one or more of the options presented, amalgamating options into hybrids or putting forward alternative options. The Executive Board was keen to engage with people at an early stage of the process and Mr Walmsley was of the view that this consultation had worked well in that respect. Bob Menzies, Director of Strategy and Development at Cambridgeshire County Council, did not agree that the consultation was flawed or biased in any way and referred to lengthy correspondence that had occurred with regards to the points raised in the question. He reminded the Joint Assembly that this was a consultation where people could put forward their comments or views, not a referendum where people were being asked to vote for a specific option.

Councillor Kevin Price highlighted that the report stated the consultation had been undertaken in accordance with the consultation principles of the Greater Cambridge City Deal partnership. He questioned the consultation principles and asked whether the City Deal Executive Board had ever formally adopted them. Mr Menzies reported that the City Deal had adopted Cambridgeshire County Council's protocol, which may have been agreed in the Board's Shadow capacity prior to the formal establishment of the Executive Board. Councillor Bick suggested including this as an item for the next meeting of the Joint Assembly, with a view to formalising the approach.

Councillor Bridget Smith sought clarification as to whether 'do nothing' could be included as an option in future consultations for transport infrastructure schemes. She asked this question in view of the fact that Smart City proposals were seeking to reduce congestion which, if effective, could have a significant impact on the rate of congestion in their own right. Mr Menzies said that the Smart City proposals would be delivered as part of City Deal transport infrastructure schemes and could not be introduced as a single element. Schemes were seeking to address future use of the network, taking into account the significant anticipated growth in the number of people living and working in the Greater Cambridge area. He advised, therefore, that doing nothing would be significantly detrimental and delay implementation of a solution to the existing problem and problems that would occur in future years.

Councillor Smith also asked whether the options set out in future consultations could include an assessment of carbon emissions. Mr Menzies explained that a range of assessments, including that of carbon emissions, would be undertaken to inform the next stage of consultation in developing preferred options for the scheme.

Councillor Bick took this opportunity to thank all those who contributed to the consultation process.

The Joint Assembly **NOTED** the responses to the consultation on the A428/A1303 bus infrastructure improvement scheme, including the alternative and hybrid options suggested and **RECOMMENDED** that the Executive Board includes these and other comments received in the ongoing development and assessment appraisal to allow the Board to select a recommended option or options in September 2016.

9. THE CHISHOLM TRAIL

The Joint Assembly considered a report which summarised the results of the consultation undertaken on the proposed route for the Chisholm Trail.

Mike Davies, Team Leader of Cycling Projects at Cambridgeshire County Council, presented the report and stated that 1,457 responses had been received to the consultation, as well as ten additional letters. Over 90% of those responding supported some form of mostly off road walking and cycling route to link the north and south of the city. 86% supported the specific route and 84% said that they would 'probably or definitely use the route'. When broken down into sections, Mr Davies reported that there was support of over 83% for each of the five sections, with most support being shown for the length linking to the existing station. It was noted that most opposition appeared to be associated with the lengths north of Coldhams Common, particularly in respect of the impact on green space and proposed path sizes. Mr Davies reported that the project team would continue to engage with landowners, stakeholders, interest groups and specialists, especially over key issues such as flood mitigation, ecology and heritage.

Councillor Tim Bick, Chairman, invited three members of the public who had given notice to put forward their questions in respect of this item. These were noted as follows:

Rob King

Mr King explained that he ran a group of local cycling businesses in the area, with the logistics arm specialising in urban deliveries by bicycle. He said that the Chisholm Trail on the route proposed would be hugely important in supporting his work, creating a new route through the heart of the City's business district and linking Addenbrooke's and the Science Park. He asked whether the Joint Assembly would support the adoption of quality cycling infrastructure and, particularly, the Chisholm Trail to ensure Cambridge was a world leading, modern, fit and active city ready for the challenges of the future.

Edward Leigh

On Edward Leigh's behalf, Lynn Hieatt read out a statement by Edward Leigh which fully endorsed the recommendation to proceed with building the Chisholm Trail. He hoped to see the City Deal bring forward many more similar schemes for connecting up Cambridge and its surrounding villages in a network of high quality cycle ways.

Chris Smith

Mr Smith was not in attendance to present his question, but Members noted his statement and question. He asked on what design the consultation had been made and felt that more scrutiny should be given to the scheme before any further approval was granted.

In discussing the content of the report and issues raised by public questions, the following points by Members of the Joint Assembly were noted:

- the cycles used by Mr King's business were quite large, weighing approximately a quarter of a tonne, so clarification was sought as to whether the route had been designed to accommodate vehicles such as this. Mr Davies confirmed that these vehicles, as well as motorised mobility vehicles, could be accommodated on the route;
- Mr King's logistics aspect of his business, in terms of undertaking urban deliveries by bicycle, provided a competitive advantage over road-based haulage operators. It was suggested that the added economic benefit in this context should be investigated further and potentially used as evidence to support the inclusion of more cycle schemes in future Tranches of the City Deal programme;
- in terms of reference to green space, Councillor Dave Baigent asked that officers made specific reference to the status of such areas in future reports, rather than using the rather generic term 'green space';
- part of the proposed route went through the Ridgeons site development. It was noted that this was a long-term aspiration, subject to discussions and negotiations with landowners, and that alternatives and temporary measures could be put in place;
- the proposed route was very dependent on land acquisitions, so it was suggested that the Joint Assembly should receive regular progress updates;
- Cambridge Past, Present and Future, in discussions with the Chairman, confirmed that the proposed route accommodated a concern it had originally raised in respect of the proximity of the route to the Leper Chapel.

Mr Davies reminded the Joint Assembly that approximately ten different landowners had been spoken to in respect of this scheme and the proposed route and at this stage verbal agreement had been reached with them all. Negotiations were also on-going with Network Rail, which he was seeking to progress as quickly as possible.

The Joint Assembly **RECOMMENDED** that the Executive Board:

- (a) Noted the results of the public consultation.
- (b) Gave approval to submit a planning application based on the widths and path types as set out in the report and the route proposed as shown in Plan 1 of the report.
- (c) Supported the continuation of land negotiations.
- (d) Gave approval to use Compulsory Purchase Orders if needed.

10. A1307 HAVERHILL TO CAMBRIDGE: APPROVAL TO CONSULT ON TRANSPORT IMPROVEMENT CONCEPTS

The Joint Assembly considered a report which set out the high level transport improvement concepts that had emerged from initial study work undertaken on the A1307 corridor.

Jeremy Smith, Head of Transport and Infrastructure Policy and Funding at Cambridgeshire County Council, presented the report. He said that further consideration had been given to the scheme since it was initially looked at in view of the changing development picture in the area. A more comprehensive look into traffic conditions, taking into account seasonal variation, would be necessary together with analysis of smaller parts of the route which could provide more impact. A summary of concepts for the scheme at this stage were set out in figure 2 of the report.

Councillor Tim Bick, Chairman, clarified that further work would therefore be required on major road interventions contrary to the below recommendation contained within the report to the Executive Board:

‘That the Executive Board 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.’

It was unanimously agreed that reference to discounting major road interventions should therefore be removed from the recommendation to the Executive Board.

Councillor Bick read out a question from Peter Wakefield, Chairman of Railfuture East Anglia, who had given notice of the intention to ask a question but was not present at the meeting. He asked which rail organisations City Deal partners had spoken to and what rail projects were being considered for Tranche 1 funding. In addition, Mr Wakefield asked what progress had been made with the feasibility study for the reopening of the railway to Haverhill.

Bob Menzies, Director of Strategy and Development at Cambridgeshire County Council, confirmed that the feasibility study referred to in the question had been included in the report as a background paper. He also explained that Members of the City Deal Executive Board and officers had met with the Chairman of Network Rail as well as there being significant engagement between officers and representatives of Network Rail regarding the large number of railway projects ongoing or proposed in Cambridgeshire. He reiterated that lots of different engagement was taking place between City Deal partners and the railway industry.

In discussing the contents of the report, the following points by Members of the Joint Assembly were noted:

- significant employment growth was expected in Sawston which would impact traffic levels and should be taken into account as part of the reassessment of traffic. A question was also raised as to whether the proposed route could include Sawston to support this growth;
- growth in other areas affected by the proposed scheme had also not been taken into account as part of the initial modelling, so the reassessment was welcomed;
- the diagrams included with the consultation document should make it clear as to network links and where they would actually go, as well as demonstrate that this was a linked up scheme;
- it was difficult to visualise who this scheme was targeted at in terms of people travelling between Cambridge and the M11, with the proposed Park and Ride solution or enhanced bus route also potentially causing some confusion. Mr Menzies explained that there may be more fluidity to the scheme as it developed and made the point that things continued to emerge in the area, which was one of the key challenges with this particular project. It was agreed that the vision for this scheme needed to be clear in order that people understood what it was seeking to accomplish;
- this scheme should not lose focus on cycling and walking provision, in terms of travelling to Haverhill, and consideration should perhaps be given to including a specific link for this purpose;
- depending on what options emerged as this scheme developed, it was unclear whether it could be delivered within Tranche 1 of the City Deal programme, or Tranche 2. 'Off-road options' would make it very challenging to include as a Tranche 1 scheme as a result of the statutory processes and respective timescales that would be necessary;
- it was important to establish how the City Deal could ensure that services put in place on transport infrastructure schemes, such as bus services for example, were effective for the solutions that were being made available as a result of the investment. Councillor Bick suggested inviting representatives of the bus operators to meet with Members of the Joint Assembly to discuss this issue. Officers were therefore asked to facilitate such a meeting, with an informal setting suggested as being the most appropriate, to also include Members of the Executive Board.

Councillor Bick sought some clarity as to the signing off process for the publication of consultation documentation for City Deal schemes. Mr Menzies explained that publication occurred once approval had been granted by the Executive Board and said that the previously undertaken consultation for the Western Orbital scheme had been shared informally with all Members of the Joint Assembly and Executive Board prior to its publication. Councillor Bick welcomed this approach.

The Joint Assembly **NOTED** the findings summarised in the report and the Draft Concepts Report and **RECOMMENDED** that the Executive Board:

- (a) Discounted from further consideration as part of the Greater Cambridge City Deal reopening the railway to Haverhill and providing a Busway all the way to Haverhill.
- (b) Approved for public consultation the illustrative concepts set out in the report to provide improved Park and Ride linked to Bus Rapid Transit between Fourwentways and Cambridge, and cycling and walking measures along the corridor.

- (c) Agreed 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.

11. SOUTHBOUND BUS PRIORITY SLIP ROAD - JUNCTION 11, M11

The Joint Assembly considered a report which set out a high level risk assessment on the issues that impacted the inclusion of a southbound bus priority slip road at Junction 11 of the M11 in Tranche 1 of the City Deal Programme.

Stuart Walmsley, Head of Major Infrastructure Delivery at Cambridgeshire County Council, presented the report and highlighted a number of issues and risks that had been identified. These were set out in the report and included the fact that:

- Highways England would need to give its consent to any proposal;
- any proposal would need to cross land currently under planning consideration for new housing and leisure facilities;
- there was currently no bus route running off Junction 11 of the M11;
- any potential wider scheme, such as the Western Orbital corridor, would be closely linked to infrastructure at Junction 11.

Comments by Members of the Joint Assembly, in discussing the contents of the report, were noted as follows:

- the low likelihood of a commercial service operating at this junction was a significant issue;
- a bus-only solution seemed illogical for this junction. Mr Walmsley explained that it would be extremely unlikely for Highways England to give consent for any proposal in this respect that included cars as well as buses, on the basis that it would itself become a new junction;
- this specific project did not fit in with the bigger picture of transport infrastructure schemes included as part of the City Deal programme;
- this project would be an unnecessary diversion from the Western Orbital corridor scheme;
- despite the perceived lack of commercial opportunities, employers were still keen for this project to progress;
- there would be a significant increase in traffic movement in terms of staff, patients and visitors, as a result of Papworth Hospital moving to the Addenbrooke's site;
- if employers in the area agreed to fund a service instead of commercial operators, there was a danger that they could cease that service at any time thereby leaving the route unused and resulting in wasted resources;
- there would be significant pressure in this area in the years to come, but the solution proposed in this instance was not the right way to address it.

NOTE – Councillor Nick Wright declared a non-pecuniary interest in this item as a Governor of Papworth Hospital.

NOTE – Dr John Wells declared a non-pecuniary interest in this item as a Governor of Addenbrooke's Hospital.

The Joint Assembly unanimously **NOTED** the outcome of the high level risk assessment and the progress made on the proposal for a bus only slip road at Junction 11 of the M11.

Councillor Bick, Chairman, invited Members to vote on recommendation (ii) set out in the report, which recommended that the Executive Board be asked to proceed with the further development of the proposal to assess its final viability for inclusion in the Tranche 1 City Deal programme. He also invited Members to vote on paragraph 17 of the report, which recommended the integration of the scheme into the developing Western Orbital proposals to ensure that it was considered within this wider strategic context. With 7 votes in favour of recommendation (ii) and 8 votes in favour of paragraph 17, the Joint Assembly **RECOMMENDED** that the Executive Board integrated the scheme into the developing Western Orbital proposals to ensure that it was considered within this wider strategic context.

12. **SMART CAMBRIDGE - 'SMART TECHNOLOGY CITY MANAGEMENT PLATFORM' INVESTMENT**

Consideration was given to a report which set out the more detailed investment proposal behind the Executive Board's outline approval in November 2015 to invest up to £280,000 to implement a Smart Technology City Management Platform.

Noelle Godfrey, Connecting Cambridgeshire Programme Director, presented the report and highlighted the main components of the project as being:

- a data network, specifically designed to support 'Internet of Things' technology;
- a data hub, consisting of a software platform that would collate, combine and process a range of data sets to provide additional insights, information and visualisation as well as application development for City Deal partners and other third parties;
- an array of sensors that would enable automated detection and monitoring of a range of measures including air quality, traffic, cycle and pedestrian movements around the city.

Members made reference to an extremely useful and informative presentation on the Smart Technology City Management Platform that had been held informally prior to the meeting.

Councillor Dave Baigent questioned whether the technology and software required as part of this project could be provided by other companies, such as Google for example, and asked whether such companies were already capable of providing similar services. Noelle Godfrey said that some of this work would use leading edge technology, with the principal difference being that this would be delivered at 'real-time' and provide an opportunity to combine greater data sets locally as part of the architecture.

Councillor Roger Hickford, Helen Valentine and Councillor Nick Wright all spoke in favour of the project and Councillor Tim Bick, Chairman, added his support saying that he was impressed by the capability of what was being proposed.

The Joint Assembly:

- (a) **RECOMMENDED** that the Executive Board approved the investment of £300,000 to develop a first stage 'smart technology city management platform' for Greater Cambridge.
- (b) **REQUESTED** a progress report in six months.

13. CITY DEAL WORKSTREAM UPDATE

The Joint Assembly received an update report on City Deal workstreams.

Tanya Sheridan, City Deal Programme Director, presented the update and reported the following:

- a Strategic Communications Manager had been appointed and was expected to commence their post on 29 February 2016;
- the Cambridge Promotion Agency had reviewed its goals in respect of the skills workstream. The Joint Assembly sub-group was scheduled to meet in March to review its progress;
- a number of key consultations were due to close shortly, so Assembly Members were asked to encourage as many responses to them as possible;
- the City Deal website included more detailed information on the Smart City project, including the presentation slides delivered at the informal workshop held before this meeting.

The Joint Assembly **NOTED** the update.

14. GREATER CAMBRIDGE CITY DEAL FORWARD PLAN

The Joint Assembly considered the City Deal Forward Plan.

Councillor Tim Bick, Chairman, noted the number and significance of the agenda items scheduled for consideration at the June meeting of the Assembly and Board in comparison to the agenda for the July meeting which did not consist of any substantial items at this stage. In asking whether some items in June should be deferred to the July meeting, Members unanimously agreed that the list of items scheduled to be considered at the Joint Assembly on 2 June 2016 should continue as planned, but that this should be an all-day meeting commencing at 10.00 a.m.

The Joint Assembly **NOTED** the Forward Plan.

The Meeting ended at 5.35 p.m.

Agenda Item 6

Questions by the public and public speaking

At the discretion of the Chairman, members of the public may ask questions at meetings of the Joint Assembly. This standard protocol is to be observed by public speakers:

- (a) notice of the question should be given to the Democratic Services team at South Cambridgeshire District Council (as administering authority) by 10am the day before the meeting;
- (b) questioners will not be permitted to raise the competence or performance of a member, officer or representative of any partner on the Joint Assembly, nor any matter involving exempt information (normally considered as 'confidential');
- (c) questioners cannot make any abusive or defamatory comments;
- (d) if any clarification of what the questioner has said is required, the Chairman will have the discretion to allow other Assembly members to ask questions;
- (e) the questioner will not be permitted to participate in any subsequent discussion and will not be entitled to vote;
- (f) the Chairman will decide when and what time will be set aside for questions depending on the amount of business on the agenda for the meeting. Normally questions will be received as the first substantive item of the meeting;
- (g) individual questioners will be permitted to speak for a maximum of three minutes;
- (h) in the event of questions considered by the Chairman as duplicating one another, it may be necessary for a spokesperson to be nominated to put forward the question on behalf of other questioners. If a spokesperson cannot be nominated or agreed, the questioner of the first such question received will be entitled to put forward their question.

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Agenda Item 8



Report To: Greater Cambridge City Deal Executive Board

9 June 2016

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

Cambridge Access and Capacity Study

Purpose

1. To review the outcomes of the Cambridge Access Study and the Call for Evidence on tackling congestion in Cambridge, and to decide on next steps.
2. This report sets out a proposed Congestion Reduction package to meet the objectives and achieve the vision of the Greater Cambridge City Deal, as set out in paragraphs 8 to 13 below. It recommends engaging with the public and stakeholders to gather their views on the package, prior to the Board considering whether to take the package forward at its meeting in January 2017.

Recommendations

3. It is recommended that:
 - a. The Board notes the Call for Evidence Analysis and the Cambridge Access Study Long List and Short List Reports and outcomes.
 - b. The Board agrees the policy approach for a Congestion Reduction package, incorporating:
 - Better bus services and expanded usage of Park and Rides
 - Better pedestrian and cycling infrastructure
 - Better streetscape and public realm
 - Peak Congestion Control Points in the weekday morning and evening peak periods
 - A Workplace Parking Levy
 - On-Street Parking Controls (including Residents' Parking)
 - Smart Technology
 - Travel Planning
 - c. The Board notes the consultation and engagement principles appended to this report (see Appendix D) and agree the principles of the engagement process on the proposed Congestion Reduction package, to commence in July 2016.
 - d. That, subject to the agreement of recommendation b), the Board endorses the proposal for a trial implementation of Peak Congestion Control Points, possibly on a phased basis in late 2017 using an experimental Traffic Regulation Order. A consultation on the Order would be held during the experimental period.

Executive Summary / Reasons for Recommendations

4. The strategic objectives for the Greater Cambridge City Deal and the transport vision and objectives are summarised in paragraphs 8 to 13 below. To achieve them, it is essential that congestion and delay are addressed and that capacity in and around the City Centre for pedestrians, cyclists and public transport users is increased.
5. This report sets out the work that has been undertaken by the Cambridge Access Study and the analysis of responses to the Call for Evidence on tackling congestion in Cambridge. A shortlist of measures that could be successful as part of a package in achieving the vision and objectives has been set out by the Cambridge Access Study. On the basis of the work undertaken, this report recommends a proposed Congestion Reduction package set out in Appendix B that would deliver the vision and objectives. The key elements of the Congestion Reduction package are noted in recommendation b) above. The proposed package would:
 - provide for more, and more reliable, public transport trips on key routes into the city,
 - deliver better conditions for cyclists and pedestrians in many areas,
 - improve the Public Realm
 - remove many through trips by private car from the city during peak periods,
 - allow for further investment in public transport provision, and;
 - allow for investment in infrastructure in the later tranches of the Greater Cambridge City Deal transport programme as part of the local funding contribution to the programme.
6. Alternative interventions that have been shortlisted by the Access Study such as road user charging might achieve similar benefits, but are assessed as being more challenging in terms of deliverability in a reasonable timescale, affordability, and in terms of fairness and equity.
7. Proposals for engagement on the proposed Congestion Reduction package are set out, as are indications of timescales in which individual elements could be delivered and the links with the delivery of the wider Greater Cambridge City Deal programme.

Background

Growth, Transport and the Greater Cambridge City Deal

8. The submission Local Plans for Cambridge and South Cambridgeshire (see Background Documents below) set out the vision for sustainable economic and housing growth in the Greater Cambridge area to 2031. The Greater Cambridge City Deal supports these plans, by ensuring the transport infrastructure needed can be delivered. The strategic objectives of the City Greater Cambridge City Deal are:
 - to nurture the conditions necessary to enable the potential of Greater Cambridge to create and retain the international high-tech businesses of the future;
 - to better target investment to the needs of the Greater Cambridge economy by ensuring those decisions are informed by the needs of businesses and other key stakeholders such as the universities;
 - to markedly improve connectivity and networks between clusters and labour markets so that the right conditions are in place to drive further growth; and
 - to attract and retain more skilled people by investing in transport and housing whilst maintaining a good quality of life, in turn allowing a long-term increase in jobs emerging from the internationally competitive clusters and more university spin-outs.

9. Over the past 20 years, measures such as the Cambridge Core Traffic Scheme, Park and Ride and the Busway have been very successful at providing capacity for new trips into Cambridge by sustainable modes of transport. However, the amount of vehicular traffic travelling into the city has remained constant over this period, and congestion has worsened.
10. With the further housing and economic growth that is planned for the Greater Cambridge area, conditions on the transport network will get worse still if we do not take action to provide new transport capacity and manage congestion. If we do nothing, time spent in congested conditions is forecast to more than double by 2031. Radical interventions are needed to provide new transport capacity and allow for rational decisions by car drivers to change their travel behaviour to more reliable and convenient alternatives.

Greater Cambridge Transport Vision and Objectives

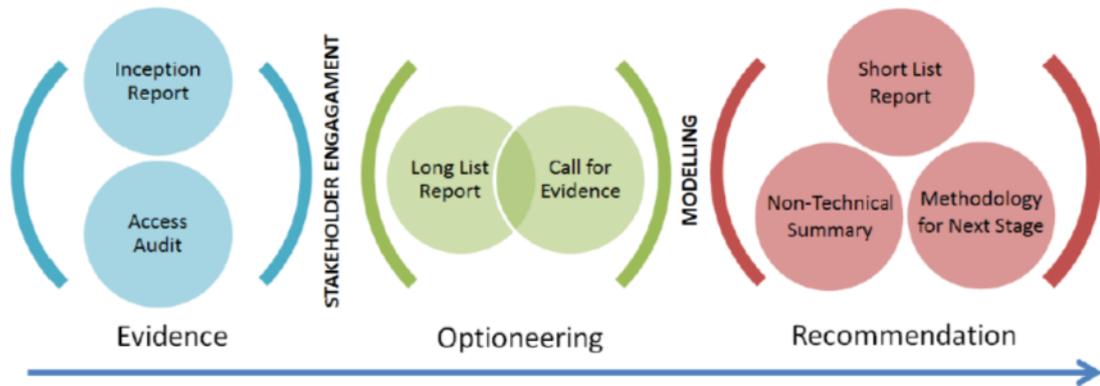
11. The transport vision for Greater Cambridge (the vision) is that it should be easy to get into, out of, and around Cambridge by public transport, by bike and on foot.
12. To achieve this, the aim is that despite the anticipated growth in journeys of about 30% by 2031, there will be a reduction in peak hour vehicular traffic of 10-15% from 2011 levels. This reduction is broadly equivalent to the reduction in traffic that is seen in the morning peak period when schools are on their half term break.
13. The Greater Cambridge City Deal's transport strategy objectives (the objectives) are:
 - To ensure transport in Greater Cambridge supports economic growth and the continuation of the Cambridge Phenomenon
 - To bring about a step change in the quality and reliability of public transport in Greater Cambridge by tackling congestion, investing in the infrastructure needed for quicker, more reliable public transport journeys and working in partnership with public transport providers.
 - To reallocate road space to public transport, cycling and walking to encourage journeys using these modes and reduce traffic volumes.
 - To encourage continued growth in the numbers of people cycling in and into Greater Cambridge.
 - To use the opportunities that road space reallocation, congestion reduction, and infrastructure projects offer to improve air quality, the public realm and the historic and natural environment.

The Cambridge Access Study

14. Consultant Mott MacDonald was commissioned to undertake the Cambridge Access Study, which has considered the effectiveness and deliverability of potential options to achieve the vision and meet the objectives, with a specific focus on the interventions that will address access and capacity in and around the city centre. It considers what packages of measures might be most effective in this respect. The process for the Access Study is shown diagrammatically in Figure 1.
15. The Access Study has several outputs, which are available on the Greater Cambridge City Deal's website (see Background Papers below). These are the:
 - Access Audit Report (July 2015)
 - Call for Evidence Analysis (May 2016)
 - Long List Report (May 2016)
 - Short List Report (May 2016)

16. The content of the Call for Evidence analysis, Long List Report and Short List Report are considered in detail below.

Figure 1: Access Study process

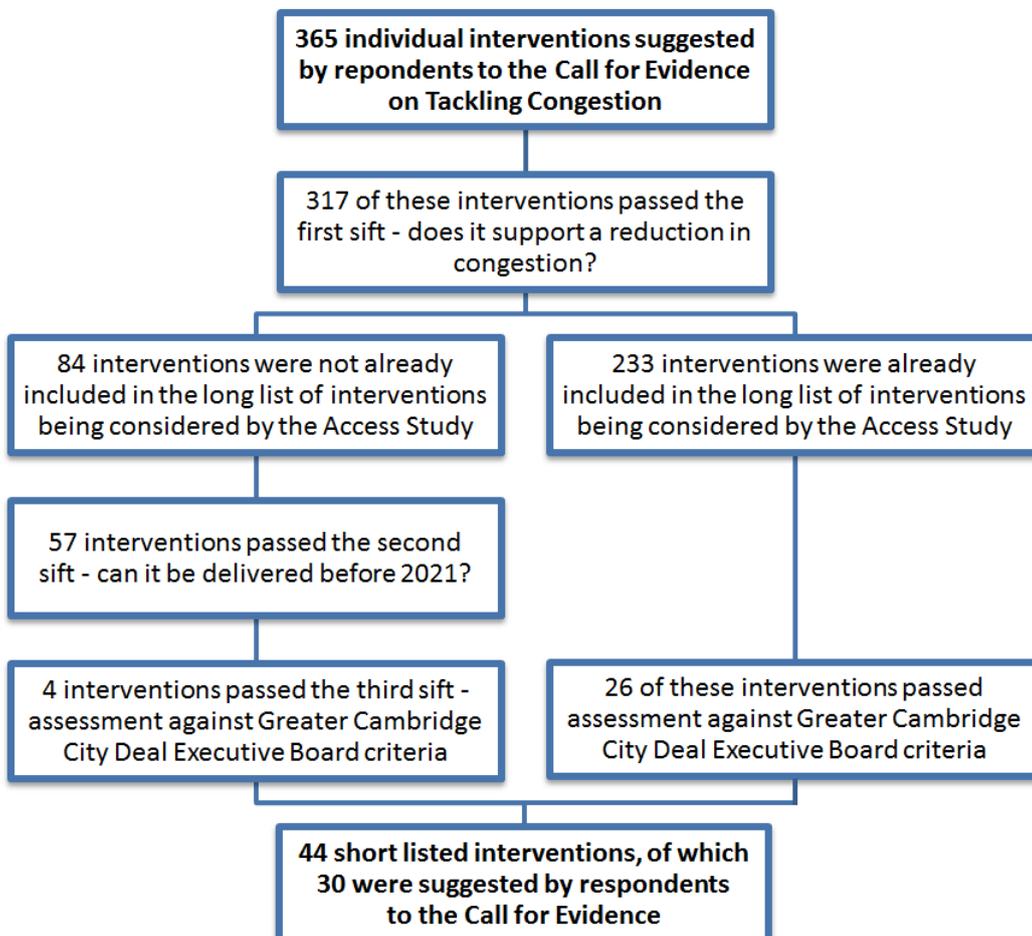


The Cambridge Access Study

Call for Evidence on tackling congestion

17. In November 2015, a Call for Evidence was launched to gather views, ideas and evidence aimed at tackling congestion in Cambridge. Written evidence was invited and interested parties presented their ideas at three public hearings held on the 16th, 18th and 30th November.

Figure 2: Call for Evidence analysis of suggestions



18. Submissions were published on the Greater Cambridge City Deal's website (see Background Papers below) and an initial summary of them was presented to the Joint Assembly on 17 December 2015 and to the Executive Board on 15 January 2016.
19. At the 15 January meeting, the Executive Board agreed the criteria for assessing submissions to the Call for Evidence. These criteria were also used in the assessment of other interventions being considered by the Access Study.
20. The Call for Evidence Analysis has been published on the Greater Cambridge City Deal's website (see Background Papers below). Figure 2 provides a summary of the sifting of suggestions made by respondents.
21. It should be noted that many suggestions made by different respondents duplicate each other, and the overall number of 365 suggestions significantly overstates the number of discrete suggestions. Duplicate suggestions were consolidated in the second sift of interventions. The table in Appendix A provides some detail on this; for example, cycle network improvements into the city from surrounding areas were suggested 17 times.
22. Suggested interventions that did not meet the sifting criteria may still be considered in other areas of the Greater Cambridge City Deal's programme. For example, the proposal to remove side road junctions on main roads is being considered in the design of the Milton Road and Histon Road schemes.

Long List Report

23. The Long List Report (available on the Cambridge Access Study website – see Background Papers below) considers potential interventions to meet eight outputs:
 1. Deliver a comprehensive and attractive Park and Ride service
 2. Deliver a comprehensive and attractive local bus network
 3. Deliver an increased rail mode share
 4. Deliver an increased cycling mode share
 5. Deliver an increased walking mode share
 6. Deliver a smarter network for smarter users
 7. Deliver efficient freight and servicing management
 8. Directly address city centre traffic growth
24. The interventions were sifted against the same criteria as agreed by the Executive Board and used in the third sift of suggestions made to the Call for Evidence.

• Value for Money	• Economic Impact
• Implementation	• Dependencies and broader benefits
• Fairness	• Environmental Impact and Design
• Effectiveness	
25. The Long List Report identified 44 interventions (see Appendix C) as having potential to contribute to achieving the outputs noted above, and that met the sifting criteria agreed by the Executive Board. These included 30 interventions that were also suggested by respondents to the Call for Evidence, as noted in Figure 2 above. Of the short-listed interventions, it is those under the theme 'Demand Management and Fiscal Measures' that are either:
 - Not included in current plans, or
 - Considered to be most likely to be able to deliver the desired outputs as part of a wider package.

26. The interventions shortlisted in this theme are:
- Smart access controls at existing key congested links
 - Road-space reallocation to non-car modes
 - Workplace Parking Levy
 - Road user charging
 - Parking / loading controls on key bus routes
27. The following sections provide commentary on a proposed Congestion Reduction package based around two of these interventions and discuss alternative options.

The proposed Congestion Reduction package

28. Assessment of the ideas from the Call for Evidence and the Access study work show that improving City Centre access and tackling congestion requires a blend of measures to manage demand for private car use and improve the attractiveness of alternatives. This report therefore puts forward a proposed Congestion Reduction package, which is discussed in more detail in Appendix B. It has eight key elements:
- Better bus services and expanded usage of Park and Rides
 - Better pedestrian and cycling infrastructure
 - Better streetscape and public realm
 - Peak Congestion Control Points in the weekday morning and evening peak periods
 - A Workplace Parking Levy
 - On-Street Parking Controls (including Residents' Parking)
 - Smart Technology
 - Travel Planning
29. The package aims to provide reliable and seamless journeys for bus users, cyclists and pedestrians on key routes into the city. Additional investment in public transport infrastructure and services and pedestrian and cycling infrastructure would therefore be made. This would add to and enhance the investment already planned in new capacity in the three tranches of the Greater Cambridge City Deal's overall transport programme.
30. Peak Congestion Control Points in the morning and evening peak periods would reallocate road space in and around the city centre, prioritising buses, cyclists and pedestrians and restricting general vehicular traffic on key routes for this purpose. Improved streetscape and public realm would also be sought as part of the design of these interventions, taking advantage of the opportunity that less demand from vehicles for road space in these areas would bring.
31. A Workplace Parking Levy (WPL) would tackle problems associated with traffic congestion by providing revenue funding for local transport and by acting as an incentive for employers to manage and potentially reduce their workplace parking. Income raised would fund specific measures to address congestion and provide new sustainable transport capacity to address the travel needs of employers and their staff. Employers would have the opportunity to influence and input into the choice of and design of measures to be funded.
32. Additional on-street parking controls including new Residents' Parking zones would be used to manage problems that might occur due to displacement of trips due to the Peak Congestion Control Points and WPL.

33. Improvements to traffic signals and control systems would assist in the management of the transport network, and would allow greater priority to be given to pedestrians, cyclists and buses.

Better public transport, pedestrian and cycling infrastructure, and better streetscape and public realm

34. The Access Study supports the need for more investment in Park and Ride and in other measures to support the extension of bus services. The Congestion Reduction package would involve some or all of:
- extended routes to more necklace villages,
 - extended operating hours for services to take better account of the variable working patterns of people working in the city and at its main employment hubs,
 - new express bus services from surrounding towns, and
 - additional Park and Ride and rural interchange capacity at existing or already planned new sites, or at further new sites as necessary
35. Cambridge North railway station will open in May 2017 and the Greater Cambridge City Deal programme will support the ongoing development of proposals for a station at Addenbrooke's, which is one of the shortlisted Access Study interventions.
36. Junction priority will continue to be developed for cyclists, pedestrians, and buses, including on radial routes and the Inner Ring Road, and opportunities for improvements in concert with the Peak Congestion Control Points would be sought.
37. Reduced peak time traffic would create opportunities for improvements to streetscape and public realm, for example on Hills Road between Station Road and the City Centre. These will be identified as part of the ongoing development and design of measures in the wider Greater Cambridge City Deal programme.
38. The Congestion Reduction package would have some implications for the Trunk Road network, including on the A14 and the M11. Consideration will be given to the targeted deployment of the Cambridge City Council's A14 Mitigation Fund of £1.5M on measures included in the Cambridge Access programme.

Peak Congestion Control Points

39. Peak Congestion Control Points would limit or ban general vehicular traffic on key routes during the morning and evening peak periods where such interventions would lead to a significant benefit to buses, pedestrians and cyclists. The Cambridge Core Scheme currently has six such points in the city centre. Six Peak Congestion Control Point options have been modelled for the purposes of 'proof of concept'. These are:
- Options that place Peak Congestion Control Points on the inner ring road.
 - **Option 1**; on Grange Road, Queens Road and East Road.
 - **Option 2**; on Grange Road, Queens Road, East Road, Elizabeth Way and Maids Causeway.
 - Options that place Peak Congestion Control Points on key bus routes.
 - **Option 3**; on Hills Road.
 - **Option 4**; on East Road, Hills Road and Mill Road.
 - **Option 5**; on East Road, Hills Road, Mill Road and Coldhams Lane.
 - An option that is a combination of Options 1 and 5 above:
 - **Option 6**; on Grange Road, Queens Road, East Road, Hills Road, Mill Road and Coldhams Lane.

40. The six options are shown illustratively in Figure B1 in Appendix B, along with more detail on how the options were developed.
41. All of these options were tested as simple 'full peak period closure' schemes, allowing no general traffic access through any of the potential new Peak Congestion Control Points in the peaks. They do not therefore represent detailed proposed schemes; at this point in time they demonstrate the potential of the approach. Therefore before final implementation, they will be refined to ensure they meet the objectives of the City Deal and provide the correct balance of outcomes for all users.
42. Options 1, 5 and 6 show potential for significant improvements on the parts of the network that are most problematic for public transport journeys. The modelling work included an initial assessment of the potential for modal shift to public transport, walking and cycling as a result of the peak period closures in these three options. A summary of the initial assessment of the impacts of these three options on forecast traffic flows and on mode share of trips are detailed in Appendix B. Further detail is included in the Short List Report (see Background Papers below).
43. Options 2, 3 and 4 are not recommended to be taken forward as:
 - Option 2 was assessed as having too great a level of negative impacts for relatively little benefit over Option 1.
 - Option 3 was assessed as having only local benefits on Hills Road rather than the wider benefits seen in the other options.
 - Option 4 led to significant additional traffic on Coldhams Lane which would be difficult to deal with. By contrast, Option 5 redistributes this traffic onto routes where it is likely to be easier to deal with and therefore is preferred over Option 4.

Proposed experimental implementation of Peak Congestion Control Points

44. For the Peak Congestion Control Points, the most significant success factors will be the extent to which travellers change their behaviour and the reliability of bus services is improved. Modelling can only go so far in predicting these behavioural changes.
45. The implementation of a small number of Peak Congestion Control Points is relatively simple, and they could be 'refined' on the ground relatively easily. Given the challenge of accurately predicting how people will respond, and the fact that there is a pressing need to address current congestion, it is considered that an experimental approach is the best way to take this element of the proposed package forward.
46. Option 6 is most effective in reducing congestion in Cambridge but requires the greatest level of change in travel behaviour. Officers recommend that the Board agrees to present Option 6 as the preferred Peak Congestion Control Point option. Its implementation could be phased in order to allow drivers to adapt to the changes. Further work would be undertaken on the most appropriate phasing and this, together with further assessment of impacts, would be reported to the Board in January 2017.
47. The preferred option would then be worked up and tested via an experimental Traffic Regulation Order for implementation from late 2017. The experimental order process permits some phasing of interventions to be introduced and tested during the trial.

Early provision of extra capacity for public transport, walking and cycling trips

48. Initial work has been undertaken to identify the additional capacity in the public transport network that could be available in 2017 alongside the experimental implementation of Peak Congestion Control Points.

- Cambridge North Station will be open from May 2017.
- Initial assessment indicates that the five Cambridge and two Busway Park and Ride sites currently have spare parking capacity that could cater for at least 60% of the total mode shift away from car use for trips into the city that might be seen with the Peak Congestion Control Points if a scheme were implemented in 2017.
- Stagecoach currently deploys additional vehicles to try and maintain service frequency in congested conditions. Removing congestion on key routes would give an immediate improvement in reliability for these services and opportunity for the additional vehicles to be used to increase frequency of services or to be deployed on new routes.
- In addition, the bus companies have indicated that, given sufficient notice, they would provide extra buses and increased frequencies to meet the demand from the day of implementation.

49. As the Peak Congestion Control Point proposals were worked up, opportunities to reallocate road space to provide better facilities for public transport, pedestrians and cyclists or to improve the public realm would be investigated. However, permanent implementation of such schemes would probably need to be delayed until after the experimental order period when any permanent changes had been confirmed.

Workplace Parking Levy

50. In order to deliver high quality public transport, revenue funding is needed. The Greater Cambridge City Deal delivers significant amounts of infrastructure funding from Government, but no revenue funding. It is therefore recommended that the introduction of a Workplace Parking Levy (WPL) should be an integral part of the overall Congestion Reduction package, as this would provide an on-going income stream that would then be invested in transport in the Greater Cambridge area to meet the transport needs of employers and employees.
51. The WPL proposal is modelled on the approach taken in Nottingham. A potential Cambridge WPL zone based on the Nottingham approach is shown in the map in Appendix B. The Nottingham scheme covers employers' premises where there are more than 10 parking spaces in use – which broadly equates to the largest 10% of employers in Nottingham. Between them, these employers account for around 63% of workplace parking capacity in Nottingham. Small employers are therefore not affected.
52. The Nottingham scheme charges employers £1.50 per weekday per car park space. The employer may or may not choose to pass that on to its employees; the experience in Nottingham is that many do.
53. A bespoke Cambridge scheme developed on similar principles would be expected to generate revenue of £7-11M per annum. It is important to note that the main impact of WPL on congestion is in its ability to bring in funding that can be invested in the provision of additional transport capacity. On its own, a WPL would not be expected to reduce congestion and improve network conditions significantly. Nottingham has forecast a reduction in traffic growth of 7% as a result of its WPL.
54. If the Board agrees to pursue the recommended package, a Cambridge scheme would be developed engaging with employers ahead of consultation in 2017.

On-street parking controls including Residents' Parking Zones

55. Further expansion of on-street parking controls including Residents' Parking zones would reduce the availability of on-street commuter parking, to help to ensure that trips not directly affected by the Peak Congestion Control Points do not increase, in

particular where the implementation of WPL results in displacement of parking onto neighbouring streets.

56. The Greater Cambridge City Deal Executive Board is not responsible for the policy on Residents' Parking in Cambridge. Instead, that policy is made by the County Council and implemented by the Cambridge Joint Area Committee (CJAC); a joint committee of the County and City Councils. CJAC is currently reviewing Residents' Parking Policy in Cambridge. Officers recommend that the Executive Board works with CJAC on the review of the policy, timescales for which are set out in Appendix B. It could be appropriate for the Greater Cambridge City Deal to fund the implementation of new Residents' Parking zones if they assist in meeting objectives for City Centre access.

Potential timescales for the delivery of the Congestion Reduction package

57. Parts 2 and 3 of Appendix B set out potential timescales for the implementation of the proposed Congestion Reduction package.
58. There could be experimental implementation of Peak Congestion Control Points from late 2017.
59. With the advantage of experience gained in Nottingham, a Workplace Parking Levy could be implemented in 3 years, subject to statutory processes.
60. If, following the public and stakeholder engagement on the Congestion Reduction package set out herein, the Board wishes to progress the package, the elements of the approach would be worked up in detail. Work would be undertaken to develop and refine Peak Congestion Control Point options that would be tested experimentally. Further modelling of the approach and the Congestion Reduction package would be undertaken, and optimised solutions sought. Opportunities for reallocation of road-space around experimental Peak Congestion Control Points would also be identified.
61. Implementation of the Peak Congestion Control Point options would initially be through the use of an Experimental Traffic Regulation Order for up to eighteen months. There would be no formal public consultation on the detail of proposals prior to implementation, as the formal public consultation would be undertaken during the experiment period, allowing people to judge and comment on the impacts directly.

Links with the prioritised Tranche 1 programme

62. Cities that have had the most obvious success in catering for new travel demand without gridlock are typically characterised by the ability of large numbers of people to travel on the public transport network or by bike or on foot more effectively and reliably than in a car. However, even in these places, congestion remains.
63. The proposed Congestion Reduction package relies upon additional non-car transport capacity being provided to cater for displaced car trips reliably and conveniently by public transport, walking and cycling. The demand management measures in the Congestion Reduction package will only succeed if this capacity is provided. The proposed package outlined above and the proposed infrastructure schemes already in development therefore provide a comprehensive package and are not alternative approaches.
64. The Greater Cambridge City Deal's wider transport programme will deliver the infrastructure needed for this capacity to be provided. Work on the Access Study has not identified options for managing demand within the city that would remove the need for other City Deal interventions, such as the Milton Road, Histon Road or Cambourne to Cambridge schemes in tranche 1 of the programme.

65. The timetable in Part 3 of Appendix B sets out how Greater Cambridge City Deal Tranche 1 scheme implementation might tie in with the implementation of the proposed Congestion Reduction package.

Links with Tranches 2 and 3 of the Greater Cambridge City Deal programme

66. The detail of the proposed Congestion Reduction package if and when worked up would inform the programming of the Tranche 2 and 3 programmes.

Access Study Short List Report

67. The Short List Report produced by Mott MacDonald as part of the Cambridge Access Study (see Background papers below) takes stock of the outcomes of the Call for Evidence Report and the Long List Report. It considers in more detail the interventions that were shortlisted. Work on the Short List Report directly informed the development of the Congestion Reduction package. The Short List report contains further more detailed analysis of the shortlisted interventions.

Potential alternatives to the proposed package

68. The Access Study has considered numerous policy approaches and potential schemes, including the 365 individual suggestions made by respondents to the Call for Evidence on tackling congestion. The process by which these policy approaches and schemes have been assessed is set out above.

Congestion charging

69. An alternative option that might achieve similar benefits to the proposed Congestion Reduction package would involve the introduction of a congestion charging scheme. This policy approach could be similar to the proposed package, but would replace the WPL, and potentially some Peak Congestion Control Points and on-street parking controls with a congestion charge. A morning peak period congestion charge of £5 would be likely to raise £40-44M per annum.
70. A congestion charge would be likely to be effective in reducing car journeys, and would allow for a greater level of investment in alternative capacity, but it would also involve a greater financial burden on individuals, particularly those living outside the City, than the proposed Congestion Reduction package in order to be effective. It would be likely – dependant on the type of charging scheme – to affect all drivers in the city during its hours of operation.
71. Given its wider impacts, a congestion charge would have greater dependency on the delivery of supporting infrastructure to provide new non-car capacity that would require a longer period before implementation, with an attendant delay in realising benefits. It would also be more costly to implement and more costly and onerous to run, and would penalise people who might not have alternative choices to travelling by car in the charging zone.
72. On the basis of experience in London, it is also likely that a charge would need to rise at a much faster rate than inflation to maintain the benefits of a scheme. The price of the London scheme doubled from £5 to £10 in the eight years after it came into effect in 2003, and it is now £11.50.
73. A feature of the London scheme is that while traffic levels have reduced, traffic speeds have still declined in the period since the scheme was implemented. However, Transport for London considers that this is due to measures that they implemented to

improve the urban environment, increase road safety and prioritise public transport, pedestrian and cycle traffic, which have reduced the capacity of the road network.

74. In a Cambridge context, similar reallocation of road space, such as more bus lanes or even Peak Congestion Control Points, might still be required to achieve the levels of public transport service and reliability needed to deliver the overall outcomes that are sought.

Iterations of the proposed Congestion Reduction package or of a Congestion charging policy approach

75. Both the recommended Congestion Reduction package and the alternative congestion charging-based package could be varied in a number of different ways. Elements could be added or removed from either package. While this might lead to packages that were perceived as easier to agree and implement, packages that removed elements would be less likely to achieve the transport vision of Greater Cambridge and the transport objectives of the Greater Cambridge City Deal. For example, removal of the WPL from the proposed Congestion Reduction package would have two main negative impacts

- It would remove the revenue stream that would permit further investment in public transport services and further infrastructure to improve non-car options.
- It would remove a cost factor that might encourage modal shift.

'Do-nothing'

76. This is not recommended. Modelling undertaken in support of the Cambridge and South Cambridgeshire Local Plans indicated that a do-nothing approach would result in a more than 30% increase in traffic, and time spent in congested conditions more than doubling by 2031. It was clear from the Call for Evidence that there is a general acceptance that there are significant problems on the transport network, and that with planned growth, interventions are needed to ensure the transport network continues to support the area's economy and caters for an increasing demand for travel.

Other options that were suggested in the Call for Evidence but are not recommended to be taken forward

Tunnels

77. Tunnelling options are not recommended to be taken forward primarily due to high costs and impracticality. The Access Study considered indicative costs of a system involving four tunnel portals and around 5,000 yards of bus tunnel underneath the city centre. Using the cost of the Limehouse Link tunnel in London's Docklands as a benchmark, and adjusting for inflation, this system would be likely to cost around £1.15B. Tunnel portals would need a large amount of space; it is highly doubtful that three of the portals shown in the option considered by Mott MacDonald could be delivered. Alternative locations for such portals in Cambridge are not obvious. Officers do not believe that an affordable, practically deliverable bus tunnel scheme is possible.

'Inbound flow control'

78. Inbound flow control or 'gating' could potentially deliver congestion relief, although there is a high risk that it would fail in this regard as it would allow the release of suppressed demand for travel by car within the city. The impact would fall only on drivers from outside of Cambridge, who typically have fewer alternative travel options available to them. It would not provide good alternative travel options to those

travelling from outside the city while it would allow those within the city to travel more easily. It is also unclear how the system would work in the evening peak period.

Public and stakeholder engagement, July to October 2016

79. It is recommended that the proposed Congestion Reduction package be communicated to the public using a variety of activities, media channels, and materials from July to October 2016.
80. This engagement would set out clearly the proposed Congestion Reduction package and the reasoning behind it, and invite qualitative feedback on it. This feedback would be recorded and collated and fed back to the Joint Assembly and Executive Board at their January 2017 meetings. At this point, the Executive Board would be asked to consider whether to progress the Congestion Reduction package.
81. The July – October 2016 public and stakeholder engagement would focus on:
 - Engaging with people on the proposed Congestion Reduction package, on what it involves, how it fits together and what it aims to achieve, seeking to build their understanding of it and listening to their feedback.
 - Communicating how the Call for Evidence and Access Study informed the development of the proposed Congestion Reduction package.
 - Communicating how, when and by whom the different elements of the Congestion Reduction package would be implemented.
 - Involving stakeholders in the development of the detail of proposals.
82. This will provide the public and stakeholders with a full understanding of the proposed Congestion Reduction package, the policy approach behind it, and the future benefits of the package, informing their feedback to the engagement process.
83. Engagement activities and materials will be prepared, held and disseminated in a wide variety of platforms, locations and media to ensure an inclusive and proactive participation from the spectrum of audiences that would currently or in the future benefit from or be affected by the proposed Congestion Reduction package.
84. Appendix D provides details of the consultation and engagement principles that apply to transport infrastructure schemes delivered by the Greater Cambridge City Deal.

Options

85. In considering the recommendation in this paper, a number of options are available to the Executive Board.
86. Recommendation b): the Board could:
 - Agree the proposed Congestion Reduction package
 - Request that further work is undertaken to develop further the proposed Congestion Reduction package, instead of agreeing it now
 - Ask officers to work up a different policy option or options
 - Make minor changes to the proposed package while keeping to the current timescale. The scope for such changes is likely to be limited while maintaining the planned timescales.
87. Recommendation c): the Board could:
 - Agree the public and stakeholder engagement proposals and timescales.
 - Defer the start of the public and stakeholder engagement proposals to September, allowing more detail to be worked up and presented.

88. Recommendation d):
- Officers consider that an experimental implementation would be the most effective way of introducing and gauging the impact of the Peak Congestion Control Point options, and would give the flexibility to quickly modify or iterate the Peak Congestion Control Points to achieve better results. Officers recommend that the Board does not accept recommendation b) as it stands if it does not also accept recommendation d).

Implications

89. 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

90. The proposed Congestion Reduction package would lead to expenditure on the development and implementation of the measures included in it. Through the Workplace Parking Levy it would bring a revenue stream that could generate £7-11M per annum that would be invested in transport infrastructure and services.
91. There could be a need to identify revenue funding to pump prime the early delivery of new public transport services ahead of the introduction of the Peak Congestion Control Points and again before the introduction of the Workplace Parking Levy.

Legal

92. Specific statutory processes related to delivery of specific interventions are referred to in the report and appendices.

Staffing

93. Recruitment processes are underway for delivery team staff for the Cambridge Access programme. For a Workplace Parking Levy, the option to buy in expertise from Nottingham is also available and is recommended.

Risk Management

94. The proposed Congestion Reduction package has a number of strands that fit together, and includes some challenging measures that are likely to lead to much public and stakeholder interest. Effective communication and clear messaging will be needed and the public and stakeholder engagement will need to be open and well managed.
95. The experimental introduction of the Peak Congestion Control Points offers an opportunity to test and tweak the scheme. However, as the scheme relies on behaviour change, time may be needed for new travel patterns to become established, and resolve may be needed to stay with the scheme while this happens.

Equality and Diversity

96. The proposed Congestion Reduction package seeks to avoid interventions that would have unfair implications for residents of different areas and to avoid any social impacts. Nonetheless, care would be needed in the detailed design of the Peak Congestion Control Point, Workplace Parking Levy and on-street parking proposals to ensure such impacts were not realised.

97. The options of road pricing and of flow control by 'gating' have not been recommended to be taken forward in part because they would have differential impacts in Cambridge and South Cambridgeshire that could be seen as discriminating against South Cambridgeshire residents who worked in the city.

Climate Change and Environmental

98. If the proposed Congestion Reduction package is successful in achieving mode shift away from the private car to public transport, walking and cycling, transport emissions in the Greater Cambridge area will be reduced.

Consultation responses and Communication

99. The report details the responses and presentations that were made Call for Evidence on Tackling Congestion in Cambridge in November 2015. Proposals for public and stakeholder engagement on the proposed Congestion Reduction package between June and October 2016 are also detailed. Appendix D details the Greater Cambridge City Deal's engagement principles.

Background Papers

Cambridge Access Study

The Cambridge Access Study web page can be found at:

http://www.gccitydeal.co.uk/citydeal/info/2/transport/1/transport_projects_and_consultations/6

The following reports are available on this webpage:

- Audit Report (July 2015)
- Call for Evidence Analysis (May 2016)
- Long List Report (May 2016)
- Short List Report (May 2016)

Call for Evidence

In addition, further details of the Call for Evidence can be accessed from the Cambridge Access Study web page, including:

- Written submissions to the Tackling Congestion: Call for Evidence.
- Presentations made at the Tackling Congestion: Call for Evidence hearings.
- Initial Summary of the evidence received, including notes of the Tackling Congestion: Call for Evidence hearings and of the 'Traffic Generators' meeting.
- Presentations made at the 'Traffic Generators' meeting.

Greater Cambridge City Deal transport infrastructure programme

First tranche Great Cambridge City Deal transport schemes, 2015/16 to 2019/20

<http://www.gccitydeal.co.uk/citydeal/info/2/transport/9/transport/2>

Transport policy context

Third Cambridgeshire Local Transport Plan 2011-2031

Policies and Strategy document

<http://www.cambridgeshire.gov.uk/ltp>

Long Term Transport Strategy document

<http://www.cambridgeshire.gov.uk/lts>

Transport Strategy for Cambridge and South Cambridgeshire

The Transport Strategy for Cambridge and South Cambridgeshire can be viewed at:
<http://www.cambridgeshire.gov.uk/tscsc/>

Planning policy context

Local Plans

Cambridge Local Plan

<https://www.cambridge.gov.uk/local-plan-review>

South Cambridgeshire Local Plan

<https://www.scambs.gov.uk/ldf/localplan>

Report Author: Bob Menzies,
Director of Strategy and Development
Cambridgeshire County Council
Telephone: 01223 715664

List of Appendices

- Appendix A:** Call for Evidence main themes
- Appendix B:** The proposed Congestion Reduction package
- Appendix C:** Shortlisted interventions from the Access Study
- Appendix D:** Engagement principles

Appendix A Summary of main themes and ideas raised by respondents to the Call for Evidence

Theme / Suggestion	Number of representations
Demand Management & Fiscal Measures	
Further limiting access to the city centre and further Selective Road Closures (Includes: extension of Core Scheme, pedestrianisation etc.)	14
Further Parking Controls (Includes: more residents parking zones, reductions in city centre car parks, reduction in free street parking)	20
Road Pricing (Includes: Congestion charge – various forms suggested for testing)	22
Workplace Parking Levy (Includes: taxing private non-residential parking in the city)	8
'Gating' and Queue Redistribution	4
Tourist Tax	2
Technology	
Smart Traffic Management (Includes: syncing signals more efficiently and further use of SCOOT system)	10
Data Collection Tools	2
Smart Card Tickets, RTPI, Journey Planning etc. (Includes: multi-modal, multi-operator tickets too)	5
Autonomous Vehicles	2
Public Transport Infrastructure & Service Improvements	
Bus Lanes, Tidal-flow Bus Lanes, Bus Priority Measures	10
Bus Rapid Transit	5
More Attractive Bus Journeys (Includes: reliability, nicer buses, quality bus partnerships and contacts)	16
Rail Investment (Includes: new stations, re-opening old lines, increasing capacity)	5
Underground Public Transport Systems (Includes: tunnelling for buses, metros etc.)	9
Transport Hubs & Interchanges (Includes: new ones, upgrades to existing and linking of modes)	9
Upgrading/Improving Park and Ride (Includes: Removing charge, new P&R sites, extending capacity of current sites, longer operation of services and free/discounted travel on P&R)	28
Infrastructure Improvements for Active Modes	
Enhanced Cycle Networks (in/from rural areas) (Includes: more cycle lanes, more segregation of cycle lanes, links to services and Cambridge, joining the villages etc.)	17
Enhanced Cycle Networks (urban/city) (Includes: more cycle lanes, more segregation of cycle lanes)	25
Further Cycle Priority at Junctions (Includes: priority at junctions etc.)	11
Cycle Parking (Includes new city centre facility, additional, secure racks at businesses/schools/leisure etc.)	11
Improved Pedestrian Facilities	7

Theme / Suggestion	Number of representations
Highway Capacity Enhancements	
Junction Improvements (Includes: measures aimed at traffic flow improvements)	9
New Roads (Includes: orbital movements to the east of the city and a southern relief road)	6
Re-Classify Roads by Use	1
Promote / priority for Motorcycles/Scooters (Includes use of bus lanes)	3
Behavioural Change	
Last Mile Delivery & Consolidation Points and More Management of Delivery Vehicles (Includes reducing freight/HGVs etc.)	9
Tackling School & Sixth Form Traffic (Includes. using P&R sites as drop-off pick up, spreading hour of opening)	15
Peak hour spreading (Includes business hour change)	5
Car Clubs & Car Sharing	4
Low Emission Vehicles (Includes: electric vehicles, driverless vehicles etc.)	2

Appendix B: The proposed Congestion Reduction package

Tackling Cambridge's Congestion

The Strategy and vision for Greater Cambridge

Local Plans for Cambridge and South Cambridgeshire set out the vision for sustainable growth in the Greater Cambridge area to 2031. The Transport Strategy for Cambridge and South Cambridgeshire was developed in parallel with the Local Plans and sets out the strategy approach and infrastructure needed to address the transport demands that come with the planned growth in a sustainable way. The Greater Cambridge City Deal supports these plans, by ensuring the transport infrastructure needed can be delivered. The strategic objectives of the City Deal are:

- to nurture the conditions necessary to enable the potential of Greater Cambridge to create and retain the international high-tech businesses of the future;
- to better target investment to the needs of the Greater Cambridge economy by ensuring those decisions are informed by the needs of businesses and other key stakeholders such as the universities;
- to markedly improve connectivity and networks between clusters and labour markets so that the right conditions are in place to drive further growth; and
- to attract and retain more skilled people by investing in transport and housing whilst maintaining a good quality of life, in turn allowing a long-term increase in jobs emerging from the internationally competitive clusters and more university spin-outs.

The transport vision for Greater Cambridge is that it should be easy to get into, out of and around Cambridge by public transport, by bike and on foot. The aim is that, despite the anticipated growth in journeys of about 30% by 2031, there will be a reduction in peak hour traffic of 10-15% by 2031, using 2011 as a baseline.

This aim is based on pragmatism as well as being grounded in national and local policy; there is not space on the transport network to cater for the increase in travel demand that will be seen with planned growth if travel behaviour does not move away from private car use.

The Greater Cambridge City Deal transport strategy objectives are:

- To ensure transport in Greater Cambridge supports economic growth and the continuation of the Cambridge Phenomenon
- To bring about a step change in the quality and reliability of public transport in Greater Cambridge by tackling congestion, investing in the infrastructure needed for quicker, more reliable public transport journeys and working in partnership with public transport providers.
- To reallocate road space to public transport, cycling and walking to encourage journeys using these modes and reduce traffic volumes.
- To encourage continued growth in the numbers of people cycling in Greater Cambridge.
- To use the opportunities from road space reallocation, congestion reduction, and infrastructure projects offer to improve air quality, the public realm and the historic and natural environment.

Part 1: The Proposed Package

The proposal on which engagement would take place in the summer and autumn 2016 will be a package of measures to reduce peak time traffic flows and congestion, improving bus reliability, conditions for cyclists and pedestrians, and creating opportunities to improve the public realm. The package consists of the following elements.

- Better bus services and expanded usage of Park and Rides
- Better pedestrian and cycling infrastructure
- Better streetscape and public realm
- Peak Congestion Control Points in the weekday morning and evening peak periods
- A Workplace Parking Levy
- On-Street Parking Controls (including Residents' Parking)
- Smart Technology
- Travel Planning

The following sections describe each element of the proposed package.

1 Better public transport

A key objective of the proposed Congestion Reduction package is to remove congestion on the key bus corridors, which would result in an immediate improvement in bus reliability and reduced journey times. Tranche 1 of the Greater Cambridge City Deal already includes significant infrastructure to improve bus journey times and reliability on key routes into Cambridge from new settlements. The Cambourne to Cambridge, A1307 and Western Orbital schemes all include consideration of new Park and Ride provision.

Stagecoach currently deploys additional vehicles to try and maintain service frequency in congested conditions. Removing congestion on key radial and city centre routes would give an immediate improvement in reliability and frequency for services that use these routes and opportunity for the redeployment of the extra vehicles on new routes. In addition, the bus companies have indicated that, given sufficient notice, they would provide extra buses and increased frequencies to meet the demand from the day of implementation of the Peak Congestion Control Points element of the proposed Congestion Reduction package.

Initial assessment indicates that the current five Cambridge and two Busway Park and Ride sites have spare parking capacity that could cater for the total mode shift away from car use for trips into the city that might be seen with the Peak Congestion Control Points if implemented in 2017. In reality, rail, cycling and other bus services would also cater for many of these trips. However, additional buses are likely to be needed to cater for the shift away from car use; these could be on new routes or supplement existing Park and Ride services. Additional Park and Ride car park capacity will still be needed to cater for future growth. Advance funding of further service enhancements prior to the implementation of a Workplace Parking Levy (WPL) would also need to be considered.

Potential new interchange sites that might be relatively quickly developed would be identified as part of the development of the proposed Congestion Reduction package, including adjacent to railway stations in the Greater Cambridge area and beyond. WPL could be used to fund this infrastructure.

The new Cambridge North Station will open in May 2017. This will eliminate the need to cross the city to access the rail network, and will allow access to employment in North Cambridge by rail. The Access Study also includes the proposed new station to serve Addenbrooke's, the Biomedical Campus and the south of the city in the shortlist of interventions to tackle congestion in the city.

2 Better cycling infrastructure

The Peak Congestion Control Points will reduce traffic on key routes in Cambridge resulting in an immediate improvement in conditions for cyclists. Opportunities for quick wins for cyclists will be identified, such as the re-allocation of road space.

High quality cycling infrastructure to enable people to cycle easily and safely around Greater Cambridge is already being delivered with Cycle City Ambition Grant schemes either complete or being implemented this year. Tranche 1 of the Greater Cambridge City Deal includes the Chisholm Trail and Cross-City cycling routes. All other tranche 1 schemes, and moving forward, tranche 2 and 3 schemes include significant new cycling facilities.

A proposal is being developed to provide a comprehensive network for commuting into Cambridge from surrounding settlements. WPL could be used to fund this infrastructure.

3 Better streetscape and public realm

The removal of traffic in the busiest periods from key routes would allow for improvements to the streetscape and public realm. Where less space is needed for motor vehicles, and where maximum throughput of vehicles is no longer the key factor, a better balance between movement and place can be achieved.

Opportunities for improvements would be identified as part of the proposed Congestion Reduction package development. The permanent implementation of such measures would be as part of the final implementation of a Peak Congestion Control Point scheme, if it were confirmed following the trial implementation using the experimental Traffic Regulation order process.

4 Peak Congestion Control Points in the weekday morning and evening peak periods

To provide the road space needed to increase the capacity and reliability of bus services, improve conditions for pedestrians and cyclists and manage congestion, Peak Congestion Control Points in and around the city centre would limit access to buses, cyclists, and taxis in the peak periods. The Peak Congestion Control Points would be located at key points on the network, with the aim of using the minimum number of restrictions to give the maximum traffic reduction effect across the widest part of the network. The closures will limit cross city car journeys, which have the greatest impact on congestion.

Six Peak Congestion Control Point options have been subject to initial testing. These are shown indicatively in Figure B1 and are as follows:

- Options that place Peak Congestion Control Points on the Ring Road.
 - **Option 1**; on Grange Road, Queens Road and East Road.
 - **Option 2**; on Grange Road, Queens Road, East Road, Elizabeth Way and Maids Causeway.
- Options that place Peak Congestion Control Points on key Bus Routes.
 - **Option 3**; on Hills Road.
 - **Option 4**; on East Road, Hills Road and Mill Road.
 - **Option 5**; on East Road, Hills Road, Mill Road and Coldhams Lane.
- An option that is a combination of the two approaches above.
 - **Option 6**; on Grange Road, Queens Road, East Road, Hills Road, Mill Road and Coldhams Lane.

Options 1 and 2 were proposed to test the concept of cutting the ring road to prevent through movements. Option 1 effectively cuts the ring road in two places (East Road is informally the Inner ring road). Option 2 cuts it in three places.

Options 3, 4 and 5 were proposed to test the concept of reducing general traffic on key routes for public transport, walking and cycling where congestion is particularly problematic. Option 3 focuses specifically on Hills Road which is the busiest road in the city for buses, and also one of the most congested, particularly in the evening peak period. Options 4 and 5 iterate from Option 3 to manage where traffic is displaced to. Both Options 4 and 5 also cut East Road; informally the inner ring road.

Option 6 combines Options 1 and 5 to see if the benefits from both could be achieved without severe negative impacts.

Of these six options:

- **Option 1** would provide benefits in the north of the city but less so in the south.
- **Option 2** was assessed as having too great a level of negative impacts for relatively little benefit over Option 1.
- **Option 3** would provide local benefits on Hills Road rather than the wider benefits seen in the other options.
- **Option 4** provides good benefits on East Road, Hills Road and East Road, but would lead to significant additional traffic on Coldhams Lane that would be difficult to deal with.
- **Option 5** is an iteration of Option 4, and redistributes this traffic away from Coldhams Lane onto routes where it is likely to be easier to deal with and therefore is preferred over Option 4.
- **Option 6** is most effective in reducing congestion in Cambridge but requires the greatest level of change in travel behaviour.

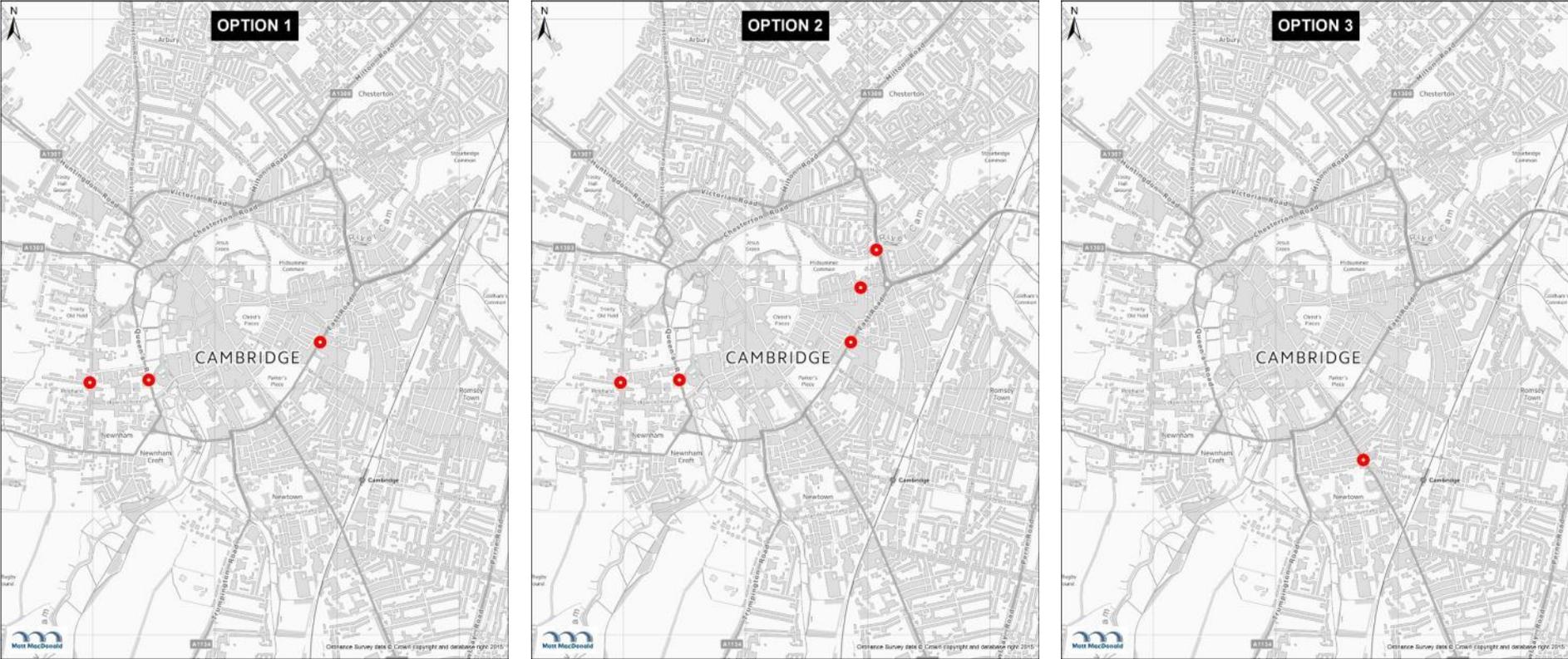
On the basis of the initial assessment, the benefits seen in Options 1, 5 and 6 are worth pursuing. Option 6 provides the greatest level of benefits, and the level of behaviour change that might be facilitated by this option is likely to be needed to cater for the population and economic growth occurring in the Greater Cambridge area.

The most significant success factor will be the extent to which travellers change their behaviour, and transport modelling can only go so far in predicting these behavioural changes. The implementation of a small number of Peak Congestion Control Points is relatively simple, and they could be 'tweaked' relatively easily. Given the challenge of accurately predicting how people will respond, and the fact that there is a pressing need to address current congestion, it is considered that an experimental approach is the best way to take this element of the proposed Congestion Reduction package forward.

Initial public and stakeholder engagement in the summer / autumn of 2016 would focus on effectively communicating the proposed Congestion Reduction package and the role of Peak Congestion Control Points in it. More detailed technical work would be undertaken to refine a Peak Congestion Control Points scheme that could be tested through an Experimental Traffic Regulation Order from late 2017. This work would include consideration of variations of the closure points by location, time, and whether all movements would be barred. Potential options for phasing of implementation to allow drivers to adapt to the changes would also be investigated. This work would be reported to the Executive Board in January 2017.

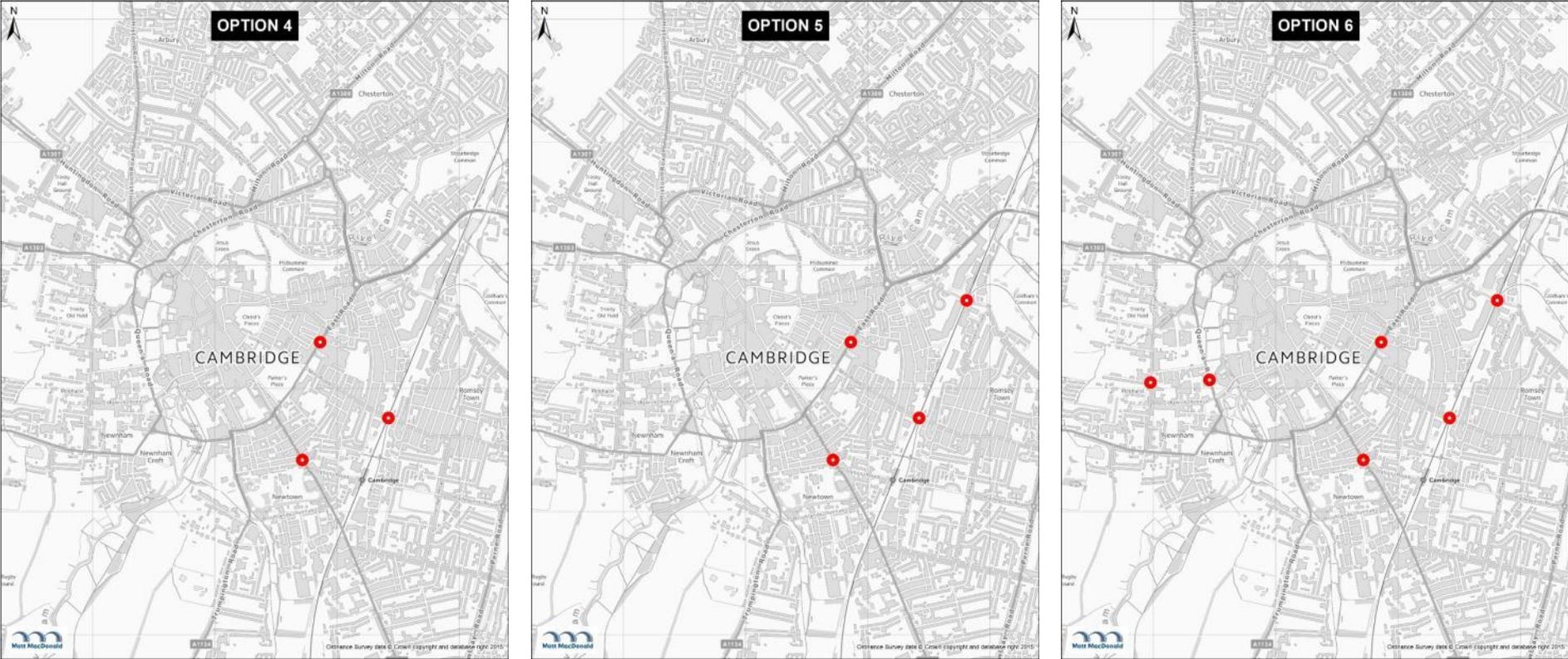
The experimental approach would take place without further formal public consultation prior to implementation, although informal consultation would take place with the emergency services, bus operators, the Road Haulage Association and Freight Transport Association as required by the regulations. Public consultation on the experiment would take place post implementation. Details of the experimental Traffic Regulation Order process would be set out in the engagement on the proposed package from July 2016.

Figure B1: Peak Congestion Control Point options 1, 2 and 3
(Control point locations shown are indicative only)



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Figure B2: Peak Congestion Control Point options 4, 5 and 6
(Control point locations shown are indicative only)



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It is proposed that for the experiment the closures would only operate Monday to Friday from 7am to 10am, and from 4pm to 6:30pm. These times are proposed to minimise the number of drivers that seek to travel earlier or later to avoid the closures. The procedures do allow for the experiment to be varied, but it is better to aim for a more onerous restriction and relax it if necessary than the other way round. These details may be refined as part of the development of the Peak Congestion Control scheme.

To permit enforcement by Automatic Number Plate Recognition cameras, the closure points would be designated as bus gates. The County Council will be replacing the existing rising bollards in the city with camera enforcement in the 2016/17 financial year and already has in place arrangements for purchasing equipment and operating camera enforcement.

It is proposed that access through the closure points would be limited to: cyclists, scheduled service buses, local taxis, and emergency vehicles. These are the groups permitted through the existing core scheme closure points.

The current Cambridge core traffic scheme allows private hire cars access through the existing closure points; however it is considered that this may not be appropriate for these closures. It is relatively simple and cheap to register a vehicle as a private hire car with no obligation to accept a hire and where apps such as Uber have been deployed there have been large increases in numbers of private hire cars.

As with the current core scheme vehicles would need to be registered and authorised to use the closure points. Unauthorised vehicles would be liable to a penalty charge. Disabled drivers would not be exempt. As with the core traffic scheme, in special circumstances exceptional authorisation may be permitted; for example, in the case of a doctor's surgery in close vicinity to a closure point.

The closure points would be sited at, or close to, points where vehicles can turn, with appropriate signs in place both at the closure point and in advance. The existing system of Variable Message Signs will be used to give advance warning of the closures, and would be augmented if necessary.

5 Workplace Parking Levy

A Workplace Parking Levy (WPL) would act with smart Peak Congestion Control Points to further reduce numbers of commuter car trips to employer's premises in Cambridge and help to ensure that car trips not directly affected by the Peak Congestion Control Points do not increase. However, the primary purpose of the WPL would be to bring a revenue stream that would fund infrastructure and sustainable transport improvements, including supporting public transport provision. This investment would be targeted at sustainable transport capacity that would provide for the travel demand of employers.

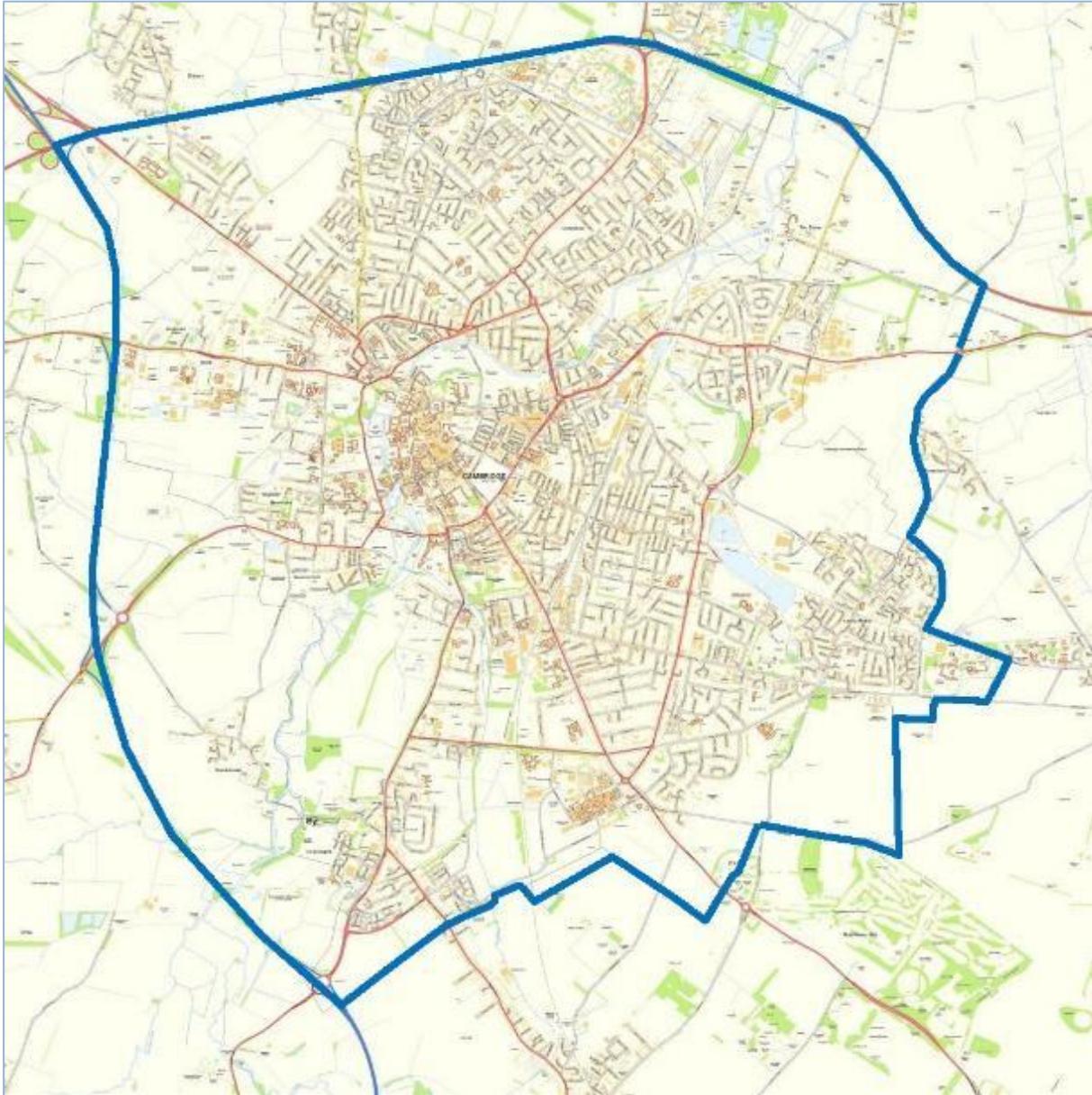
The proposal for engagement on WPL as part of the package will use the successful Nottingham scheme as an illustrative example, including Nottingham's charging levels, exemptions for small businesses, licensing and enforcement arrangements. In the Nottingham scheme exemptions for those with ten or fewer spaces mean that only 10% of employers are required to pay the levy; however these employers have around 63% of the workplace parking spaces in Nottingham.

The annual charge per parking space in Nottingham is £375 (equivalent to £1.50 per working day). If this figure were applied to Cambridge, a WPL scheme could raise revenue in the order of £7m to £11m per annum.

The levy is applied to spaces actually used. Employers apply for a license for the spaces they use, including exempt spaces, and the Council regularly monitors usage to establish that the number of spaces is correct. Visitor and customer parking are excluded.

Nottingham City Council applies WPL to the whole city. A proposed zone covering Cambridge and adjoining urban fringes in South Cambridgeshire is shown on the map in Figure B3.

Figure B3 Proposed zone for a Workplace Parking Levy for Cambridge



The area is bounded to the north by the A14 and to the west by the M11. All of Cherry Hinton is included; in addition, in the vicinity of Addenbrooke's and Cherry Hinton the area includes the identified South Cambridgeshire Local Plan Allocations that adjoin the boundary with the City. The WPL would therefore cover the Cambridge City area, excluding the small areas to the north of the A14 and the west of the M11, and include those parts of South Cambridgeshire within the A14 and M11, and that are allocated for development in the fringe areas in the draft South Cambridgeshire Local Plan.

The proposed Congestion Reduction package engagement over the summer / autumn of 2016 would include a programme for adapting the Nottingham scheme to ensure it is appropriate to the Cambridge conditions; this would include consideration of:

- Setting of charging levels.
- Exemptions.
- Licensing.
- Enforcement.

The final scheme would be subject to further consultation prior to introduction.

It is a requirement of the legislation (Transport Act 2000) that the package of measures to be funded from WPL needs to be set out, and must be:

“for application by the authority for the purpose of directly or indirectly facilitating the achievement of policies in the authority’s Local Transport Plan.”

The authority as defined by the legislation is Cambridgeshire County Council, as the local traffic authority. The Greater Cambridge City Deal programme is drawn from the Third Cambridgeshire Local Transport Plan 2011-2031 (LTP3) and from the Transport Strategy for Cambridge and South Cambridgeshire, which is part of the LTP3 suite of strategy documents. While the legislation would technically allow revenue to be spent anywhere in Cambridgeshire, for the avoidance of doubt, it would be spent in the Greater Cambridge City Deal on transport measures that directly benefit businesses / employers in the area, and focussed as noted below.

The detailed package of measures to be funded from WPL would be developed through engagement with the business / employer community to ensure maximum support. At this stage it is proposed that the measures would focus on providing support for journeys to and from work, such as:

- Support for peak hour express bus services from major satellite settlements and orbital bus services.
- Support to reduce the cost of smartcard season tickets.
- Further enhancements to the cycle network.
- Additional Park and Ride capacity.
- Support for travel planning with schools and employers.

These measures would directly facilitate the achievement of policies in the Third Cambridgeshire Local Transport Plan.

6 On Street Parking Controls

Further expansion of residents parking and on-street parking controls would reduce the availability of on-street commuter parking. It would help to ensure that trips not directly affected by the Peak Congestion Control Points do not increase, and would ensure that any displacement of parking onto neighbouring streets due to either the Peak Congestion Control or the WPL Points could be managed.

The County Council is responsible for on-street parking policy. The Implementation of that policy is delegated to the Cambridge Joint Area Committee (CJAC), a joint Committee with Members from the City and County Councils. CJAC is currently reviewing the County Council’s Resident’s Parking Policy and their programme is set out in Figure B4.

Charges for permits would remain as it is unlikely to be acceptable to business to cross subsidise residents’ parking from WPL, and no other revenue funding is available. To appropriately manage the impact of changes on local businesses, and in accordance with the current policy, short stay pay and display parking would be provided at appropriate locations.

Figure B4 Timetable for CJAC review of Residents Parking Policy

Milestone Date	Milestone No.	Milestone Description
7th June 2016	1	CJAC – Agree Terms of Reference & Scope
26th July 2016	2	CJAC – Present progress report
25th October 2016	3	CJAC – Final Present of recommendations
8th November 2016	4	County Council Highways and Community Infrastructure Committee – Authorisation
January 2017	5	Implementation

7 Smart Technology

Use of technology and data gathering to provide information to improve journeys, particularly on public transport and through digital way finding and use of smart signals to facilitate bus priority and provide enhanced facilities for pedestrians and cyclists.

New equipment may allow for localised improvements to capacity, but significant increases in network capacity should not be expected. New and replacement traffic signals introduced as part of infrastructure schemes will give priority to buses, pedestrians and cyclists. Existing traffic signal operations and systems will be reviewed to take account of the reductions and changes in traffic flows arising from the implementation of the package.

The Smart Cambridge programme is developing proposals as part of the Greater Cambridge City Deal programme, and these will be implemented where appropriate as part of the Cambridge Access programme.

8 Travel Planning

A travel planning service would be made available to all businesses, schools, and individuals. This would help businesses, schools, and individuals to adapt to the changes, providing advice and support about alternative modes of travel, ways of working, travel information and support for changes to facilities, such as cycle parking.

Through Travel for Cambridgeshire this service is already provided, usually as part of a planning condition on new developments. This approach will be expanded to existing businesses and schools funded from WPL. Advanced funding prior to the introduction of WPL will be required.

Part 2: Potential delivery timescales

Figure B5 Notional delivery timescales for the Congestion Reduction package

Times are from 'in principle' decision to develop these aspects of the package following the initial consultation.

Item	Timescale	Notes
1 Better bus services and expanded usage of Park and Rides		
Better bus services	9 months – 1 year	<ul style="list-style-type: none"> Day 1 improvement in bus reliability and reduction in bus journey times from Peak Congestion Control Points. Subject to notice to operators- increase in bus services and new intermediate fare zone. Subject to revenue funding - additional service enhancements e.g. orbital services and express services.
Better bus infrastructure	2 years – 4 years	<ul style="list-style-type: none"> Tranche 1 schemes already under development.
New Park and Ride Sites	3-5 years	<ul style="list-style-type: none"> Requires site selection process, planning permission including heritage and environmental impact assessments, land acquisition. Note significant spare capacity in existing P&R sites.
2 Better pedestrian and cycling infrastructure		
Better conditions for cycling	9 months	<ul style="list-style-type: none"> Day 1 improvement in cycling conditions resulting from traffic reductions from Peak Congestion Control Points. Potential for experimental TROs to reallocate road space released.
Cycling infrastructure	immediate – 4 years	<ul style="list-style-type: none"> Tranche 1 cycling schemes already under development. First schemes delivered late 2016 – Cross City Cycling. Cycle City Ambition Grant schemes being delivered.
3 Better streetscape and public realm		
	Immediate – 4 years	<ul style="list-style-type: none"> Delivery will be linked to the timing of other schemes.
4 Peak Congestion Control Points in the weekday morning and evening peak periods		
Experimental	9 months – 1 year	<ul style="list-style-type: none"> Experimental TRO process No further pre-implementation public consultation.
Permanent	2 years	<ul style="list-style-type: none"> Standard TRO process Detailed scheme development, consultation and formal objection period prior to implementation.
5 Workplace Parking Levy		
	3 years – 5 years	<ul style="list-style-type: none"> Scheme parameters need to be developed. Consultation and formal Order process required.
6 On-Street Parking Controls (including Residents' Parking)		
	2 years+	<ul style="list-style-type: none"> Minimum time for TRO process. Actual time will depend on scale of expansion and level of consultation.
7 Smart Technology		
Better data and journey information		<ul style="list-style-type: none"> An ongoing process as technologies and systems become available
Smart traffic signals	9 months – 2 years	<ul style="list-style-type: none"> Reconfiguring existing traffic signals to changed conditions, depends on scope of changes. Timings can be reconfigured almost immediately. Changes to junction configuration requiring physical works take longer.
8 Travel Planning		
Travel planning	Immediate	<ul style="list-style-type: none"> Advice and support to businesses, schools and individuals, to help them adapt to the changed circumstances. Can be funded from WPL but will require funding in advance of implementation of measures.

Part 3: Notional time line for key decisions and implementation

Note that dates noted below for schemes in the proposed Congestion Reduction package are indicative only, and would be very likely to change as projects became more clearly defined.

Figure B6 Notional time line for key decisions and implementation

2016	July-Oct	Public and stakeholder engagement on Congestion Package
	Oct	Decision to Implement Chisholm Trail
	Nov	Decision to implement Cross City Cycling
2017	Jan	Decision to proceed with Congestion Package
	May	Opening of Cambridge North Station
	Aug	Cross City Cycling Schemes completed
	Sept	Start of Peak Congestion Control Points Experiment
	Oct	Decision to implement Histon Road scheme
	Nov	Tranche 2 programme approved
2018	Feb	Decision to implement Milton Road scheme
	Mar	Decision to implement Cambourne to Cambridge scheme
	Apr	Decision to implement A1307 corridor scheme
	Sept	Decision to implement Western Orbital Scheme*
	Oct	Implementation of additional on-street parking controls
2019	Jan	Decision to implement A10 North scheme*
	Feb	Histon Road Scheme completed
	Mar	Peak Congestion Control Points made permanent
	Dec	Decision to implement Workplace Parking Levy
2020	April	Tranche 2 funding received
	June	Milton Road Scheme completed
	June	Final stage of Chisholm Trail completed

*Subject to tranche 2 funding

Appendix C Shortlisted interventions from the Access Study
(44 total, including 30 suggested in the Call for Evidence)

Schemes in the shortlist that were suggested by respondents to the Call for Evidence are highlighted in **blue bold**.

Proposal		Recommendation
Proposals likely to be wholly deliverable in Tranche 1		
Demand Management & Fiscal Measures	Smart-Peak Congestion Control Points at existing key congested links	Included in the proposed Congestion Reduction package.
	Parking / loading controls on key bus routes	Would be considered as part of the development of the proposed Congestion Reduction package.
Technology	Coordinated, optimised and responsive UTC system	Included in the proposed Congestion Reduction package.
	Expansion of VMS network and real time travel information broadcasting	
Infrastructure Improvements for Active Modes	Provide good access and facilities at the start and end of key cycle paths	Principle will be worked across the GCCD Cambridge City Deal Programme.
	Improve walking routes between Public Transport nodes and key destinations	
	Increase cycle parking in City Centre core	Included in the proposed Congestion Reduction package.
Behavioural Change	Shuttle buses to collect school children at park and ride sites	Some services have been running for several years, and facilities at Trumpington have been recently expanded. Further opportunities will be sought.
Proposals that could commence in Tranche 1 but might take longer to deliver		
Demand Management & Fiscal Measures	Road space reallocation to non-car modes	Included in the proposed Congestion Reduction package.
	Road user charging	Not included in the proposed Congestion Reduction package. Could form the basis of an alternative policy approach to the proposed package.
	Implement a Workplace Parking Levy	Included in the proposed Congestion Reduction package.
Technology	Road works management and coordination	Being delivered by County Council
	Improved responsiveness to disruptions	
	Dedicated multi-modal journey planning app for Cambridge	Private sector could deliver. Cambridge University and the Biomedical Campus also pursuing.
Public Transport Infrastructure & service Improvements	Improve vehicular access to existing park and ride sites	Will be considered as part of the following GCCD schemes. <ul style="list-style-type: none"> • Cambourne to Cambridge • A1307 • A10(N) • Western Orbital • Newmarket Road

Proposal	Recommendation	
Proposals that could commence in Tranche 1 but might take longer to deliver (continued)		
Public Transport Infrastructure & service Improvements	<p>New park and ride sites</p>	<p>Already under consideration as part of the following GCCD schemes:</p> <ul style="list-style-type: none"> • Cambourne to Cambridge • A1307 • Western Orbital • Newmarket Road <p>Additional sites may be considered if further capacity is needed.</p>
	<p>Deck park and ride car parks to increase capacity</p>	<p>Will be considered as part of any GCCD schemes that deliver new Park and Ride sites or might require expansion of existing sites.</p>
	<p>Expand high quality passenger facilities at park and ride sites</p>	<p>Will be considered as part of any GCCD schemes that deliver new Park and Ride sites or might require expansion of existing sites.</p>
	<p>Ensure park and ride routes serve highest demand destinations</p>	<p>Proposals for new bus services will be worked up as part of the further development of the Cambridge Access package</p>
	<p>Maximise routeing of park and ride services on busways</p>	
	<p>New bus lanes to bypass congested sections</p>	<p>Proposals already incorporated in the following GCCD schemes:</p> <ul style="list-style-type: none"> • Histon Road • Milton Road • Cambourne to Cambridge • A1307 • A10(N) • Western Orbital • Newmarket Road • Eastern Orbital <p>Further opportunities would be investigated as part of the proposed Congestion Reduction package.</p>
	<p>Bus actuation at signals to clear queues (where bus lane not possible)</p>	<p>Already in place at some signals. Will be incorporated in GCCD bus priority schemes.</p>
	<p>Expand high quality bus stops / interchanges etc.</p>	<p>Will be incorporated in all City Deal bus priority schemes. Opportunities beyond the current programme will be further investigated.</p>
	<p>Expand and improve high quality bus vehicle fleet</p>	<p>The Councils and Bus Companies are already working together on bids for the greening of the bus fleet, which would involve new, high quality vehicles.</p>
	<p>Interchange all out-of-city bus services at park and ride sites</p>	<p>Will be considered on a case by case basis.</p>
<p>Increased passenger capacity at Cambridge station</p>	<p>Additional passenger circulation space in the ticket office currently being delivered by Abellio Greater Anglia. Further capacity may be needed in future.</p>	

Proposal		Recommendation
Proposals that could commence in Tranche 1 but might take longer to deliver (continued)		
Public Transport Infrastructure & service Improvements	Cambridge Biomedical Campus Station	City Deal partners are working with the Biomedical Campus and others to bring forward proposals for the station.
	Frequent buses between stations and main destinations	Included in the proposed Congestion Reduction package.
Infrastructure Improvements for Active Modes	Provide and link segregated cycle ways with park and ride sites	Included in the proposed Congestion Reduction package.
	Resurface and remark roads, cycle lanes and footpaths including colour coding mixed use areas	Recommended for inclusion in proposed Congestion Reduction package.
	Expand quality cycle parking at park and ride sites	Will be actioned by City Deal schemes that deliver new Park and ride sites. Facilities at existing sites will be reviewed – refer to Cross- City cycle improvements team.
	Improved cycle link between Cambridge station and city centre	Included in the proposed Congestion Reduction package.
	Quality cycle links for new rail stations	Will be delivered as an integral part of new station proposals (as is already the case with Cambridge North Station).
	Identify and prioritise primary and secondary cycle route network	Included in the proposed Congestion Reduction package.
	Deliver network of cycle routes to necklace villages	Gaps in the GCCD programme will be identified by the work to identify and prioritise primary and secondary cycle route network and considered for delivery from GCCD or other sources following on from this work.
	Address high pedestrian accident / conflict routes and junctions	Included in the proposed Congestion Reduction package.
Behavioural Change	Consolidate freight at park and ride sites	Private sector could deliver
	Consolidate freight at edge of city centre sites	
	Spread freight movements through Smart Locker technology	
	Spread freight movements through out of hours deliveries	
	Freight delivery by cycle	
	Parcel collection at rail stations	
	Car clubs and car sharing schemes	Car clubs already operate in the city but there is scope for expansion. Private sector could deliver.
School Travel Plans and school bus programme	School travel plans included in the proposed Congestion Reduction package. School buses would be considered further as part of the development of the package.	

Appendix D Consultation and Engagement Principles

Introduction

On 12th February 2016, the Joint Assembly asked about the consultation principles that apply for City Deal schemes. Paragraph 5.3 of the City Deal Executive Board Terms of Reference states:

"The lead role on projects shall be determined by the Board, subject to the principle that the lead authority should be the Council primarily responsible for the service in question for their area. The procurement and other rules of the lead authority will apply in respect of projects."

Transport scheme consultation and engagement principles

For transport projects, the lead authority is the County Council whose consultation and community engagement principles in its Listening and Involving Strategy apply. The strategy can be viewed at www.cambridgeshireinsight.org.uk/file/2906/download

The key good practice principles of the Cambridgeshire Listening and Involving Strategy are:

- A. Consultation and involvement will be clearly linked to decision-making and take place as early as possible in the decision-making process.
- B. Consultation and involvement will be carried out to a high standard.
- C. Consultation and involvement will be inclusive.
- D. Consultation and involvement will be cost-effective and co-ordinated.

The principles within the strategy are equally applicable to both Engagement and Consultation exercises in that:

- Communication will be clear, explaining what we are asking or informing and how the collected views will be used.
- Listening to the views and feedback which would then be collated and shared with the Joint Assembly and Executive Board.
- Involving stakeholder representative groups in early engagement exercises that would then lead to future wider and inclusive consultation practices.

An Engagement Strategy is focussed on informing and communicating a package and inviting qualitative feedback by listening to people's views and involving stakeholder representative groups in focus group discussions.

A Consultation Strategy is a formal process in which questions are asked based on the relevant information and answers are collated and analysed where results are fed into the decision-making process.

These principles, like the Cambridge City and South Cambridgeshire principles, set a high standard. All three sets of principles are broadly similar, emphasising the importance of early involvement of affected parties, transparency, inclusiveness, continuous improvement, planning and clear communication of outcomes.

The difference between these and the Cambridge City Council Code of Best Practice for consultation and community engagement is that the latter requires a named officer contact for each consultation. Using a City Deal mailbox for the City Deal consultations and a dedicated phone number allows us to respond to people more quickly and ensure enquiries relating to multiple consultations and all aspects of this extensive programme can be handled helpfully and efficiently.

Action

A summary of the consultation principles that apply to City Deal schemes of all types will be made available on the City Deal website.

Agenda Item 9



Report To: Greater Cambridge City Deal Executive Board

9 June 2016

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

Histon Road Bus Priority, Walking and Cycling Measures: Report on Initial Consultation and Selection of a Preferred Option

Purpose

- 1 This report reviews the feedback from a consultation on initial project ideas, sets out recommendations on a preferred project option and seeks approval to carry out a further public consultation.

Unless stated otherwise, all the background documents referred to in this report are available here:

http://www.gccitydeal.co.uk/citydeal/info/2/transport/1/transport_projects_and_consultations/5

Context and Scope

- 2 The project supports the City Deal priority of achieving efficient and reliable movement between key existing and future housing and employment sites and is being delivered as part of the Tranche 1 infrastructure programme
- 3 In particular, the project will support the delivery of new housing at Northstowe and provide improved links with employment sites within the city. The project is being developed concurrently with a similar scheme for Milton Road, as there are links and dependencies between the two projects.
- 4 The project aims to provide improved infrastructure for buses to improve service reliability and journey times and to enhance the quality and safety of cycling and walking facilities.

Recommendations

- 5 The Executive Board is recommended to:
 - a. Note the findings in the initial consultation report;
 - b. Take forward the initial ideas included in the 'Do Maximum' option for further design work, excluding the idea of banning the right turn into Warwick Road and the idea of 'floating' bus stops;
(Note: please refer to Section 25 and 26 of this report in relation to this recommendation)
 - c. Note the further technical work that would be undertaken over the summer period to develop a preferred option layout for further consultation;
 - d. Support the development of traffic management measures to mitigate displaced traffic and parking for the purposes of further consultation;

- e. Delegate authority to the Executive Director of Economy, Transport and Environment, in consultation with the Chairman and Vice-Chairman of the Executive Board, to approve a further consultation for a preferred option scheme design, as detailed in Section 43 of this report; and
- f. Note the procurement plan for project delivery, the revised project programme and the consultation plan set out in this report.

Reasons for Recommendations

- 6 Histon Road is a high priority scheme for the City Deal programme and a key proposal within the Local Transport Plan 2011-2026. Earlier technical work identified various options that have been the subject of public consultation and a preferred set of measures now needs to be selected for detailed development.
- 7 An assessment has been undertaken of various bus lane layouts (see Appendix 3) to determine the layout that is being recommended as part of a project preferred option.
- 8 Consideration needs to be given to suitable traffic management measures to ensure that any unacceptable displacement of traffic and parking, as a consequence of the project, are mitigated where necessary and appropriate.

Background

Key objectives

- 9 The project has the following key objectives, (in no particular order):
 - a) Comprehensive priority for buses in both directions wherever practicable;
 - b) Additional capacity for sustainable trips to employment/education sites;
 - c) Increased bus patronage and new services;
 - d) Safer and more convenient routes for cycling and walking, segregated where practical and possible;
 - e) Maintain or reduce general traffic levels; and
 - f) Enhance the environment, streetscape and air quality.

Development

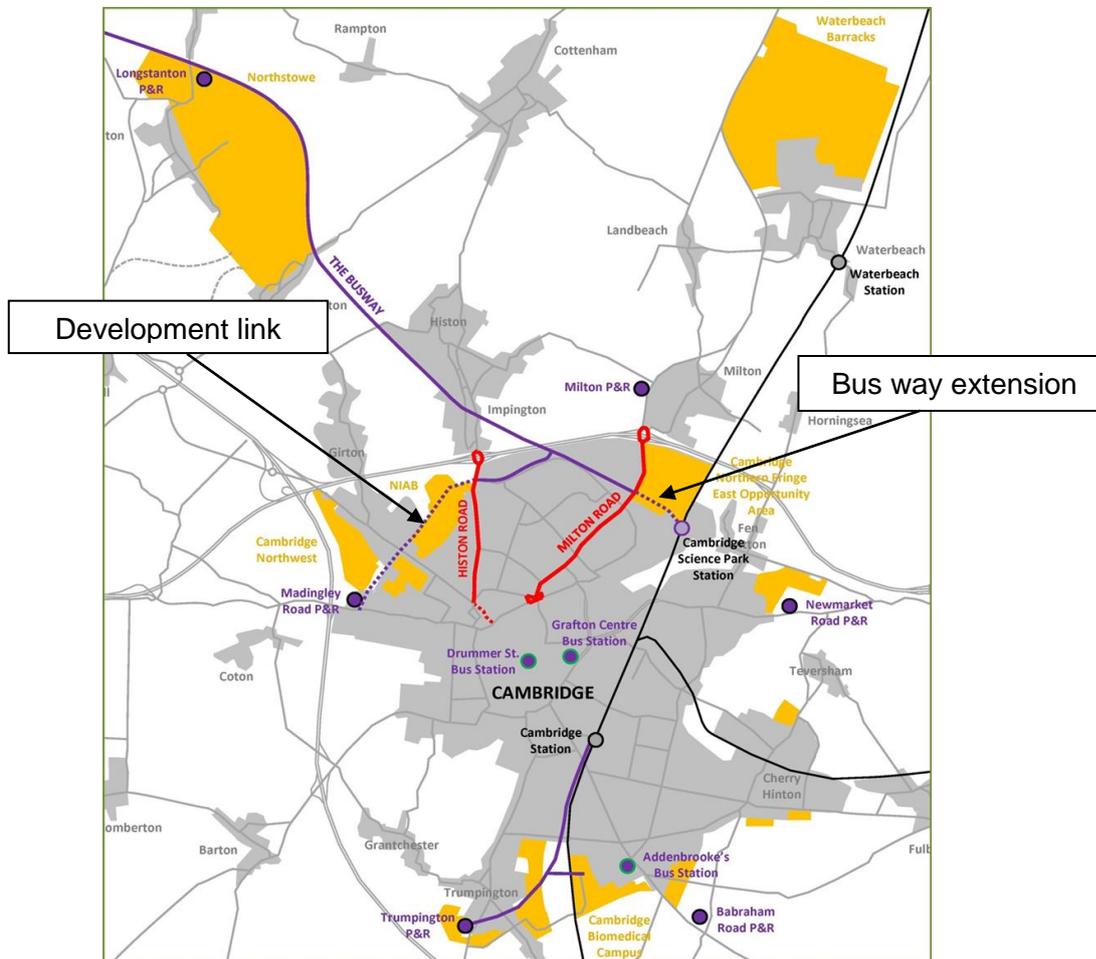
- 10 **Figure 1** below indicates the length of Histon Road under consideration and shows its setting in a wider context. The report considered by the Executive Board on 3rd November last year sets out the strategic and planning background and context for the scheme.

Options assessment

- 11 At its meeting on 3rd November 2015, the Executive Board considered a report on technical work undertaken by consultants, WSP/Parsons Brinkerhoff, to identify initial ideas for delivering the project objectives. Two options were put forward:
 - a 'Do Maximum' option comprising measures to provide the maximum benefit in terms of the project objectives but with a significant impact on the urban street scene and local access
 - a 'Do something' option offering less overall benefit for bus movements (although journey time and reliability would still improve over that experienced now), a similar level of improvement for cycling and walking but with slightly less impact on the public realm.

The Board resolved to undertake consultation on the two options. The consultants' draft options report, which contains drawings of the initial ideas, is available as a background document. The Board report and minutes are available here: <http://scams.moderngov.co.uk/ieListDocuments.aspx?CId=1074&MId=6537&Ver=4> http://www.gccitydeal.co.uk/citydeal/info/2/transport/1/transport_projects_and_consultations/5

Figure 1: Histon Road in the wider area context



Considerations

- An initial budget estimate of around £4 million was set for the Histon Road project by the City Deal Board when the first tranche of projects was approved. The technical work to date is in line with the Department for Transport technical scheme appraisal methodology (known as WebTAG) and the City Deal objectives set out in the City Deal document agreed between the five City Deal partners and Government: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/321722/Greater_Cambridge_City_Deal_Document.pdf

Initial consultation

- In line with the Executive Board decision of 3rd November 2015, a consultation exercise for the initial project ideas was undertaken between 14th December and 15th February. Full details of the consultation process, the response to consultation and its analysis are provided in the report prepared by consultants WSP which is available as a background document.

- 14 The consultation is strongly influenced by a large percentage of responses from those living along and close to the route with far fewer responses from outside the area and from other stakeholder groups. The initial ideas have received a generally negative response although some aspects have been received positively. Appendix 1 sets out the headline results from the consultation and the key issues that have emerged, along with officer comment. A full report on the consultation and its results is available as a background document
- 15 The consultation sought suggestions and ideas on other ways of achieving the project aims and the responses are summarised in Appendix 2 along with officer comment.

Further assessment work

- 16 Following consultation, further work has been undertaken to assess the opportunities to respond to the issues that have emerged and to provide further detail to inform a decision on a preferred option. Some of the initial ideas put forward are considered to be pivotal in achieving the project objectives even though they may have received a negative response at consultation.

Highway cross-section

- 17 As Histon Road is currently a two lane road, the provision of any bus lane would require road widening and the focus has been on how best to use a three lane layout from a bus perspective. As with the Milton Road project, the option of using a tidal bus lane arrangement has been explored to see if this provides a better use of carriageway space. The option of providing an inbound bus lane on the approach to the Gilbert Road junction coupled with an outbound bus lane on the approach to the King's Hedges Road junction has also been assessed as an alternative to providing a continuous inbound bus lane as shown in the initial 'Do Maximum' ideas.
- 18 An assessment of the likely bus journey time benefits of tidal flow arrangements has been undertaken to allow comparison with other bus lane options. The safety, operational, streetscape and maintenance challenges arising from tidal flow options have also been assessed through an officer/consultant workshop. Technical notes on current tidal flow schemes and assessment of tidal bus lane options are available as background documents and are referenced in an interim options report.

'Floating' bus stops

- 19 Whilst the idea of providing 'floating' bus stops, which would allow cyclists to avoid overtaking buses at bus stops, gained some degree of support, the limited highway space available at most existing bus stops means that additional land would be required. This is considered to be impractical at many existing bus stop locations and therefore, it is recommended that floating bus stops should not be considered further.

Traffic modelling

- 20 Further work has been undertaken to assess the impacts of various bus lane design options (without the idea of banning the right turn into Warwick Road but including the changes at the Victoria Road junction) and changes to traffic flows on the road network which is detailed in the interim options report.
- 21 Appendix 3 compares various bus lane option journey times against a 'Do Nothing' scenario based on traffic modelling using a Paramics micro-simulation model constructed for the Histon Road corridor. It also sets out a comparison of these options in terms of benefits for bus services, urban landscape impact and risk.

- 22 Whilst modelling helps inform the decision making process there are issues that need to be taken into account when considering the modelling results. At this stage the benefits from early bus detection at traffic signals has not been built into the traffic model and further refinements in the model will allow bus dwell times to be more accurately reflected. Therefore, the modelled bus journey times should reduce when further modelling is undertaken.
- 23 The various bus lane layouts combined with the changes suggested at the Victoria Road junction all achieve bus journey time savings in the morning peak period but of varying lengths. How much the Victoria Road junction changes contribute towards these savings is not known at this time as the modelling has not been broken down to this level of detail.
- 24 Whilst the Victoria Road junction changes contribute positively towards bus journey time savings in the morning peak period, the displacement of traffic that results from these changes has a potentially negative impact on evening peak period bus journey times. This is primarily due to displaced trips from Victoria Road adopting alternative routes that result in more right turn movements from Histon Road, notably at the Gilbert Road and Roseford Road junctions, which causes more delay to all outbound traffic, resulting in longer bus journey times than a 'Do Nothing' scenario.
- 25 Whilst the predicted savings in the morning peak period exceed the time losses in the evening peak period, there is a need to understand more fully the contribution that the changes suggested at the Victoria Road junction make towards bus journey time savings to determine whether these ideas should form part of a preferred option and, if so, to consider mitigation measures to reduce any negative impact on evening peak period bus journeys. Mitigation might involve the retention of a right turn lane at the Gilbert Road junction and traffic management measures to deter or prevent through movements on Roseford Road.
- 26 Further modelling work is in hand to examine this issue more fully but the outcomes are not known at the time of the publication of this report. However, the modelling results will be published prior to any formal consideration of this report to inform a decision on the recommendations put forward.
- 27 The 'Do Maximum' and 'Do Something' bus lane options provide an inbound bus lane between King's Hedges Road and Gilbert Road but with the 'Do Something' option a short section is omitted near the Roseford Road junction. Therefore, the 'Do Something' option cannot be expected to achieve as much bus journey time saving as the 'Do Maximum' option and therefore it has not been modelled at this time.
- 28 The interim options report identifies various routes where traffic levels are expected to change (increases and reductions) as a result of the restricted traffic movements proposed in the Milton Road and Histon Road projects. The report provides a commentary on the reasons for these changes. Appendix 4 provides a diagrammatic representation of these road network flow changes across the northern part of the city during the peak periods.

Cycling

- 29 On the southern section, where highway space is very constrained, the initial ideas for cycling improvements have been reviewed and it is considered that the provision of advisory cycle lanes on each side combined with parking prohibitions offers the best option for future development.

Preferred option

- 30 Determining the bus lane layout is a key element in establishing the cross sectional profile of the street layout for the preferred option. Appendix 3 sets out an assessment of the options that have been considered. The key findings from this assessment and the conclusions drawn are as follows:

Impact on the urban landscape

All the options utilise a three traffic lane wide carriageway and, therefore, have very similar impacts on the street scene. Whilst the removal of highway trees is an issue of local concern there would be little difference in the numbers that would be removed by each option and the opportunities for tree replacement, both within and outside the highway, would be considered as part of whatever option pursued. The tidal flow options would require the installation of gantry signing along the length of the bus lanes which will impact significantly on the street scene.

Bus journey time savings

The tidal flow options provide better bus journey time savings in the direction of the peak flow but are less effective in the opposite direction. Overall, the 'Do Maximum' option offers the greatest time savings for buses with little difference between the savings achieved by the other options. Whilst not modelled, the 'Do something' option cannot be expected to achieve greater time savings than the 'Do maximum' option.

Risks

The 'Do Maximum' option requires additional land outside the highway boundary which would have to be purchased and this could involve compulsory purchase with its associated risks. Early engagement with landowners would be undertaken. All other options can be accommodated within the highway boundary.

The tidal flow options would require Department for Transport authorisation for the signing regime with no guarantee of approval. There are also safety issues that would require careful scrutiny through the safety audit process. Accommodating the foundations for gantry signs within a constrained highway width would be challenging and could also necessitate the use of land outside the highway boundary

- 31 Taking into account the bus lane assessment set out in Appendix 3, and the conclusions set out above, it is considered that the 'Do Maximum' bus lane layout should be taken forward as part of the preferred option for further design layout work to facilitate a second round of consultation. Appendix 5 summarises the key elements that the preferred option would comprise of, along with the rationale for their inclusion. ***(Please refer to Section 25 above with regard to the Victoria Road junction measures)***

Future work

- 32 The following work would be undertaken over the summer/early autumn period to prepare a design for a preferred layout for consultation.

Engagement

- 33 A joint Histon Road and Milton Road Local Liaison Forum (LLF) is being formed with local councillors to facilitate communications as both projects are developed further. Local councillors will determine which stakeholder groups they wish to attend the LLF meetings with project officers giving the necessary support.

Design

- 34 Detailed highway layout plans will be developed for the preferred option which will involve input from urban design professionals to ensure that street scene aspects, particularly highway trees and other planting areas, are given careful consideration and weight in the design process. Street scene images of the layout at various locations along the route will be prepared to provide a visual impression of what the design would look like. To inform and influence this design work, informal consultation with key stakeholders, particularly local residents groups, will be undertaken over the summer period to get feedback on specific design aspects such as cross section design layout options for the footway, cycleway and green landscaping elements, tree planting (tree species, size and spacing of trees), and the use and design of other landscaping areas.
- 35 Trial pits will be dug at various sites along the route to check the location of public utility services to validate the information provided by the utility companies to inform the design process.

Traffic modelling

- 36 The modelling done to date will be revised to take account of the likely impacts arising from the package of measures emerging from the Cambridge Access and Capacity Study to show how this would affect journey time performance and the business case for the project..
- 37 The changes in traffic flows on the surrounding road network that are likely to arise as a result of the Milton Road and Histon Road schemes will be explored in greater detail to inform the design work for the preferred option, particularly the Gilbert Road junction layout, to address the issue of increased right turning movements in the evening peak period identified earlier in the report. Consideration will also be given to measures to mitigate any adverse impacts on side roads through further engagement with the LLF to consider the need for and the traffic management options available to mitigate any significant impacts. The mitigation proposals that emerge from this dialogue will also form part of the next consultation.
- 38 For the preferred option, new signal timings will be developed to achieve a suitable balance of main road and side road traffic delays which will be coupled with an early bus detection mechanism. This will facilitate further traffic modelling to refine the work already undertaken on bus journey times and to then assess non-bus journey times for comparison which will then feed into the initial project business case.

Parking

- 39 Additional parking management proposals will be developed to complement the preferred option to ensure its efficient operation and to manage the displacement of any parking into side roads and to mitigate the loss of any local residents parking. These proposals, which will be developed with input from local councillors and residents' groups through the LLF, will form part of the next consultation. This will provide an opportunity to address some existing local parking issues on neighbouring side roads where demand exceeds supply and where residents have to compete with commuters for parking space.

Business Case and Costs

- 40 An initial business case for the preferred option will be prepared over the summer/early autumn period to form part of the next consultation to allow the public to reflect on the cost effectiveness of the scheme. This work will be revised as the project moves through the next stages of development. A final full business case

would be considered by the Executive Board, prior to any decision to approve the construction of a scheme.

- 41 The approximate capital costs for the preferred option is £2.5 million. However, this estimate does not allow for various cost elements which are not known at this time including (but not limited to):
- land purchase & any compensation claims;
 - the potential relocation of utilities which is expected to be substantial;
 - risk and contingencies;
 - operations and maintenance;
 - inflation;
 - contractor's overheads, profit and preliminaries; and
 - design fees and construction / project management.

The initial business case for the preferred option will provide more detail on these costs.

Second consultation and officer delegation

- 42 Subject to the successful completion of design, traffic modelling and business case work over the summer/early autumn period, a second round of consultation on the preferred option detailed design, parking and traffic management mitigation proposals and an initial business case will be undertaken during November and December covering the Milton Road and Histon Road projects. The consultation will seek to set the two schemes in the wider City Deal context identifying how they complement the measures emerging from the Cambridge Access and Capacity study. An earlier project timeline suggested this would take place early in 2017 but this can be brought forward subject to appropriate officer delegation.
- 43 To facilitate this process, it is recommended that the Executive Director, Economy, Transport and Environment, be delegated authority to approve the undertaking of a further consultation. This delegation would need to be exercised in consultation with the Chair and vice-chair of the Board and the other Board members if they deemed it appropriate and would cover the following elements that would form part of the consultation package:
- Plans showing detailed highway design layouts including any design variations/options, green landscaping including tree planting, bus stop locations and landscaping for other areas
 - Modelling outputs comparing bus and non-bus journey times
 - A draft business case
 - Parking and traffic management proposals to support the operation of the project and to mitigate scheme impacts.

The delegation would only be exercised on scheme details outlined above. The alternative would be for the details of the scheme as outlined above to come back to the Board and Assembly ahead of the consultation being finalised – this would mean consultation would need to take place later.

A consultation process and programme is set out in Appendix 6.

Procurement

- 44 The early involvement of a contractor in large infrastructure projects can minimise construction risk, lead to a more readily deliverable design and allow more innovative construction methods to be utilised. Setting in place a procurement plan to allow the early appointment of a contractor would facilitate an early start of construction for the Histon Road scheme.

- 45 With a scheme of this nature it is recommended that it should be delivered through a design and build process whereby the appointed contractor is tasked with preparing a detailed engineering design and a target construction cost and then undertaking its construction once the design and target cost are accepted.
- 46 The County Council is a partner in the Eastern Highways Framework, a contract shared by 11 local authorities in the eastern region. It is considered that this would provide a suitable vehicle for the delivery of the scheme for Histon Road. Use of the framework will reduce procurement and contract preparation time as the pre-qualification and tendering process have identified suitable contractors under a competitive process and the legal basis of the contract is already established. A further competitive process within the framework, where the selected contractors are invited to compete for the scheme will ensure that best value is obtained.
- 47 A two stage Design and Construct contract would bring the contractor into the project team early, with the team working together through the design and construction phases. This provides benefits of ensuring that the contractor can use his experience in the design phase to reduce overall project risk and ensure buildability. There is a presumption that the scheme will be delivered as a single package, but there is no guarantee that the contractor will move directly from detailed design to construction. This would be conditional on satisfactory performance and agreement of a construction target cost based on their detailed design.
- 48 A works 'package' would be prepared which would set out the requirements of the project and the framework contractors would then compete for the design and build contract through a detailed design target cost/initial construction target cost bid. Subject to acceptance of this procurement approach, it is anticipated that a contractor would be appointed by the late autumn of this year.
- 49 Following the second round of consultation and approval of a preferred option layout by the Executive Board, the contractor would assume full responsibility for detailed engineering design work. Appointing the contractor to develop the detailed design would not pre-empt the final decision to implement the scheme.

Programme

- 50 A revised project timeline is provided as Appendix 7. Attention is drawn to the assumptions upon which the programme is based. It is anticipated that the Executive Board would consider the response to the second consultation and take decisions on a scheme design for a final consultation, to satisfy statutory processes, at its meeting in June 2017. The programme will be revised as detailed design work continues and the timeline assumptions are clarified and will be shared with public utility companies and Highways England in relation to the A14 improvement works.

Implications

- 51 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

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

Legal

No significant legal implications have been identified at this stage although they may emerge as the project moves towards the statutory process stage.

Staffing

Project management is undertaken by Cambridgeshire County Council's Major Infrastructure Delivery Team. All schemes are worked up in collaboration with the District Councils.

Risk Management

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

Equality and Diversity

There are no equality or diversity implications in this report.

Climate Change and Environmental

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.

Consultation responses and Communication

This report sets out a plan for further public consultation. The setting up of a Local Liaison Forum and further informal stakeholder meetings, ahead of further formal consultation, will also help facilitate engagement on the project.

Community Safety

Some of the options set out in this report will help reduce road casualties on Histon Road and improve road safety.

Background Papers

The following documents were used in the preparation of this report:

Milton Road and Histon Road Corridors – Draft Options report (WSP)

Histon Road consultation report (WSP)

Histon Road and Milton Road Interim Options Report (WSP)

Technical note: Tidal flow bus lane assessment (County Council)

Technical note: Tidal flow bus lane review (Atkins)

Executive Board agenda and minutes 03/11/15

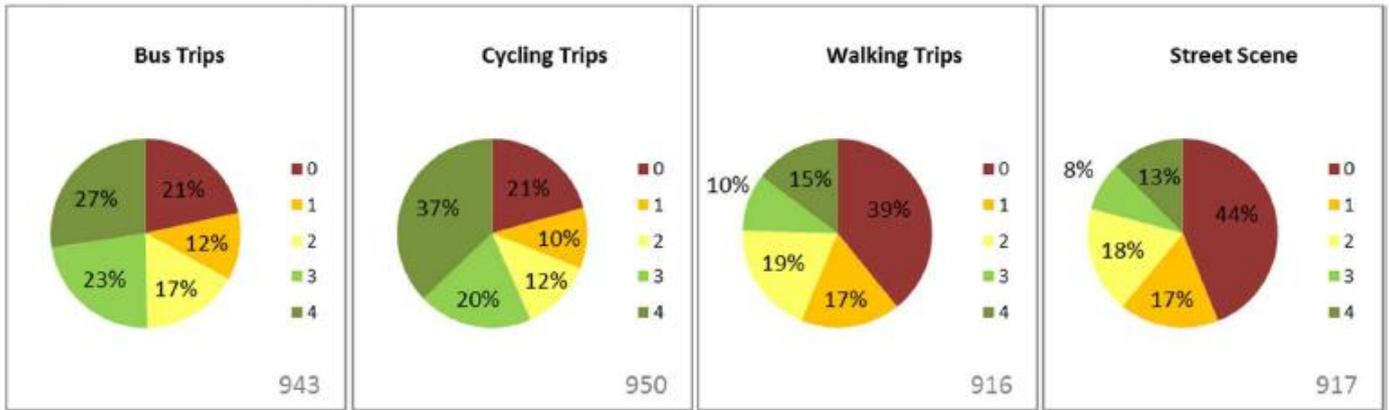
Report Author: Richard Preston, Project Manager, Highway Projects, Major Infrastructure Delivery Team, CCC

Email: Richard.preston@cambridgeshire.gov.uk

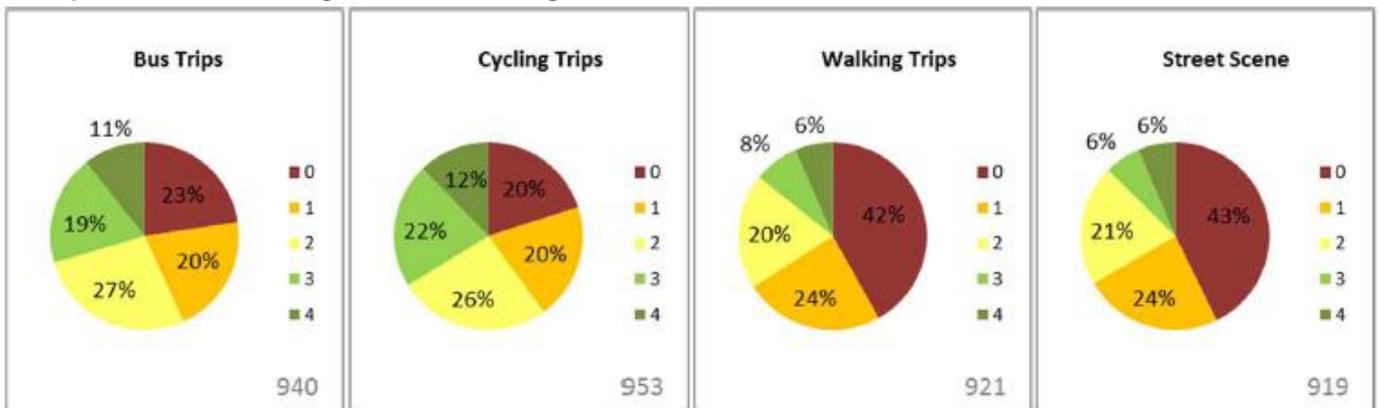
Telephone: 01223 74370

APPENDIX 1: CONSULTATION HEADLINE RESULTS AND EMERGING ISSUES

Improvement rankings: 'Do Maximum'



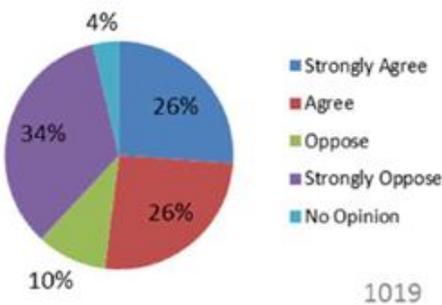
Improvement ranking: 'Do Something'



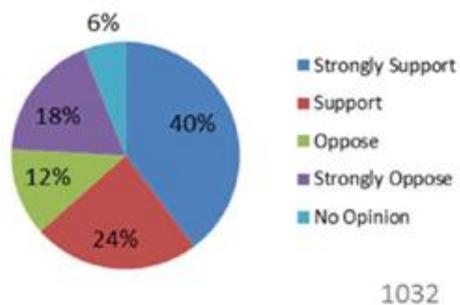
KEY

0 = No improvement 1 = Little improvement 2 = Moderate improvement 3 = Significant improvement
 4 = Very significant improvement

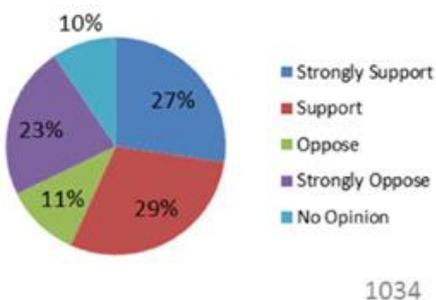
Q7. Histon Road/Huntingdon Road/Victoria Road junction: Should the initial ideas be considered further?



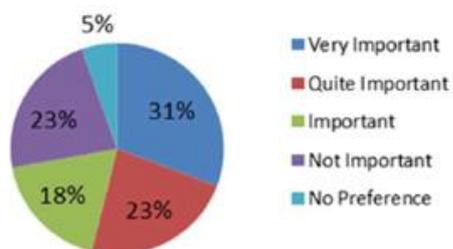
Q8. How far do you support the removal of on-road parking to improve cycle safety and reduce traffic delays (particularly for buses)?



Q9. How far do you support the creation of the new style of bus stop along Histon Road?



Q10. How important is it to enhance the street scene, where possible, on Histon Road with new landscape areas, better surfacing materials, new verges and tree planting?



EMERGING ISSUE	OFFICER COMMENT
<p>Banned Turning Movements [No motor vehicle access to Victoria Road, No right turn to Histon Road (except buses), No right turn into Warwick Road] Impact of displaced traffic on side roads Inconvenience to local trips Lack of accessibility to schools and businesses</p>	<p>There is strong opposition to the initial idea of banning the right turn at the Warwick Road junction based on the inconvenience this would cause and the risk of traffic being displaced to residential streets. These concerns need to be weighed against the benefits of reduced delays if the banned turn was implemented.</p> <p>In light of the consultation, it may be better to address these junction delays through re-design work rather than by movement restrictions and, therefore, the idea of banning the right turn should be set aside and only reconsidered if future modelling work over the summer period shows a clear need for reconsideration.</p> <p>Despite a generally negative response, it is felt that the access restrictions at the Histon Road/Victoria Road junction are pivotal to achieving reliable and reduced bus journey times and improving conditions for cycling. Therefore, these measures should be developed further for consideration as part of the next consultation, despite a generally negative response.</p>
<p>Loss of Trees Impact on street scene Vandalism of any replacement saplings</p>	<p>The impact on the street scene, in particular highway trees and verges, of carriageway widening to create space for further bus and cycle lanes is a significant issue of local concern although the number of highway trees along Histon Road is relatively small.</p> <p>On Histon Road the 'Do Maximum' option would achieve more benefit for buses and cycling than the 'Do Something' option but the difference in street scene impact between each option is not expected to be significant. Therefore it is felt that that the 'Do Maximum' option should also be taken forward for further development and future detailed consultation.</p> <p>This could require the use of land outside the existing highway boundaries and this aspect would need careful assessment and direct consultation with the relevant landowners.</p>
<p>Bus Lanes and Bus Services 41% of responses mentioned buses, with majority focussing on frequency, reliability and quality of services rather than proposed bus lane Changes to Citi 8 service / Lack of local access to Busway services / Bus lanes not justified by low number of buses</p>	<p>As identified in earlier reports, the number of buses using Histon Road is expected to double as planned growth takes place.</p> <p>The local concerns over the lack of access to the bus way services that use Histon Road is not an issue directly linked to the design of the project but the future provision of bus services along Histon Road and other key access routes is a matter that is being considered through ongoing liaison and discussion between the Great Cambridge City Deal and bus operators.</p>
<p>Cycleways Avoid half way house Need consistent high standard design</p>	<p>The initial ideas put forward provide the potential for significant improvements for cyclists using Histon Road although it is recognised that the degree of improvement is likely to be less at the southern end of the corridor where the highway width is much constrained and compromises in the standard of cycling facility may need to be made.</p>

<p>Removal of parking 27% of comments made reference to removal of parking (57% in support, 31% opposed)</p>	<p>The idea of removing carriageway parking on the southern section of Histon Road has received a reasonable level of support although it would impact on some local residents and businesses.</p> <p>Therefore, it is considered that this idea should be developed further for future consultation, including parking management proposals to mitigate the impact on current users.</p>
<p>Walking trips Lack of maintenance of footways Need for additional crossing points</p>	<p>Highway maintenance matters are not a matter directly germane to the project but it is intended that the improvements developed through the project will provide higher quality and better constructed footways which will lessen future maintenance needs</p> <p>As part of the next stage in developing a detailed scheme design, current crossing facilities will be reviewed and consideration given to the need for additional crossings based on consultation feedback.</p>

APPENDIX 2: ALTERNATIVE PROJECT IDEAS

Alternative Idea / Suggestion	Frequency of suggestion/idea	Comment
Alternative cross section layouts to reduce or eliminate the need to remove trees	39%	Various options based on a three lane cross section are assessed in this report to identify the optimum layout for bus improvements. It is not possible to provide a bus lane(s) and segregated cycle facilities without road widening along the corridor which will inevitably impact on some highway trees. Other areas for tree planting will be sought as part of the next stage of design.
Make public transport more affordable	9%	The City Deal does not have powers to set bus fares but if bus services are able to operation more reliably and frequency this will increase patronage and in the longer term may lead to cheaper bus travel.
Include pedestrian crossing near to Aldi and Iceland	8%	This idea will be explored as part of the next design stage.
Remove charge for parking at Park & Ride sites	8%	On its own, this is unlikely to achieve a significant reduction in traffic delays or improve the performance of bus services
Make Busway services stop at the bus stops along Histon Road	7%	Busway services are intended to provide an express service for passengers to/from the city. If services stop at local stops this may make the service less attractive to current and future users. New bus infrastructure to make local services quicker and more reliable may lead to increased patronage and a more frequency service in the future.
Increase the number of bus stops and distribute them more evenly	7%	Histon Road is current well served with bus stops. Providing more stops will increase bus dwell times making trips longer?
Introduce a congestion charge	6%	This idea has been considered as part of the Cambridge Access and Capacity Study (see meeting agenda)
Introduce residents only parking on roads off Histon Road to enable easier parking for residents and dis-incentivise driving	5%	Additional parking management measures will be considered for side roads along Histon Road which could include residents only parking bays to ensure adequate space is available for local residents.
Revert the Citi 8 bus service back to its previous route which served the railway station and Addenbrooke's Hospital	4%	Whilst the routing of bus services is something for bus operators to determine, these matters are being discussed as part of an on-going dialogue between the City Deal and bus operators.

Consider a bi-directional cycle lane on one side rather than one on each side	4%	This option may require more crossing movements across the main road to reach a bi-directional facility. The idea of providing a segregated cycle lane each side has received generally good support at consultation and is the favoured option.
Consider only vehicular banned turns, thus allowing cyclists to make these turn movements	4%	The idea of banning the right turn into Warwick Road is to be set aside. The ideas for restricting vehicle movements at the Victoria Road junction only impact on motor vehicle movements.
Introduce a Park & Ride at Histon	4%	The need to expand Park & Ride capacity has been considered as part of the Cambridge Access and Capacity Study (see meeting agenda).
Consider where alternative parking is going to be located, if removed	3%	Adequate capacity exists in neighbouring side roads to accommodate any parking removed from the main road. New parking controls will be developed as part of the next design stage for future consultation.
Increase the reliability of buses by using stricter regulations	3%	The reliability of bus services is a matter for the Traffic Commissioners. Stricter regulations will not create the conditions required on the highway to allow buses to keep to timetable – this will only be achieved through new bus infrastructure.
Continue cycleways and other infrastructure beyond the scope of this study to create a continuous route	2%	Other City Deal projects will provide similar infrastructure improvements across the City Deal area road network.

APPENDIX 3: COMPARISON OF BUS LANE OPTIONS

BUS JOURNEY TIMES (2031): Journey time (between A14 interchange and Victoria Road junction) in seconds

OPTION	AM PEAK		PM PEAK	
	Inbound	Outbound	Inbound	Outbound
'Do Nothing'	689	747	386	473
'Do Maximum' Continuous inbound bus lane through to Gilbert Road	504	543	369	552
'Do Maximum' variation: Split inbound and outbound bus lane through to Gilbert Road junction	523	608	387	553
Tidal flow Option A Reversible peak period central bus lane	528	706	418	515
Tidal flow Option B Alternating peak period kerb side bus lanes	504	643	420	482

Note: the results for Tidal Option A are influenced by local service bus trips which more likely to use the traffic lane rather than the bus lane given the need to access bus stops

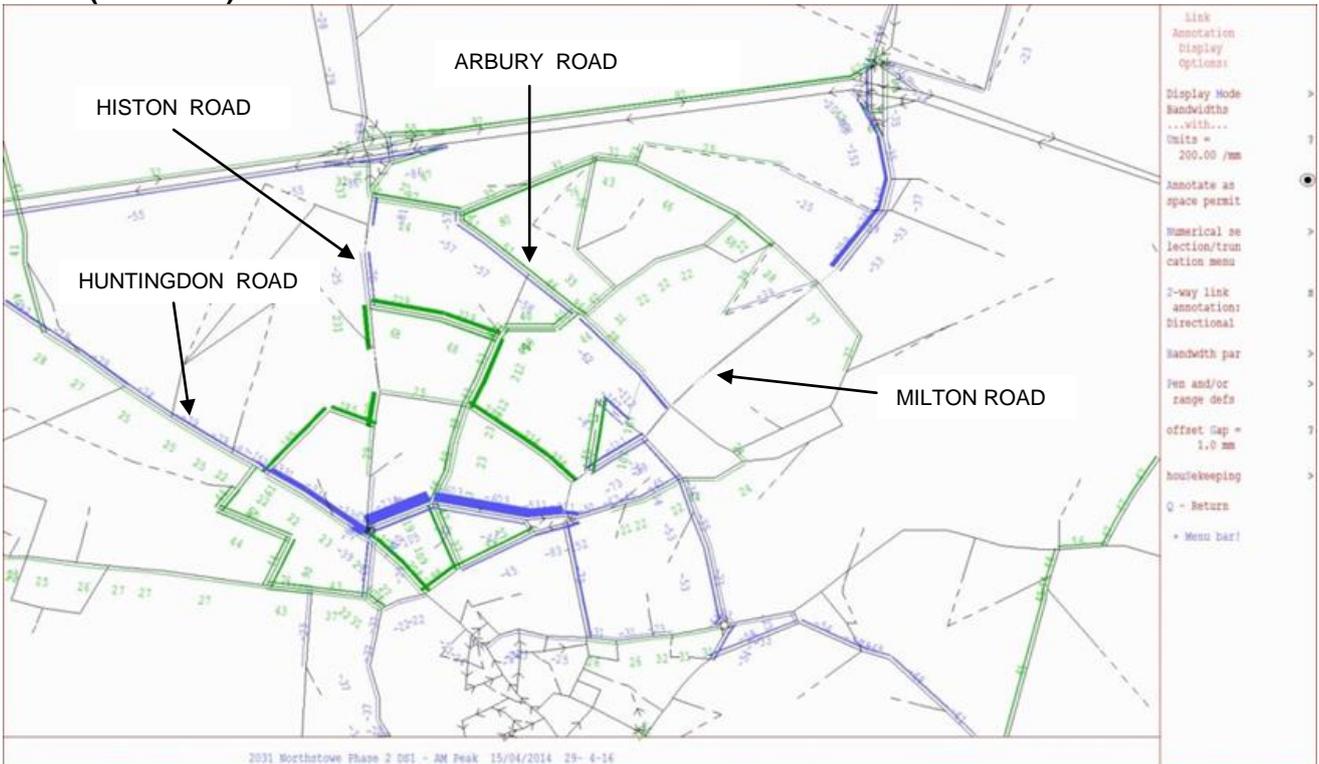
Option	Benefits to bus services	Impact on urban landscape	Risks
'Do nothing'	Bus delays increase and reliability reduces as traffic levels and delays grow	Existing urban landscape retained	Failure to deliver new transport infrastructure will adversely impact on economic and housing growth Quality of the highway environment reduces as traffic delays increase and air quality reduces
'Do Maximum' Continuous inbound bus lane through to Gilbert Road	Overall provides the best journey time savings but performs better in the morning peak period No outbound savings during PM peak period	Removal of almost all highway trees and verge areas north of Gilbert Road although the number of highway trees affected is relatively small Limited opportunities for tree replanting on the highway near junctions but some opportunities for new verge areas	Lack of bus priority for outbound buses Wider carriageway creates more severance of the local community Requires additional land outside the highway boundary
'Do Maximum' variation: Split inbound and outbound bus lane through to Gilbert Road junction	Similar pattern of journey time results as 'Do Maximum' option but less effective overall No savings during PM peak period	Potential for new tree planting to be offered within frontage properties Loss of existing garden hedges where additional land required but potential for new planting to be provided	Wider carriageway creates more severance of the local community Bus lanes not long enough to ensure buses always bypass traffic queues
'Do Something' Split inbound and outbound bus lane through to Gilbert Road junction	Expected to provide less journey time savings than 'Do Maximum' option	Removal of almost all highway trees and verge areas north of Gilbert Road although the number of highway trees affected is relatively small Limited opportunities for tree replanting on the highway near junctions but some opportunities for new verge areas Potential for new tree planting to be offered within frontage properties	Bus lanes not long enough to ensure buses always bypass traffic queues

<p>Tidal flow Option A Reversible peak period central bus lane</p>	<p>Performs better in AM peak period but not as well as 'Do Maximum' option No savings during PM peak period</p>	<p>Removal of almost all highway trees and verge areas north of Gilbert Road although the number of highway trees affected is relatively small</p> <p>Limited opportunities for tree replanting on the highway near junctions but some opportunities for new verge areas</p>	<p>Failure to secure Department for Transport approval for gantry signing system</p> <p>Increase risk of road collisions if drivers/riders fail to understand lane changing operation</p>
<p>Tidal flow Option B Alternating peak period kerb side bus lane</p>	<p>Performs better in AM peak period but not as well as 'Do Maximum' option No savings during PM peak period</p>	<p>Potential for new tree planting to be offered within frontage properties</p> <p>Significant visual impact of gantry signing north of Gilbert Road</p>	<p>Potential for litigation if vehicle conflicts occur when lane changing occurs</p> <p>Inadequate space to accommodate gantry signing foundations</p>

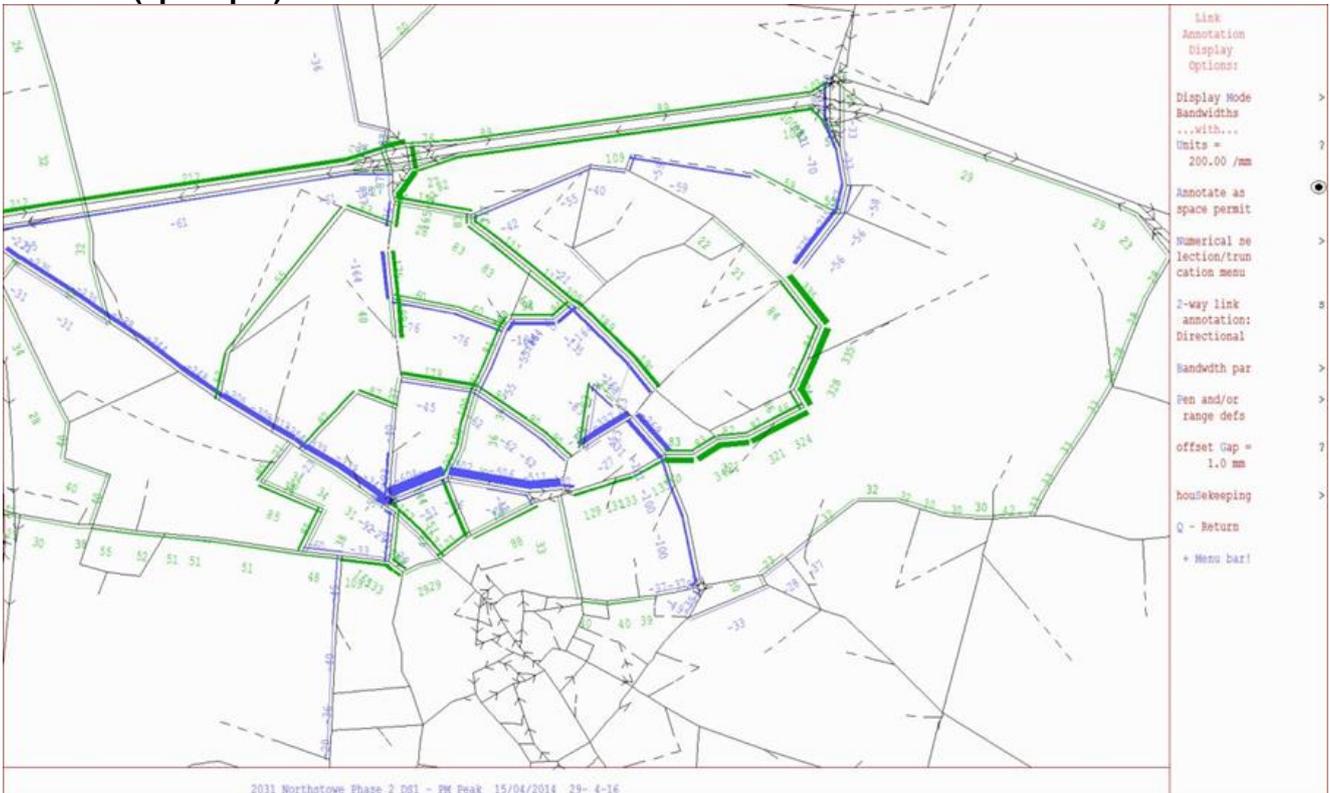
APPENDIX 4: CHANGES IN ROAD NETWORK TAFFIC FLOWS

Key: Blue shows reductions, Green shows increases

Peak (8am-9am)



PM Peak (5pm-6pm)



APPENDIX 5: PREFERRED OPTION KEY ELEMENTS

	Design element	Rationale for inclusion
Bus	Continuous inbound bus lane between King's Hedges Road and Gilbert Road	To optimise bus progression along the route
	Early bus detection on all approaches to signal controlled junctions	
	Some bus stops relocated	To avoid bus stops being located opposite each other to reduce traffic delays and improve safety
Cycling	Continuous segregated inbound cycle lane from King's Hedges Road junction through to vicinity of Rackham Close junction	To provide a higher standard of cycle facility with greater segregation from motor vehicles and pedestrians, where possible
	Continuous segregated outbound cycle lane from vicinity of Rackham Close junction to King's Hedges Road junction	
	Advisory cycle lanes on both sides between Victoria Road junction and vicinity of Rackham Close junction	
Walking	Re-designed side road junctions with at grade crossing points and reduced junction radii	To give greater priority to cycle and pedestrian movements across side roads and to create opportunities for localised street scape enhancement
	Upgraded footway surfaces throughout	It is expected that most footway surfaces will be disrupted by construction work and utility service diversions which creates the opportunity to strengthen and resurface footways to achieve a higher standard of finish to improve conditions for pedestrians, particularly those with less/limited mobility
	Explore option of an additional controlled crossing near the Aldi and Iceland stores	To improve pedestrian safety and accessibility
Junctions	Re-designed layout for the Histon Road/Victoria Road junction to prohibit entry to Victoria Road except for buses and cycling and prohibit the right turn from Victoria Road into Histon Road except buses and cycling <i>(Please refer to Sections 25 and 26 of this report)</i>	To simplify the operation of a complex junction to increase overall green time for Histon Road to reduce delays for buses and improve safety for cyclists and pedestrians as well as creating opportunities for localised streetscape enhancement
Parking and traffic management measures	Additional restrictions to prohibit all parking on all parts of the highway (other than in laybys) and peak period loading restrictions on certain sections Additional parking controls in side roads to accommodate displaced residential parking Measures on alternative routes to mitigate, where necessary, displaced traffic	To ensure that parking and loading/unloading do not adversely affect traffic progression and safety on the main road and to accommodate local parking needs To mitigate any unacceptable changes in traffic flow in residential streets

APPENDIX 6: SECOND PUBLIC CONSULTATION PROCESS

PRINCIPLES

The consultation will be undertaken in accordance with the City Deal approach to consultation, that the consultation principles of the Authority leading on the project should apply.

AIMS

To:

- Engage with key stakeholders, the public and all interested parties in the consultation on proposals for bus priority, walking and cycling improvements.
- Ensure that messages reach the widest audiences, that all voices are heard and that channels are enabled for excellent 2-way communications.
- Provide unbiased, appropriate, timely, and clear information in plain English on the proposed options for the routes.

ENGAGEMENT

Public Consultation to run from 1st November through to 19th December, consisting of the following main elements:

- Pre-consultation advance notification to households and businesses along both routes and the surrounding areas
- Pre-consultation briefings for local councillors and stakeholder groups
- Briefing for City Council North Area Committee
- Information leaflets delivered to households and businesses along both routes and the immediate side streets
- Press release/social media/web presence using www.greatercambridgecitydeal.co.uk
- On-line questionnaire/survey
- Staffed public exhibitions at venues in proximity to both corridor areas
- Information made available at Milton, Babraham, St. Ives and Longstanton Park & Ride sites
- Information displays in shelters at bus stops along both routes and in the city centre
- Direct mail/e-mail
- Information in libraries, GP surgeries and other places of interest with passing trade
- Work with local schools and colleges

Post-consultation

- Analyse results
- Provide consultation outcomes through website, press release, direct mail/e-mail, local newsletters and magazines, social media.
- Bring a report back to the Executive Board to approve detailed scheme designs for statutory processes.

KEY MESSAGES

The key messages for the Histon Road and Milton Road routes will be layered over the background of the vision for the Greater Cambridge City Deal as a whole. The vision will be strong part of the consultation information so that people know how this project fits with other priorities for the City Deal:

- Greater Cambridge City Deal (GCCD) brings together 5 organisations in a ground-breaking new partnership to create the conditions necessary to unlock the 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 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.
- Histon Road and Milton Road bus priority aims to deliver high quality passenger transport, in terms of reliability, frequency and speed, complemented with good quality cycling and pedestrian facilities and an enhanced street scape.
- The consultation is a continuation of the delivery process and there will be further opportunities to comment as part of the statutory process stage of the project.

ON-LINE QUESTIONNAIRE/SURVEY

A questionnaire will be provided for each corridor which will seek views for respondents on how well the scheme design delivers each project objective and views on preferences for any options put forward. This will inform a further review of the design for each route.

STAKEHOLDERS

The consultation will seek to ensure that all users of Histon Road and Milton Road have the opportunity to have their say. Whilst the use of on-line 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.

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Agenda Item 10



Report To: Greater Cambridge City Deal Executive Board

9 June 2016

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

Milton Road Bus Priority, Walking and Cycling Measures: Report on Initial Consultation and Selection of a Preferred Option

Purpose

- 1 This report reviews the feedback from a consultation on initial project ideas, sets out recommendations on a preferred project option and seeks approval to carry out a further public consultation.

Unless stated otherwise, all the background documents referred to in this report are available here:

http://www.gccitydeal.co.uk/citydeal/info/2/transport/1/transport_projects_and_consultations/4

Context and Scope

- 2 The project supports the City Deal priority of achieving efficient and reliable movement between key existing and future housing and employment sites and is being delivered as part of the Tranche 1 infrastructure programme
- 3 In particular, the project will support the delivery of new housing at Northstowe, Waterbeach and on the northern fringe of the city and provide improved links with employment sites such as the Science Park and Cambridge North Station, benefitting residents, commuters and business. The project is being developed concurrently with a similar scheme for Histon Road, as there are links and dependencies between the two projects. A separate study looking at the transport needs of the A10 north of Cambridge is currently underway.
- 4 The project aims to provide improved infrastructure for buses to improve service reliability and journey times, to enhance the quality and safety of cycling and walking facilities and enhance the streetscape.

Recommendations

- 5 The Executive Board is recommended to:
 - a. Note the findings in the initial consultation report;
 - b. Take forward the initial ideas in the 'Do Something' option for further design work including the Union Lane closure and Elizabeth Way roundabout ideas and 'floating' bus stops (where highway space permits) but excluding the ideas for banned turns at the Gilbert Road, Arbury Road and King's Hedges Road junctions;

- c. Agree to consider major changes to the highway layout at the Mitcham's Corner junction for implementation as part of the ongoing tranche 2 prioritisation work. ;
- d. Note the further technical work that would be undertaken over the summer period;
- e. Support the development of traffic management measures to mitigate displaced traffic and parking for the purposes of further consultation;
- f. Delegate authority to the Executive Director of Economy, Transport and Environment, in consultation with the Chairman and Vice-Chairman of the Executive Board, to approve a further consultation for a preferred option scheme design, as detailed in Section 43 of this report; and
- g. Note the procurement plan for project delivery, the revised project programme and the consultation plan set out in this report.

Reasons for Recommendations

- 6 Milton Road is a high priority scheme for the City Deal programme and a key proposal within the Local Transport Plan 2011-2026. Earlier technical work identified various options that have been the subject of public consultation and a preferred set of measures now needs to be selected for detailed development.
- 7 An assessment has been undertaken of various bus lane layouts (see Appendix 3) to determine the option that is being recommended as part of a project preferred option.
- 8 Consideration needs to be given to suitable traffic management measures to ensure that any unacceptable displacement of traffic and parking, as a consequence of the project, are mitigated where necessary and appropriate.

Background

Key objectives

- 9 The project has the following key objectives, (in no particular order):
 - a) Comprehensive priority for buses in both directions wherever practicable;
 - b) Additional capacity for sustainable trips to employment/education sites;
 - c) Increased bus patronage and new services;
 - d) Safer and more convenient routes for cycling and walking, segregated where practical and possible;
 - e) Maintain or reduce general traffic levels; and
 - f) Enhance the environment, streetscape and air quality.

Development

- 10 **Figure 1** below indicates the length of Milton Road under consideration and shows it's setting in a wider context. The report considered by the Executive Board on 3rd November last year sets out the strategic and planning background and context for the scheme.

Options assessment

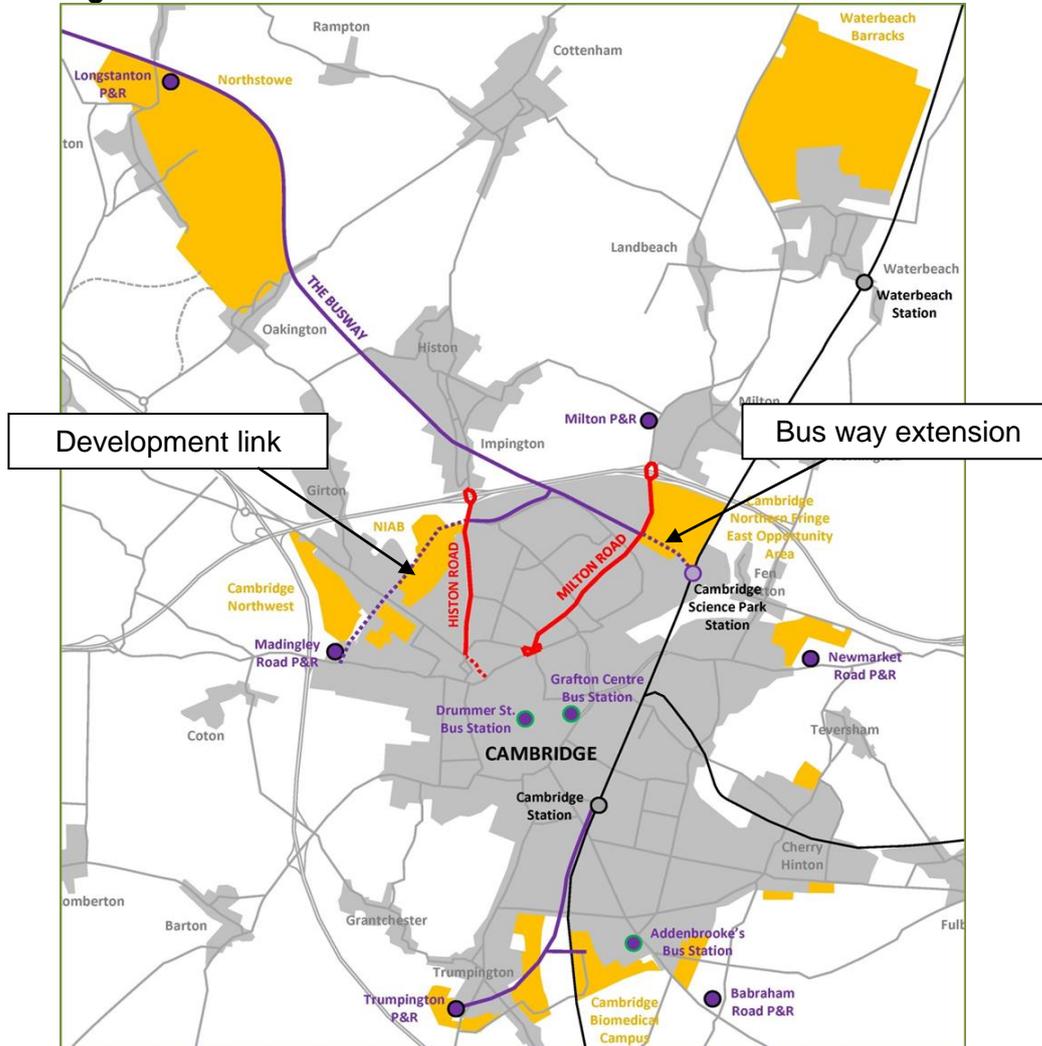
- 11 At its meeting on 3rd November 2015, the Executive Board considered a report on technical work undertaken by consultants, WSP/Parsons Brinkerhoff, to identify initial ideas for delivering the project objectives. Two options were put forward:
 - a 'Do Maximum' option comprising measures to provide the maximum benefit in terms of the project objectives but with a significant impact on the urban street scene and local access

- a 'Do something' option offering less overall benefit for bus movements (although journey time and reliability would still improve over that experienced now), a similar level of improvement for cycling and walking but with less impact on the public realm.

The Board resolved to undertake consultation on the two options. The consultants' draft options report, which contains drawings of the initial ideas, is available as a background document. The Board report and minutes are available here:

<http://scambsmerngov.co.uk/ieListDocuments.aspx?CId=1074&MId=6537&Ver=4>

Figure 1: Milton Road in the wider area context



Considerations

- 12 An initial budget estimate of £23 million was set for the Milton Road project by the City Deal Board when the first tranche of projects was approved. The technical work to date is in line with the Department for Transport technical scheme appraisal methodology (known as WebTAG) and the City Deal objectives set out in the City Deal document agreed between the five City Deal partners and Government: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/321722/Greater_Cambridge_City_Deal_Document.pdf

Initial consultation

- 13 In line with the Executive Board decision of 3rd November 2015, a consultation exercise for the initial project ideas was undertaken between 14th December and 15th February. Full details of the consultation process, the response to consultation and

its analysis are provided in the report prepared by consultants, WSP, which is available as a background document.

- 14 The consultation is strongly influenced by a large percentage of responses from those living along and close to the route with far fewer responses from outside the area and from other stakeholder groups. The initial ideas have received a generally negative response although some aspects have been received positively. Appendix 1 sets out the headline results from the consultation and the key issues that have emerged, along with officer comment. A full report on the consultation and its results is available as a background document.
- 15 The consultation sought suggestions and ideas on other ways of achieving the project aims and the responses are summarised in Appendix 2 along with officer comment.

Further assessment work

- 16 Following consultation, further work has been undertaken to assess the opportunities to respond to the issues that have emerged and to provide further detail to inform a decision on a preferred option. Some of the initial ideas put forward are considered to be pivotal in achieving the project objectives even though they may have received a negative response at consultation.

Highway cross-section

- 17 Given the concerns over the possibility of carriageway widening, the option of using a tidal bus lane arrangement has been explored to see if this provides a better use of carriageway space. An assessment of the likely bus journey time benefits of tidal flow arrangements has been undertaken to allow comparison with other bus lane options. The safety, operational, streetscape and maintenance challenges arising from tidal flow options have also been assessed through an officer/consultant workshop. Technical notes on current tidal flow schemes and an assessment of tidal bus lane options are available as background documents.

Floating bus stops

- 18 The idea of providing 'floating' bus stops, which would allow cyclists to avoid overtaking buses at bus stops, gained some degree of support. Whilst this is considered to be impractical at many existing stop locations, it is recommended that consideration be given to the provision of floating bus stops type where adequate highway space exists.

Traffic modelling

- 19 Further work has been undertaken to assess the impacts of various bus lane design options (without the suggested banned turns into Gilbert Road, Arbury Road and King's Hedges Road) and changes to traffic flows on the road network, which is detailed in an interim options report which is available as a background document.
- 20 Appendix 3 summarises and compares various bus lane option journey times against a 'Do Nothing' scenario based on traffic modelling using a Paramics micro-simulation model constructed for the Milton Road corridor. The model assumes the closure of Union Lane and the signalisation of the Elizabeth Way junction. It should be noted that at this stage the benefits from early bus detection at traffic signals has not been built into the traffic model and further refinements in the model will allow bus dwell times to be more accurately reflected. Therefore, the modelled bus journey times are expected to reduce when further modelling is undertaken. Appendix 3 also sets out a comparison of these options in terms of benefits for bus services, urban landscape impact and risk.

- 21 The interim options report identifies routes where traffic levels are expected to change (increases and reductions) as a result of the restricted traffic movements proposed in the Milton Road and Histon Road projects. The report provides a commentary on the reasons for these changes. Appendix 4 provides a diagrammatic representation of these road network flow changes across the northern part of the city during the peak periods.

Mitcham's Corner

- 22 The emerging Local Plan sets out aspirations to enhance the environment of the Mitcham's Corner junction through the severing of the gyratory system to create opportunities for public realm improvements. The City Council is preparing a development framework supplementary planning document for Mitcham's Corner, with input from the City Deal team, which will set out proposed changes to the area, including a proposal to sever the gyratory system as well as providing guidance for the re-development of key sites and the general area. Plan 1 shows a conceptual layout.
- 23 Early project informal stakeholder engagement suggested strong local support for changes to the junction and in response to the consultation 23% of replies supported the removal of the gyratory layout, although 31% felt no changes were necessary. An officer/consultant workshop was held in February to consider further the best options for changing the highway configuration of the junction. A report from the workshop, which considers options for changing the gyratory nature of the junction, is available as a background document.
- 24 As highlighted in the Executive Board report of 3rd November last year, delivering these aspirational changes will require significant funding, perhaps as much as £4-5 million pounds although the cost would be less if the scope was limited to changes to the road layout only. The cost of more detailed landscape features could be part funded by the City Council via its Local Centre Improvement Programme with the public realm design aspects being phased over time to allow for funding contributions through planning obligations secured from new development in the local area.
- 25 As stated in the Board report of 3rd November, the City Deal has identified the potential to invest in public realm improvements as part of project delivery but careful consideration of the business case for any contribution towards Mitcham's Corner improvements would be needed to ensure that it represents value for money when assessed against the City Deal objectives and it is consistent with the agreed Assurance Framework. Whilst the highway layout changes envisioned by the City Council would bring about a much enhanced public realm and improved conditions for walking and cycling, the benefits for bus movements are likely to be less significant and, given the scale of investment required, careful consideration would need to be given as to the extent that this would help deliver the objectives of the City Deal.
- 26 Any changes in highway layout would need to avoid reducing the capacity of the junction given the potential growth in traffic as planned development takes place. The measures being developed for Milton Road and Histon Road along with the measures emerging from the Cambridge Access and Capacity Study are expected to help reduce traffic levels at the junction and it is recommended the Mitcham's Corner changes should be considered as part of the current work to assess priorities for tranche 2 of City Deal funding.

Preferred option

- 27 Determining the bus lane layout is a key element in establishing the cross sectional profile of the street layout for the preferred option. Appendix 3 sets out an assessment of the options that have been considered. The key findings from this assessment and the conclusions drawn are as follows:

'Do Maximum' option (Almost continuous bus lanes in both directions)

Offers the best improvements in bus journey times but would offer very limited opportunities to enhance the urban streetscape. A four lane carriageway layout, coupled with segregated cycleways on each side, would impact very significantly on the current street scene with the loss of a large number of highway trees and would create more severance of the local community.

'Do Something' option (Inbound and outbound bus lanes on approaches to key junctions)

Provides good improvements in bus journey times. Coupled with the segregated cycle lanes either side will also result in the removal of a large number of highway trees. However, there will be opportunities for new highway tree planting and other green landscaping areas throughout the route albeit not always on both sides of the road which creates opportunities for streetscape enhancement and resulting in healthy trees for the future.

Tidal flow options (Reversible peak period central bus lane/Alternating peak period kerb side bus lane)

Provides better journey time savings in the peak flow direction but are less effective in the alternative direction and, overall, are not as beneficial as the 'Do Maximum' or 'Do Something' options. Like the 'Do something' option, they also offer opportunities for streetscape enhancement and new highway tree replanting but this would be offset, at least in part, by the visual impact of gantry signing along the whole route. There are risks associated with securing approval for the signing regime and operational aspects.

- 28 It is considered that the 'Do Something' option offers the best balance in terms of the project objectives and will allow the emerging design to respond positively to the key concern that have been raised over the need for road widening and its impact on the street scene. Therefore, it should be taken forward for further design layout work to facilitate a second round of consultation. Appendix 5 summarises the key elements that the preferred option would comprise of, along with the rationale for their inclusion.

Future work

- 29 The following work would be undertaken over the summer/early autumn period to prepare a preferred option layout and initial business case for consultation purposes. This work will also include the preparation of design variations and options to provide a further response to the issues that emerged at consultation..

Engagement

- 30 A joint Milton Road and Histon Road Local Liaison Forum (LLF) is being formed with local councillors to facilitate future local engagement and communication as both projects are developed further. Local councillors will be asked to determine which stakeholder groups they wish to attend the LLF meetings with project officers giving the necessary support.

Design

- 31 Detailed highway layout plans will be developed for the preferred option which will involve input from urban design professionals to ensure that street scene aspects, particularly highway trees and other planting and landscape areas, are given careful consideration and weight in the design process. Street scene images of the layout at various locations along the route will be prepared to provide a visual impression of what the design would look like.
- 32 To inform and influence this design work, informal consultation with key stakeholders, particularly local residents groups, will be undertaken over the summer period to get feedback on specific design aspects such as cross section design layout options for

the footway, cycleway and green landscaping elements, tree planting (tree species, size and spacing of trees), and the use and design of other landscaping areas.

- 33 For the Elizabeth Way roundabout, a new detailed design for a signalised junction will be prepared, building on the initial layout set out in the consultation plans and taking into account the useful ideas put forward by the Cambridge Cycle Campaign. Design layout variations will also be developed for further consultation; one to include prohibiting the right turn into Elizabeth Way to further simplify the junction operation and a second to retain a fourth arm for Highworth Avenue. These would be modelled and assessed to show how the benefits for sustainable trips vary between each option.
- 34 Trial pits will be dug at various sites along the route to check the location of public utility services to validate the information provided by the utility companies to inform the design process.

Traffic modelling

- 35 The modelling work done to date will be revised to take account of the likely impacts arising from the package of measures emerging from the Cambridge Access and Capacity Study to show how this would affect journey time performance and the business case for the project.
- 36 The current Paramics micro-simulation model for Milton Road is being extended to include the Elizabeth Way-Chesterton Road roundabout to assess the effects that the Milton Road measures would have on this nearby junction.
- 37 The changes in traffic flows on the surrounding road network that are likely to arise as a result of the Milton Road and Histon Road schemes will be explored in greater detail to assess whether there is a need to mitigate for these changes. Further engagement will be undertaken through the LLF to consider the need for and the traffic management options available to mitigate any significant impacts. The mitigation proposals that emerge from this dialogue will also form part of the next consultation.
- 38 For the preferred option, new signal timings will be developed to achieve a suitable balance of main road and side road traffic delays which will be coupled with an early bus detection mechanism. This will facilitate further traffic modelling, to refine the work already undertaken on bus journey times, and an assessment of non-bus journey times for comparison, which will then feed into the initial project business case.

Parking

- 39 Additional parking management proposals will be developed to complement the preferred option to ensure its efficient operation and to manage the displacement of any parking into side roads and to mitigate the loss of any local residents parking. These proposals, which will be developed with input from local councillors and residents' groups through the LLF, will form part of the next consultation. This will provide an opportunity to address some existing local parking issues on neighbouring side roads where demand exceeds supply and where residents have to compete with commuters for parking space.

Business Case and Costs

- 40 An initial business case for the preferred option will be prepared over the summer/early autumn period to form part of the next consultation to allow the public to reflect on the cost effectiveness of the scheme. This work will be revised as the

project moves through the next stages of development. A final full business case would be considered by the Executive Board, prior to any decision to approve the construction of a scheme.

- 41 The approximate capital costs for the preferred option is £6 million. However, this estimate does not allow for various cost elements which are not known at this time including (but not limited to):
- land purchase & any compensation claims;
 - the potential relocation of utilities which is expected to be substantial;
 - risk and contingencies;
 - operations and maintenance;
 - inflation;
 - contractor's overheads, profit and preliminaries; and
 - design fees and construction / project management.

The initial business case for the preferred option will provide more detail on these costs.

Second consultation and officer delegation

- 42 Subject to the successful completion of design, traffic modelling and business case work over the summer/early autumn period, a second round of consultation on the preferred option detailed design, parking and traffic management mitigation proposals and an initial business case will be undertaken during November and December covering the Milton Road and Histon Road projects. The consultation will seek to set the two schemes in the wider City Deal context identifying how they complement the measures emerging from the Cambridge Access and Capacity study. An earlier project timeline suggested this would take place early in 2017 but this can be brought forward subject to an appropriate officer delegation.
- 43 To facilitate this process, it is recommended that the Executive Director, Economy, Transport and Environment, be delegated authority to approve the undertaking of a further consultation. This delegation would need to be exercised in consultation with the Chair and Vice-Chair of the Board and the other Board members, if they deemed it appropriate, and would cover the following elements that would form part of the consultation package:
- Plans showing detailed highway design layouts including any design variations/options, green landscaping including tree planting, bus stop locations and landscaping for other areas
 - Modelling outputs comparing bus and non-bus journey times
 - A draft business case
 - Parking and traffic management proposals to support the operation of the project and to mitigate scheme impacts.

The delegation would only be exercised on scheme details outlined above. The alternative would be for the details of the scheme as outlined above to come back to the Board and Assembly ahead of the consultation being finalised – this would mean consultation would need to take place later.

A consultation process and programme is set out in Appendix 6.

Procurement

- 44 The early involvement of a contractor in large infrastructure projects can minimise construction risk, lead to a more readily deliverable design and allow more innovative construction methods to be utilised. Setting in place a procurement plan to allow the early appointment of a contractor would facilitate an early start of construction for the Milton Road scheme.

- 45 With a scheme of this nature it is recommended that it should be delivered through a design and build process whereby the appointed contractor is tasked with preparing a detailed engineering design and a target construction cost and then undertaking its construction once the design and target cost are accepted.
- 46 The County Council is a partner in the Eastern Highways Framework, a contract shared by 11 local authorities in the eastern region. It is considered that this would provide a suitable vehicle for the delivery of the scheme for Milton Road. Use of the framework will reduce procurement and contract preparation time as the pre-qualification and tendering process have identified suitable contractors under a competitive process and the legal basis of the contract is already established. A further competitive process within the framework, where the selected contractors are invited to compete for the scheme will ensure that best value is obtained.
- 47 A two stage Design and Construct contract would bring the contractor into the project team early, with the team working together through the design and construction phases. This provides benefits of ensuring that the contractor can use his experience in the design phase to reduce overall project risk and ensure buildability. There is a presumption that the scheme will be delivered as a single package, but there is no guarantee that the contractor will move directly from detailed design to construction. This would be conditional on satisfactory performance and agreement of a construction target cost based on their detailed design.
- 48 A works 'package' would be prepared which would set out the requirements of the project and the framework contractors would then compete for the design and build contract through a detailed design target cost/initial construction target cost bid. Subject to acceptance of this procurement approach, it is anticipated that a contractor would be appointed by the late autumn of this year. Appointing the contractor to develop the detailed design would not pre-empt the final decision to implement the scheme.
- 49 Following the second round of consultation and approval of a preferred option layout by the Executive Board, the contractor would assume full responsibility for detailed engineering design work.

Programme

- 50 A revised project timeline is provided as Appendix 7. Attention is drawn to the assumptions upon which the programme is based. It is anticipated that the Executive Board would consider the response to the second consultation and take decisions on a scheme design for a final consultation, to satisfy statutory processes, at its meeting in June 2017. The programme will be revised as detailed design work continues and the timeline assumptions are clarified and will be shared with public utility companies and Highways England in relation to the A14 improvement works.

Implications

- 51 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

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

Legal

No significant legal implications have been identified at this stage although they may emerge as the project moves towards the statutory process stage.

Staffing

Project management is undertaken by Cambridgeshire County Council's Major Infrastructure Delivery Team. All schemes are worked up in collaboration with the District Councils.

Risk Management

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

Equality and Diversity

There are no equality or diversity implications in this report.

Climate Change and Environmental

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.

Consultation responses and Communication

This report sets out a plan for further public consultation. The setting up of a Local Liaison Forum and further informal stakeholder meetings, ahead of further formal consultation, will also help facilitate engagement on the project.

Community Safety

Some of the options set out in this report will help reduce road casualties on Milton Road and improve road safety.

Background Papers

The following documents were used in the preparation of this report:

Histon Road and Milton Road Corridors – Draft Options report (WSP)

Milton Road consultation report (WSP)

Histon Road and Milton Road Interim Options report (WSP)

Technical note: Tidal flow bus lane assessment (County Council)

Technical note: Tidal flow bus lane review (Atkins)

Mitcham's Corner workshop report (Hamilton-Ballie Associates)

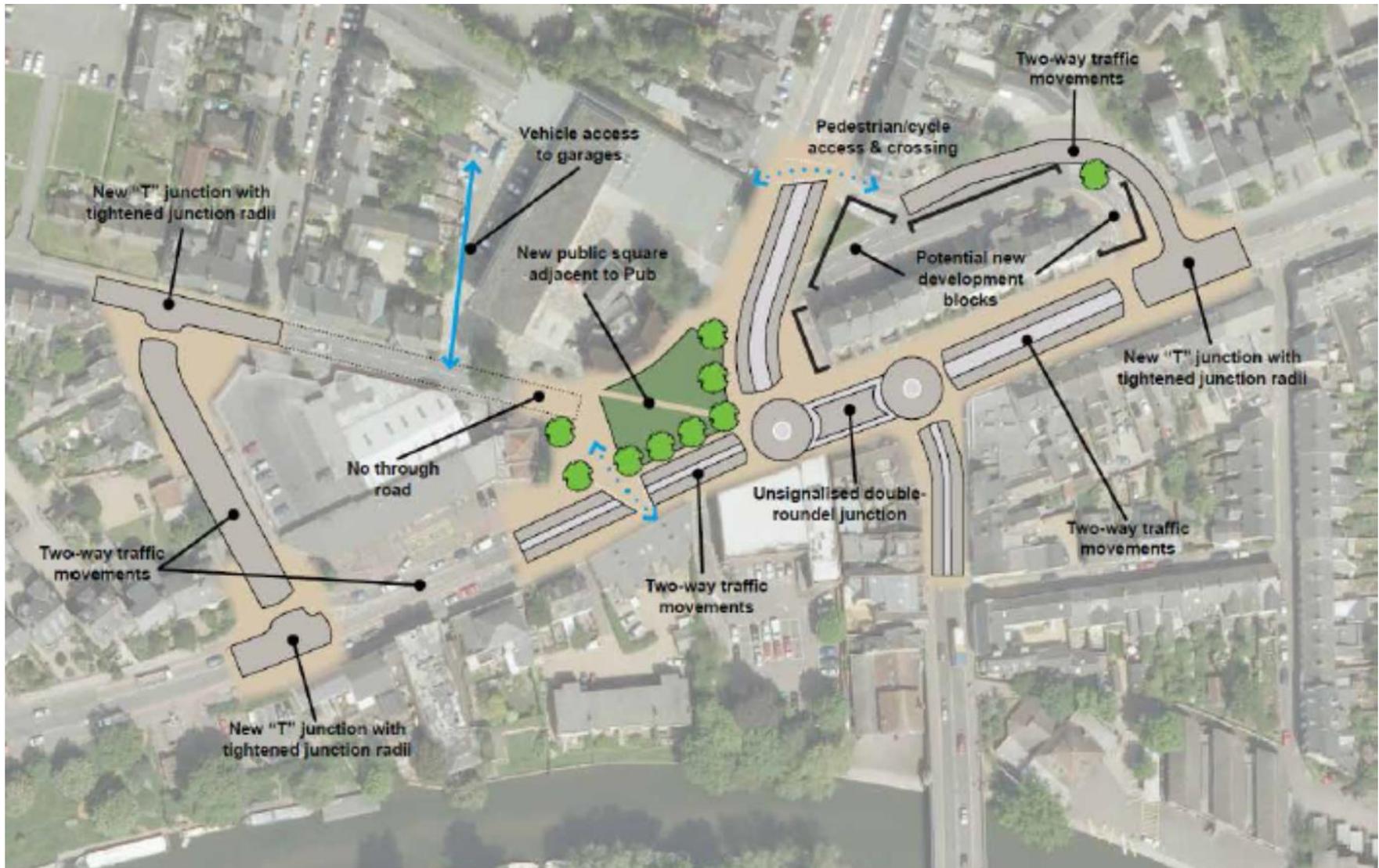
Executive Board agenda and minutes 03/11/15

Report Author: Richard Preston, Project Manager, Highway Projects, Major Infrastructure Delivery Team, CCC

Email: Richard.preston@cambridgeshire.gov.uk

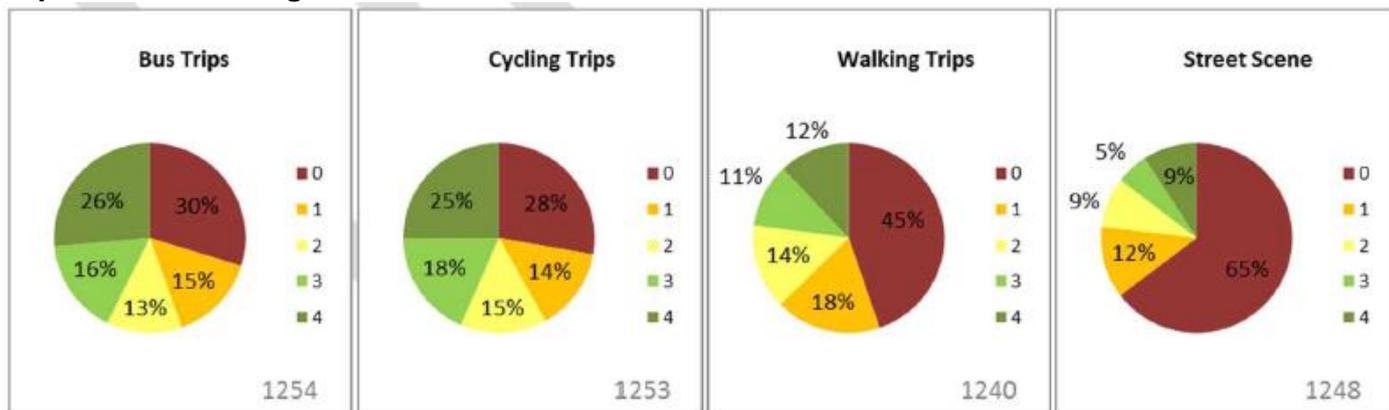
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PLAN 1: MITCHAM'S CORNER CONCEPTUAL LAYOUT

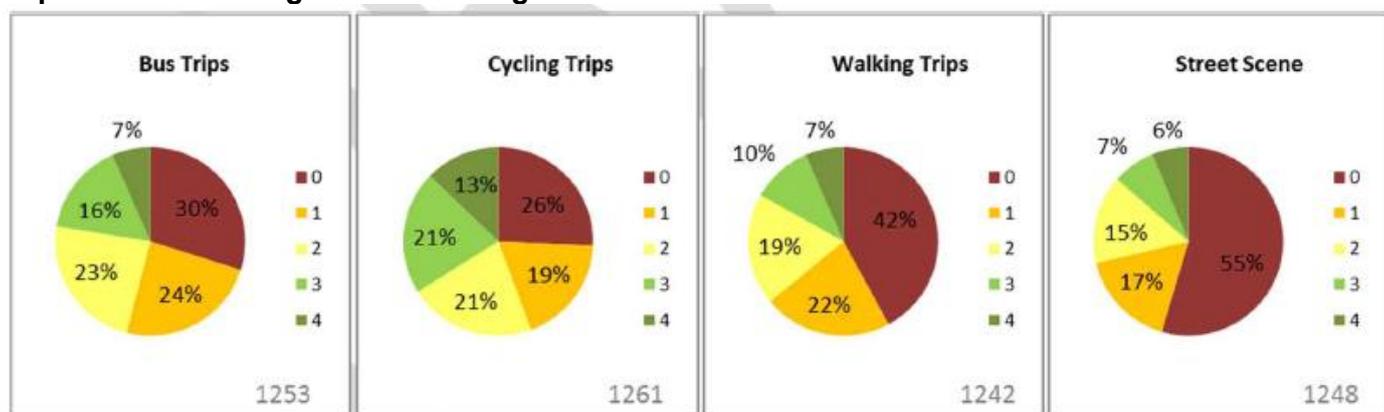


APPENDIX 1: CONSULTATION HEADLINE RESULTS AND EMERGING ISSUES

Improvement rankings: 'Do Maximum'

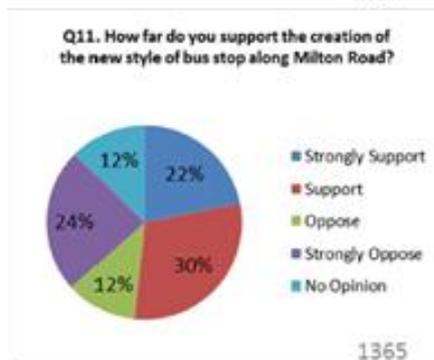
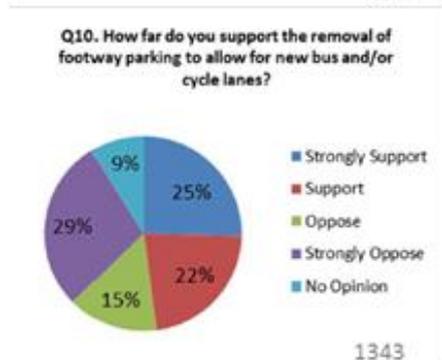
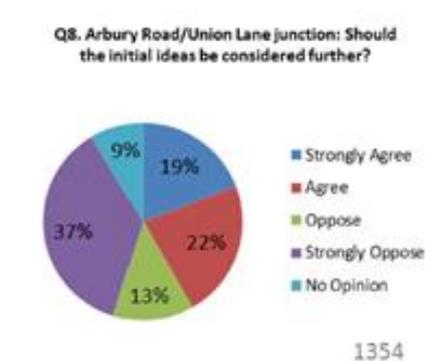
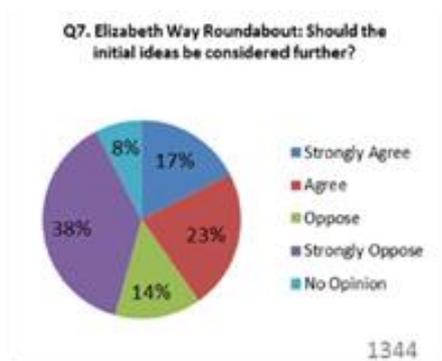


Improvement ranking: 'Do Something'

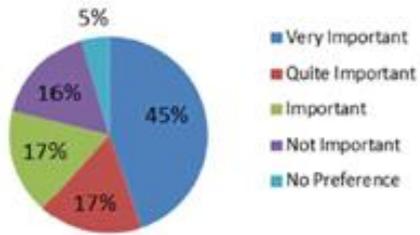


KEY

0 = No improvement 1 = Little improvement 2 = Moderate improvement 3 = Significant improvement 4 = Very significant improvement



Q12. How important is it to enhance the street scene, where possible, on Milton Road with new landscape areas, better surfacing materials, new verges and tree planting?



1315

EMERGING ISSUE	OFFICER COMMENT
<p>Banned Turning Movements [No right turns into Gilbert Road and Arbury Road, No left turn into King's Hedges Road] Impact of displaced traffic on side roads / inconvenience to local trips / lack of accessibility to schools and businesses</p>	<p>There is strong opposition to the various initial ideas for banned turns based on the inconvenience this would cause and the risk of traffic being displaced to residential streets. These concerns need to be weighed against the benefits of reduced delays if the banned turns were implemented.</p> <p>In light of the consultation, it may be better to address these junction delays through re-design work rather than by movement restrictions, therefore, the ideas for banned turns should be set aside and only reconsidered if future modelling work over the summer period shows a clear need for reconsideration.</p> <p>Despite a generally negative response, it is felt that the access restrictions at the Union Lane junction are important in achieving reliable and reduced bus journey times and improving conditions for cycling. Therefore these measures should be developed further for consideration as part of the next consultation, despite a generally negative response.</p>
<p>Loss of Trees 26% of comments mentioning trees / 70% of these opposed to current proposals / use mature trees if trees replaced / impact on air quality</p>	<p>The impact on the street scene, in particular highway trees and verges, of carriageway widening to create space for further bus and cycle lanes is a significant issue of local concern.</p> <p>The 'Do Maximum' option would achieve more benefit for buses and cycling than the 'Do Something' option but the difference in street scene impact between each option is considered significant. Therefore it is felt that that the 'Do Maximum' option should be set aside and the 'Do something' option taken forward for further development and future detailed consultation.</p> <p>There may be a requirement to use land outside the existing highway boundaries and this aspect would need careful assessment and direct consultation with the relevant landowners, if this proved to be the case.</p>
<p>Bus Lanes and Bus Services Bus lanes not justified by low number of buses / consider tidal bus lanes / review location of some stops / poor service for local residents</p>	<p>As identified in earlier reports, the number of buses using Milton Road is expected to double as planned growth takes place.</p> <p>The local concerns over the lack of access to bus services that use Milton Road is not an issue directly linked to the design of the project but the future provision of bus services along Milton Road and other key access routes is a matter that is being considered through ongoing liaison and discussion between the Greater Cambridge City Deal and bus operators.</p> <p>The potential use of tidal bus lane options is explored in this report.</p>

<p>Cycleway design 25% of responses discussed some element of the cycleways proposed in either option / Of these 85% were in favour of improvements / mixed views on cycle priority at side roads / concerns over loss of off-road facilities for school trips</p>	<p>The initial ideas put forward provide the potential for significant improvements for cyclists using Milton Road. As part of further work consideration will be given how an off-road cycleway facility might be retained on the west side of the corridor between Arbury Road and Gilbert Road</p>
<p>Closure of Union Lane 16% of further comments made reference to the proposals at Union Lane / access to medical centre / impact on local accessibility</p>	<p>Closing off motor vehicle access at the Milton Road end has the potential to reduce traffic levels in Union lane and to improve conditions for cycling and walking but may also increase traffic on the alternative routes used by displaced traffic. This aspect would be assessed in detail for consideration at the next consultation.</p>
<p>Removal of Elizabeth Way roundabout Concerns over / potential for improved cycle safety / impact on access to Highworth Avenue</p>	<p>Replacing the roundabout with traffic signals will improve cycle and pedestrian safety and allow more priority for bus movements. The amount of traffic displaced by closing off direct access/egress for Highworth Avenue will be small but would create inconvenience for car based trips by local residents by the longer routes that would need to be used. This aspect would be assessed in detail for consideration at the next consultation.</p>
<p>Walking trips Lack of maintenance of footways Need for additional crossing points</p>	<p>Highway maintenance matters are not a matter directly germane to the project but it is intended that the improvements developed through the project will provide higher quality and better constructed footways which will lessen future maintenance needs</p> <p>As part of the next stage in developing a detailed scheme design, current crossing facilities will be reviewed and consideration given to the need for additional crossings based on consultation feedback.</p>

APPENDIX 2: ALTERNATIVE PROJECT IDEAS

Alternative Idea / Suggestion	Frequency of idea/suggestion	Comment
Alternative cross section layouts to reduce or eliminate the need to remove trees	33%	Various options based on a three lane cross section are assessed in this report to identify the optimum layout for bus improvements. It is not possible to provide a bus lane(s) and segregated cycle facilities without road widening along the corridor which will inevitably impact on some highway trees. Other areas for tree planting will be sought as part of the next stage of design.
Increase the number of services that stop at bus stops	11%	Bus operators are responsible for deciding which services use which stops although the concerns over local access to bus services are being discussed as part of an on-going dialogue between the City Deal and bus operators.
Retain Elizabeth Way roundabout to enable vehicle to turn round, so that they can approach junctions from the opposite side	10%	The need for vehicles to turn round will be significantly diminished by the setting aside of the initial ideas for banning turns at Arbury Road and Gilbert Road.
Create clear cycle lanes at signalised junctions	9%	Detailed junction design work will aim to provide clear and user friendly cycle lanes, wherever possible.
Propose more crossings on Milton Road	8%	At this stage no new crossing are proposed although some existing crossings will be improved and/or relocated
Introduce a congestion charge	7%	This idea has been considered as part of the Cambridge Access and Capacity Study (see meeting agenda)
Consider tidal (timed two-way) bus lanes	6%	This report considers the potential use of tidal bus lane options
Relocate bus stops away from signalised junctions to reduce congestion	4%	Where the proximity of a bus stop is likely to impact on the efficient operation of the junction consideration will be given to relocating the stop
Improve current and maintain future on footways and cycleways	4%	The initial project ideas would significantly improve the quality of footways and cycleways. The new infrastructure created by the project will be maintained by the County Council, as Highway Authority, within the budget that it is able to allocate to highway maintenance.

Introduce residents only parking on roads off Milton Road to enable easier parking for residents and dis-incentivise driving	4%	Additional parking management measures will be considered for side roads along Milton Road which could include residents only parking bays to ensure adequate space is available for local residents.
Remove the charge for parking at Park & Ride sites	3%	On its own, this is unlikely to achieve a significant reduction in traffic delays or improve the performance of bus services.
Improve lighting along Milton Road	2%	Improvements to lighting along Milton Road are to be undertaken by the County Council as part of its Private Finance Initiative (PFI) programme.
Design cycleways in the same way as Hills Road	2%	The initial ideas for improving cycling facilities are based on the design concepts used on Hills Road
Explore alternatives to buses such as trams/light rail	2%	These are unlikely to be cost effective in a city the size of Cambridge. The need to provide priority for public transport would remain.
Consider Milton Road and Histon Road as one way roads to and from the A14	2%	Under any such arrangement there would be a need to develop contraflow facilities for cycling and buses to maintain road network connectivity. The impact on local trip convenience would be significant.
Increase cycle awareness of the Highway Code and enforce consequences to those that do not obey it	1%	This is not a matter germane to the development of the project
Consider underpasses for cyclists and pedestrians at major junctions	1%	Adequate highway space does not exist at junctions along Milton Road to allow the provision of underpasses. Underpasses are often unpopular options for pedestrians and cyclists and are not considered cost effective or desirable solutions in the context of this project.

APPENDIX 3: COMPARISON OF BUS LANE OPTIONS

BUS JOURNEY TIMES (2031): Journey time (A14 interchange to Mitcham’s Corner junction) in seconds

OPTION	AM PEAK		PM PEAK	
	Inbound	Outbound	Inbound	Outbound
‘Do Nothing’	487	888	467	1557
‘Do Maximum’ Almost continuous inbound and outbound bus lanes	379	375	393	310
‘Do Something’ Inbound and outbound bus lanes on approaches to key junctions	388	416	321	348
Tidal flow Option A Reversible peak period central bus lane	487	595	500	368
Tidal flow Option B Alternating peak period kerb side bus lane	342	675	505	357

Note: the results for Tidal Option A are influenced by local service bus trips which more likely to use the traffic lane rather than the bus lane given the need to access bus stops

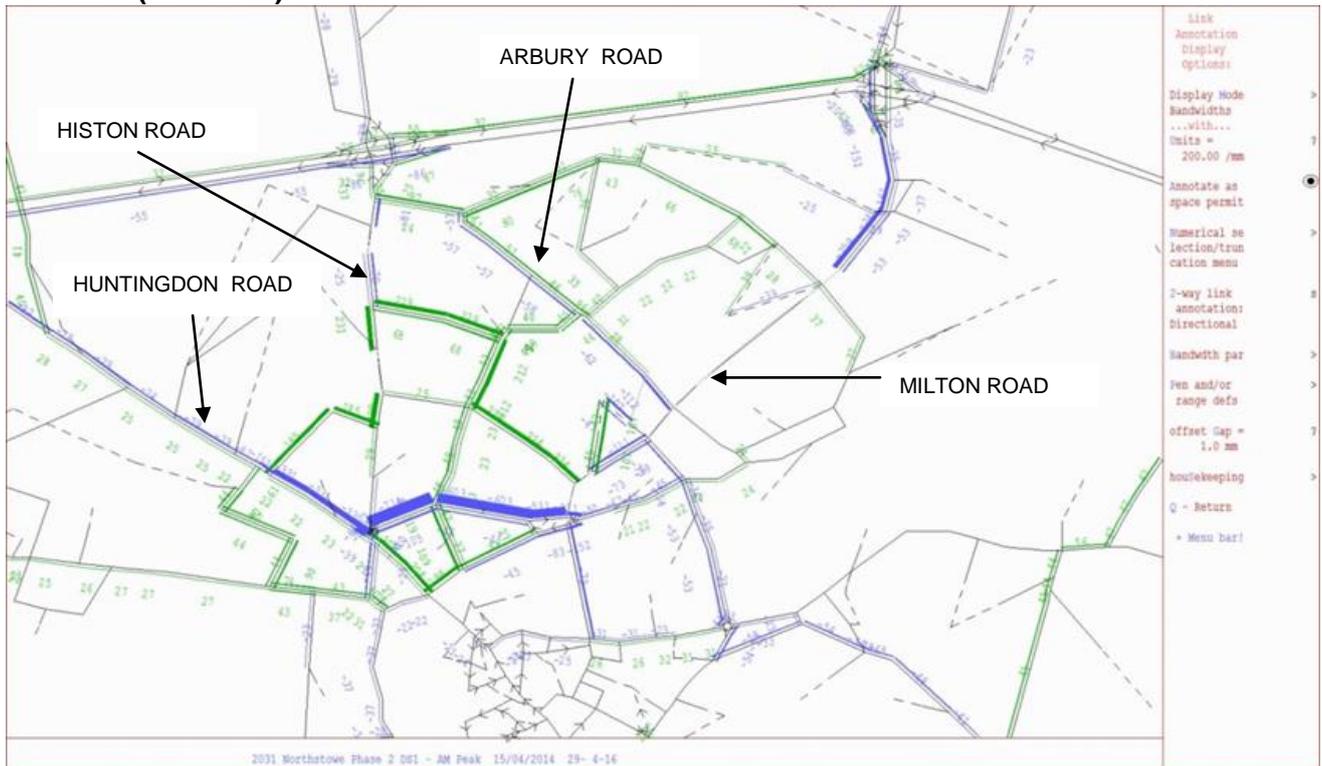
Option	Benefits to bus services	Impact on urban landscape	Risks
‘Do nothing’	Bus delays increase and reliability reduces as traffic levels and delays grow particularly in the evening peak period	Existing urban landscape retained	Failure to deliver new transport infrastructure will adversely impact on economic and housing growth Quality of the highway environment reduces as traffic delays increase and air quality reduces
‘Do Maximum’ Almost continuous inbound and outbound bus lanes	Facilitates the shortest bus journey times	Removal of a large number of highway trees and verge areas with or without cycle lanes with limited opportunities for replanting on the highway perhaps near junctions Potential for new tree planting to be offered within frontage properties	Wider carriageway creates more severance of the local community

<p>‘Do Something’ Inbound and outbound bus lanes on approaches to key junctions</p>	<p>Provides less bus journey time savings than ‘Do Maximum’ but better overall savings than tidal flow options</p>	<p>Coupled with cycle lanes on each side would require the removal of a large number of trees and verge areas</p> <p>Offers opportunities for new tree planting and other green landscaping within the highway throughout the route albeit not always on each side of the road, resulting in a healthier tree stock for the future</p>	<p>Bus lanes not long enough to ensure buses always bypass traffic queues</p>
<p>Tidal flow Option A Reversible peak period central bus lane</p>	<p>Bus journey times longer than ‘Do Maximum’ Better journey time savings in the peak flow direction but taken overall provides less bus journey time benefits than the ‘Do Maximum’ and ‘Do Something’ options</p>	<p>Coupled with cycle lanes on each side would require the removal of a large number of trees and verge areas</p> <p>Offers opportunities for new tree planting and other green landscaping within the highway throughout the route albeit not always on each side of the road, resulting in a healthier tree stock for the future</p> <p>Significant visual impact of gantry signing throughout the route</p>	<p>Failure to secure Department for Transport approval for gantry signing system</p> <p>Increase risk of road collisions if drivers/riders fail to understand lane changing operation</p> <p>Potential for litigation if vehicle conflicts occur when lane changing occurs</p> <p>Inadequate space to accommodate gantry signing foundations</p>
<p>Tidal flow Option B Alternating peak period kerb side bus lane</p>			

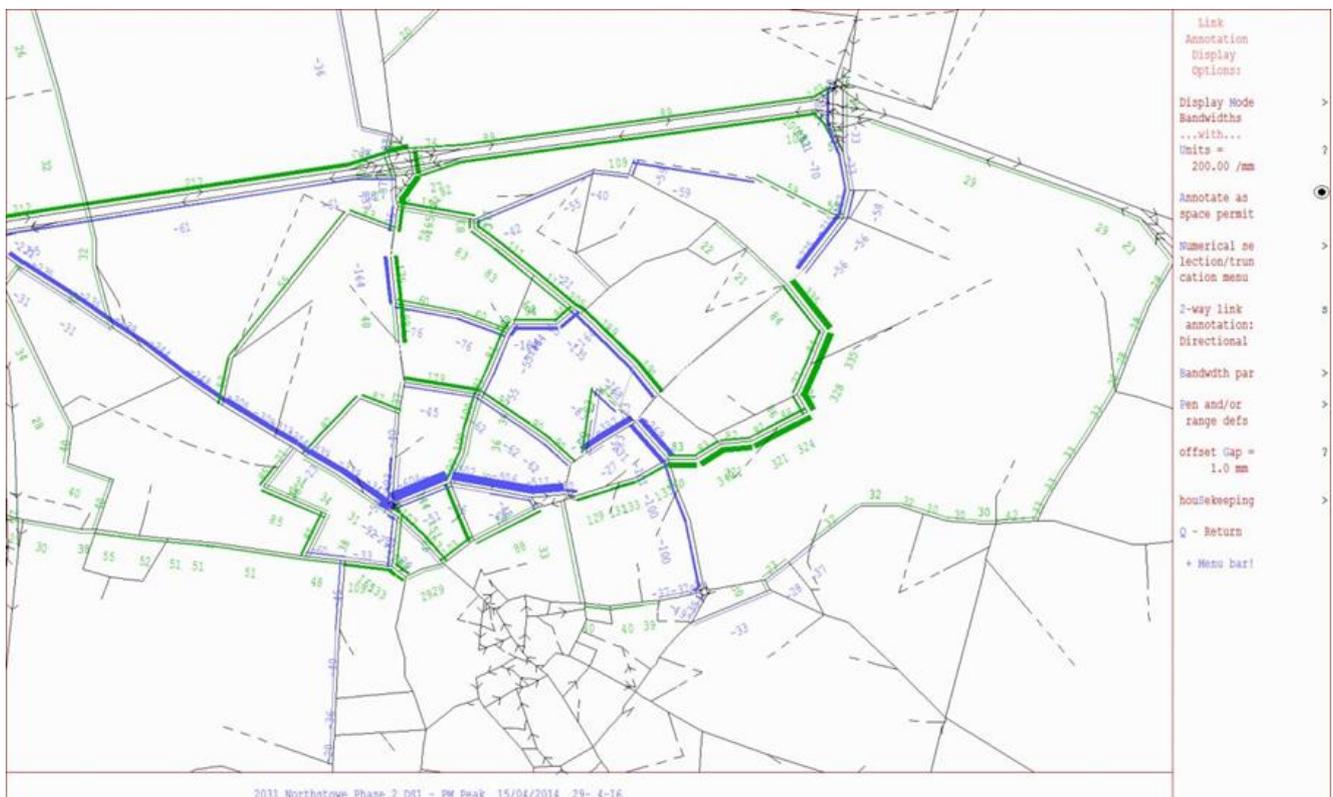
APPENDIX 4: CHANGES IN ROAD NETWORK TAFFIC FLOWS

Key: Blue shows reductions, Green shows increases

AM Peak (8am-9am)



PM Peak (5pm-6pm)



APPENDIX 5: PREFERRED OPTION KEY ELEMENTS

	Design element	Rationale for inclusion
Bus Lanes	Inbound side: On approach to Green End Road Between Woodhead Drive and Arbury Road On approach to Elizabeth Way and Gilbert Road junctions Between Gilbert Road and Mitcham's Corner Outbound bus lane: On approaches to Elizabeth Way and Arbury Road junctions Between Woodhead Drive and King's Hedges Road On approach to the Busway junction	To optimise bus progression along the route
	Early bus detection on all approaches to signal controlled junctions	
Cycleways	Inbound side: Almost continuous segregated cycle lane from approach to Green End Road junction through to Mitcham's Corner	To provide a higher standard of cycle facility with greater segregation from motor vehicles and pedestrians, where possible
	Outbound side: Almost continuous segregated outbound cycle lane from Mitcham's Corner to Lovell Road junction Bi-directional segregated cycle lane between Lovell Road and Busway junction Segregated cycle lane from Bus way junction to Science Park junction <i>Explore option of off-road facility between Ascham Road and Arbury Road</i>	
	Floating bus stops where space permits	

Walking	Re-designed side road junctions with at grade crossing points and reduced junction radii	To give greater priority to cycle and pedestrian movements across side roads and to create opportunities for localised street scape enhancement
	Upgrade/explore relocation of signal crossings near Lovell Road and Kendall Way	To replace aging signal equipment and to enhance the convenience of transverse cycling and walking trips
	Upgraded footway surfaces	It is expected that most footway surfaces will be disrupted by construction work and utility service diversions which creates the opportunity to strengthen and resurface footways to achieve a higher standard of finish to improvement conditions for pedestrians, particularly those with less/limited mobility
Junctions	Removal of Elizabeth Way roundabout and installation of traffic signals based on a three arm layout <i>To simplify the layout and signal sequence of the junction it is also intended to explore an option of banning the right turn into Elizabeth Way to further increase priority for bus, cycle and pedestrian movements.</i> <i>A further option that retains the fourth arm (Highworth Avenue) will also be developed for comparison purposes</i>	To signalise the junction to give greater priority to bus and cycling movements, to improve pedestrian and cycle safety at an accident black site and to create opportunities for localised streetscape enhancement
	Closure of Union Lane for motor vehicle access and egress	To simplify the operation of the junction to increase overall main road green time for buses to reduce delays, to improve safety for cyclists and pedestrians as well as creating opportunities for localised streetscape enhancement
Parking and traffic management measures	Additional restrictions to prohibit all parking on all parts of the highway (other than in laybys) and peak period loading restrictions on certain sections Additional parking controls in side roads to accommodate displaced residential parking Measures on alternative routes to mitigate, where necessary, displaced traffic	To ensure that parking and loading/unloading do not adversely affect traffic progression and safety on the main road and to accommodate local parking needs To mitigate any unacceptable changes in traffic flow in residential streets

APPENDIX 6: SECOND PUBLIC CONSULTATION PROCESS

PRINCIPLES

The consultation will be undertaken in accordance with City Deal the City Deal approach to consultation; that the consultation principles of the Authority leading on the project should apply.

AIMS

To:

- Engage with key stakeholders, the public and all interested parties in the consultation on proposals for bus priority, walking and cycling improvements.
- Ensure that messages reach the widest audiences, that all voices are heard and that channels are enabled for excellent 2-way communications.
- Provide unbiased, appropriate, timely, and clear information in plain English on the proposed options for the routes.

ENGAGEMENT

Public Consultation to run from 1st November through to 19th December, consisting of the following main elements:

- Pre-consultation advance notification to households and businesses along both routes and the surrounding areas
- Pre-consultation briefings for local councillors and stakeholder groups
- Briefing for City Council North Area Committee
- Information leaflets delivered to households and businesses along both routes and the immediate side streets
- Press release/social media/web presence using www.greatercambridgecitydeal.co.uk
- On-line questionnaire/survey
- Staffed public exhibitions at venues in proximity to both corridor areas
- Information made available at Milton, Babraham, St. Ives and Longstanton Park & Ride sites
- Information displays in shelters at bus stops along both routes and in the city centre
- Direct mail/e-mail
- Information in libraries, GP surgeries and other places of interest with passing trade
- Work with local schools and colleges

Post-consultation

- Analyse results
- Provide consultation outcomes through website, press release, direct mail/e-mail, local newsletters and magazines, social media.
- Bring a report back to the Executive Board to approve detailed scheme designs for statutory processes.

KEY MESSAGES

The key messages for the Histon Road and Milton Road routes will be layered over the background of the vision for the Greater Cambridge City Deal as a whole. The vision will be strong part of the consultation information so that people know how this project fits with other priorities for the City Deal:

- Greater Cambridge City Deal (GCCD) brings together 5 organisations in a ground-breaking new partnership to create the conditions necessary to unlock the 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 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.
- Histon Road and Milton Road bus priority aims to deliver high quality passenger transport, in terms of reliability, frequency and speed, complemented with good quality cycling and pedestrian facilities and an enhanced street scape.
- The consultation is a continuation of the delivery process and there will be further opportunities to comment as part of the statutory process stage of the project.

ON-LINE QUESTIONNAIRE/SURVEY

A questionnaire will be provided for each corridor which will seek views for respondents on how well the scheme design delivers each project objective and views on preferences for any options put forward. This will inform a further review of the design for each route.

STAKEHOLDERS

The consultation will seek to ensure that all users of Histon Road and Milton Road have the opportunity to have their say. Whilst the use of on-line 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.

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Agenda Item 11



Report To: Greater Cambridge City Deal Executive Board

9 June 2016

Lead Officer: Graham Hughes, Cambridgeshire County Council

Workstream ref.: 16 – Cross City Cycling

Cross City Cycling

Purpose

1. It was agreed at the Greater Cambridge City Deal Executive Board meeting in January 2015 that Cross-City Cycle Improvements should form part of the City Deal prioritised programme. The proposed priority cross-city cycle schemes represent strategic links along key desire lines, linking to employment and growth sites.
2. In August 2015 the Board endorsed the choice of five schemes to take forward to public consultation, in view of the outcomes of a stakeholder event held in March 2015. This report summarises the results of the public consultation and recommends the next steps.

Recommendations

3. The Board is asked to:
 - a) Note the results and key issues arising from the public consultation;
 - b) Increase the funding allocated to the schemes due the expansion of scope;
 - c) Continue localised discussions over trees, hedges and boundaries;
 - d) Give approval to implement all five schemes, subject to a few minor changes and areas where some further consultation is required, as per the summary table below:

Scheme	Recommendation	Future Board Decisions
Fulbourn Road & Cherry Hinton Eastern Access	Implement scheme as consulted on, with minor changes	None
Hills Road & Addenbrooke's Corridor	Implement scheme with option of improved contraflow cycle lane on south side, and diagonal movement through junction. Omit proposed banned turn into Queen Edith's Way from Long Road. Consult further on improvements in Long Road.	None

Links to East Cambridge and National Cycle Route 11	Scheme to be implemented following further engagement with Fen Ditton Parish Council on aspects of the design.	None
Arbury Road	Implement scheme as consulted on, including experimental closure for Mansel Way	Determine objections to experimental closure of Mansel Way, Jan' 2018
Links to Cambridge North Station and Science Park	Implement works in Green End Road (Milton Road to Nuffield Road) with option of uni directional lanes on each side. Consult further on improvements in Nuffield Road. Advertise TRO for Green End Road (Nuffield Road to Chesterton High Street)	Determine objections to TRO, Dec' 2016

- e) Delegate approval of detailed final scheme layouts to the Executive Director Economy Transport and Environment in consultation with the Chairman and Vice-Chairman.

Consultation

4. The consultation was undertaken in January and February 2016. Over 1,100 responses were received. Generally there was good support, with some localised issues emerging.
5. The five schemes consulted on are shown on **Plan 1**. More details of the proposals consulted on can be seen at www.tinyurl.com/zjpdx3f
6. A leaflet and questionnaire were distributed to homes in the areas affected, along with other publicity placed in libraries and GP surgeries. Details were sent via Parentmail to a number of schools, and details were sent to stakeholders and statutory consultees.
7. Seven public drop in sessions were held. The Project Team utilised other opportunities to engage with the public including Fen Ditton Parish Newsletter and a lunch time event at Long Road Sixth Form College.
8. The proposals were also discussed at Cambridgeshire County Council's monthly Cycling Stakeholder Group meeting which includes representatives from Cambridge Cycling Campaign, Sustrans, CTC Cambridge, Addenbrooke's, Cambridge University, Cambridge City Council and South Cambridgeshire District Council. The proposals were reviewed by the County and City Walking and Cycling Liaison Group.
9. 1,101 consultation responses were received. The results can be seen at: <http://tinyurl.com/zjpdx3f>

Fulbourn Road/Cherry Hinton Eastern Access

10. This scheme involving raised segregated lanes and wide shared use paths was well supported, though based on some useful comments made, the location of pedestrian crossings will be amended, and some lengths of shared use path will be widened. There is likely to be considerable growth in levels of cycling as more staff move to ARM's site, and thus access points and other minor changes have been made to ensure that cycling is as safe and attractive as possible in this area.

Hills Road/Addenbrooke's Corridor

11. The consultation revealed a preference to replace the current off-road foot/cycleway with a segregated contraflow cycle lane, and separate footway, on the south side that links to Addenbrooke's, and to amend the junction to facilitate the diagonal movement across the junction. The consultation also highlighted a significant number of cyclists who access the Addenbrooke's site via Adrian Way and Robinson Way, off Long Road. It is proposed to extend the scheme into Long Road to encompass these access points to the hospital and biomedical campus sites. Further localised consultation will be required.
12. There were significant and strong objections (47% opposed) to the proposal to ban left turns into Queen Edith's Way from Hills Road, due to the fear of traffic 'rat running' in more residential parallel and adjacent streets, a view supported by local members. Furthermore, conflict between cyclists going straight on and vehicles turning left was not raised as an issue in the consultation responses. It is therefore proposed to omit this aspect of the scheme.

Links to East Cambridge and National Cycle Route 11

13. There was general support for the package of measures proposed. The scheme details will be finalised after further liaison with Fen Ditton Parish Council who have a few concerns such as the finish detail for the new retaining wall and the width of the path near the village sign. Officers are working with residents to resolve some issues where trees have been planted and walls extended onto what appears to be public highway.

Arbury Road

14. There was also good support for the removal of mini roundabouts and a layby, and the introduction of raised cycle lanes and segregation of pedestrians and cyclists included in the Arbury Road scheme. The consultation results showed a high level of support to extend the scheme to Milton Road, and this could be considered for development and future funding.
15. The most contentious aspect of the proposals was the closure of Mansel Way/Arbury Road to general traffic. Although this was generally supported, there was some concern from a number of businesses from the nearby Arbury Court shopping area and the City Council's Property Department that the proposal may impact trade and access. This measure would remove one set of traffic signals on Arbury Road and make Mansel Way a quieter route for walking and cycling. A shopping survey has taken place which revealed less than 30% of shoppers travel by car. It is recommended that this is implemented as an experimental closure with further consultation during the experiment, to enable a final decision to be made in the future by the City Deal Board.

Links to Cambridge North Station and Science Park

16. This scheme effectively falls into three sections, two of which received clear support in the consultation process. There was strong support to implement the option of uni directional, segregated cycle lanes on each side of Green End Road in the wider length, north of Nuffield Road junction. The public also supported the introduction of advisory cycle lanes and double yellow lines in the southern section linking to Chesterton High Street, though it is anticipated that there will be some objections once parking restrictions are formally advertised.

17. In Nuffield Road there was 60% support for a wider shared use path, but strong opposition to it from the local County Councillor and Cambridge Cycling Campaign. There was some opposition (33%) to the removal of trees on the north side and the removal of the wall. Since the consultation, the idea of a two way segregated cycle facility on the south side has been developed by the Project Team, and so it is felt that a further consultation confined to Nuffield Road, but including its junction with Green End Road is required. A Nuffield Road consultation could be combined with a start of works information event for the well supported elements in Green End Road.
18. Some localised discussions are ongoing on most of the schemes regarding the need to remove trees and hedges in a few places. In all instances, working with the City Council's Landscape Architects and Tree Officers the objective is to install new trees and hedges close to where existing ones are removed in all instances.

Budget and Programme

19. Originally £4m was allocated towards the schemes. This was allocated before the locations and scope of the schemes was identified and was very much a high level early estimate. It was considered better to include comprehensive proposals for each scheme for consultation purposes, and in some cases to extend the original scope and extent of each scheme. Within the consultation, comments were made that several schemes should be extended even further (Hills Road/Long Road, Fulbourn Road and Arbury Road). To deliver the schemes to the fullest scope and the highest standards, providing good quality infrastructure in accordance with the City Deal aspirations, a further £4m of City Deal funding will be required.
19. It is considered that given the substantial range of costings for the options currently being assessed for other City Deal projects and the potential challenges to their delivery, the increase in the allocation can be accommodated, and that the opportunity for early delivery of high quality schemes should be taken. It should be noted that to date £800,000 of S106 contributions have been secured towards the Cross City Cycling schemes.
20. The alternative to the additional City Deal funding, would be to reduce the number of schemes to two or three. Maintaining the number of schemes but reducing the quality and standards to meet the budget allocation is not considered to meet the objectives of City Deal to build high quality facilities that will encourage more people to cycle.
21. The nature, value and location of the schemes means that work can commence in 2016, with substantial completion of the entire package by mid 2018.

Summary

22. It is recommended that the City Deal Board supports the implementation of all five schemes subject to minor changes and addressing a number of localised concerns.
23. The following table provides outline dates for delivery:

#	Milestone or Phase	Date
1	Initiation – Project Initiation Document and preparation	Complete
2	Determination of schemes to be taken forward	Complete

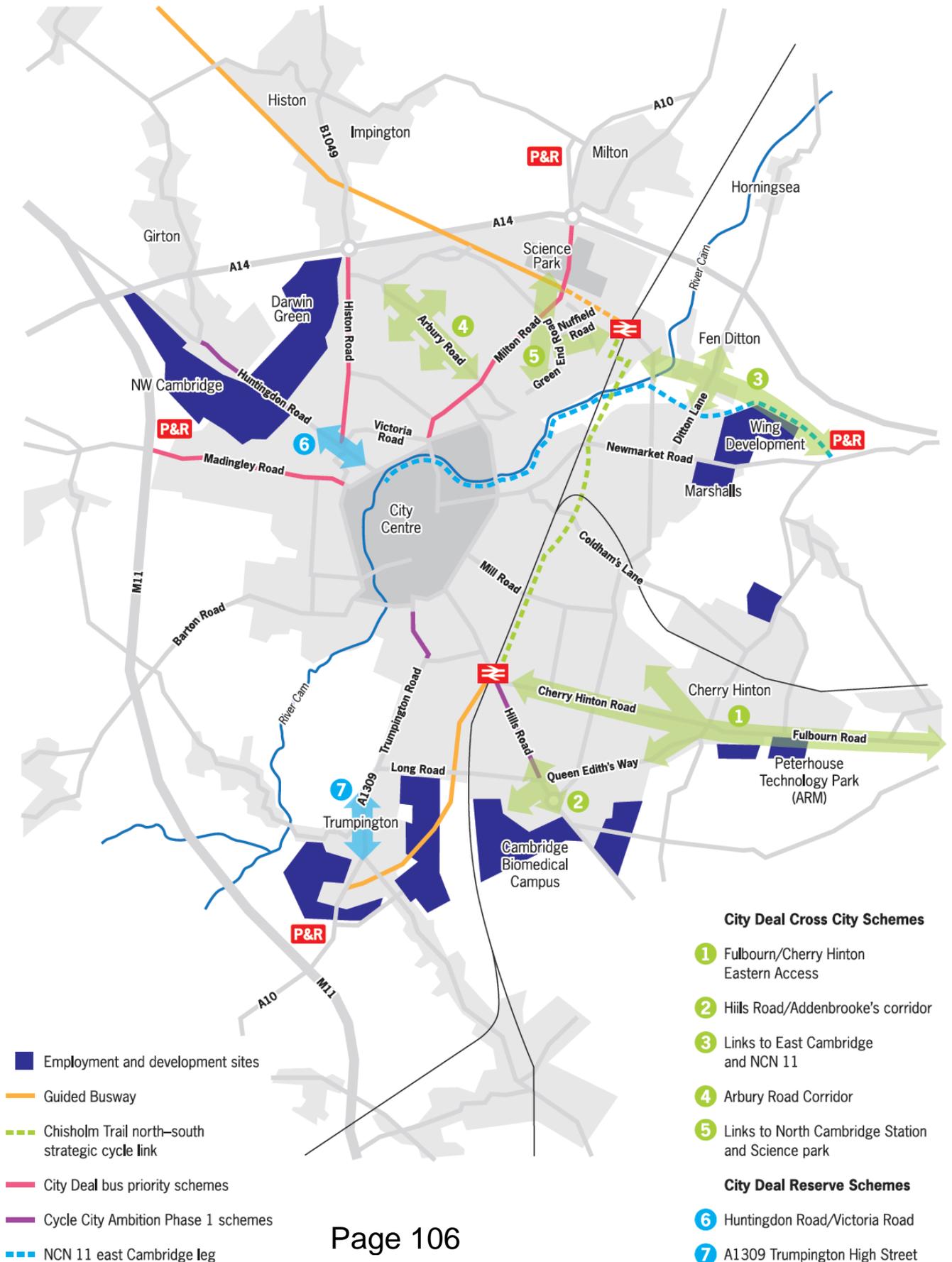
3	Preliminary design	Complete
4	Public consultation and exhibitions	Complete
5	Board approval to construct schemes	June 2016
6	Traffic Regulation Orders (TROs), detailed design, further consultation on specific elements and preparation of contract documents	Summer 2016 to early 2017
7	Construction of standalone schemes	Late 2016 - 2018

Risks, Implications and Next Steps

24. Compared to other Tranche 1 projects, Cross City Cycling is relatively low risk. The key project risks in terms of delivery within budget and with completion by April 2020 are the need to relocate or protect statutory undertakers plant and the difficulties associated with working on the current road network without causing undue delays.
25. 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 there are no significant implications.
26. The next steps are:
- Finalise designs
 - Conclude localised discussions on detail
 - Advertise Traffic Regulation Orders where necessary
 - Undertake further targeted consultation on some elements
 - Mobilise contractors

Report Author: Mike Davies – Team Leader (Cycling Projects), Cambridgeshire County Council Tel 01223 699913

City Deal Cross City Cycle Improvements



Agenda Item 12



Report To: Greater Cambridge City Deal Executive Board

9 June 2016

Lead Officer: Graham Hughes, Cambridgeshire County Council

Workstream ref: Cambridge to Royston Cycleway

Cambridge to Royston Cycleway

Purpose

1. This report explains that for a relatively small investment, a significant and valuable part of the Cambridge to Royston cycleway route, namely Cambridge to Melbourn, could be completed, and major economic benefits could be realised in the short term.

Recommendations

2. The Board is asked to:
 - a) Note the work completed to date to provide a cycle link from Cambridge to Melbourn; and,
 - b) Give approval to use £550,000 of City Deal funding to complete the link.

Reasons for Recommendation

- a) Safer, direct and convenient off-road route for cycling and walking;
- b) Improved access and reliability of journey times to employment areas, transport hubs, educational establishments and residential centres/villages;
- c) Minimal impact on motor traffic and public transport journey times;
- d) Provision of safe, convenient, direct, non-car access to key locations;
- e) Create more capacity for sustainable trips along the A10 South corridor;
- f) Improved air quality; and
- g) All of the above contributing to a positive economic impact.

The project

3. The adopted Transport Strategy for Cambridge and South Cambridgeshire promotes the implementation of sustainable transport interventions on corridors. City Deal embraces this approach, and is currently developing schemes on the A428, A10 North and A1307 corridors. Whilst it is envisaged that few people would cycle on a daily basis on the entire length of a route between Royston and Cambridge, it is recognised that many people would use distinct sections perhaps to cycle to a railway station at Foxton, Shepreth or Meldreth, or to commute from Melbourn to Royston, Harston to Cambridge etc. The corridor is full of trip generators such as employment sites, railway stations, educational establishments, leisure destinations

and housing developments. Within a mile or so of the corridor lies a further network of villages and employment sites, hence the corridor acting as a spine route.

Scheme progress

4. In January 2015 the City Deal Board considered a range of infrastructure projects for delivery in Tranche 1 of the programme. The A10 Cambridge to Royston cycleway scored relatively well: 12th out of 23 schemes considered, but the Board chose not to prioritise it initially as other schemes were felt to give greater economic benefits.
5. The County Council included sections of the overall project in its Department for Transport funded Cycle City Ambition programme. As a result funding was secured for improvements through Harston and for Frog End, Shepreth to Harston.
6. An initial public consultation for improvements in Harston village took place in November 2015. Following some positive results, and useful comments, the proposals were modified and these are currently out to further consultation. The County Council's Economy and Environment Committee will be asked on 1st September to approve the scheme for construction, starting in January 2017.
7. The length from Harston to Foxton was completed in December 2015. Works then commenced on the length from Foxton to Frog End, Shepreth which was completed in May 2016.
8. The remaining unfunded sections are:
 - Frog End, Shepreth to Melbourn
 - Melbourn to A505
 - A new bridge over the A505 to complete the link into Royston

In Royston an underpass beneath the railway line has been installed, opening in 2014, which links the eastern side of the town with the western side, and thus makes for relatively safe cycle access around the town and to key employment sites.

9. **Plan 1** shows the whole project, and is annotated to show the status of each section of the route.

Strategy for project completion

10. Melbourn to the A505 and the new bridge link to Royston need to be amalgamated as one overall package, as building either in isolation would lead to enticing users onto a potentially unsafe and incomplete route. These two elements are being submitted as a SEP3 regional funding bid by the Greater Cambridge and Greater Peterborough LEP.
11. Improvements in Harston have been patiently developed working with the local community and seem well supported, so it seems likely that the improvement scheme will be approved, and work will commence in January 2017.
12. City Deal would appear to be the logical way of funding the section from Frog End, Shepreth to Melbourn, thus giving a complete Cambridge to Melbourn cycle route which is likely to be fully available for use by June 2017.

13. It is recommended that the City Deal Board endorses the officer recommendation to proceed with the allocation of funding of £550,000 to construct the Frog End, Shepreth to Melbourn section.

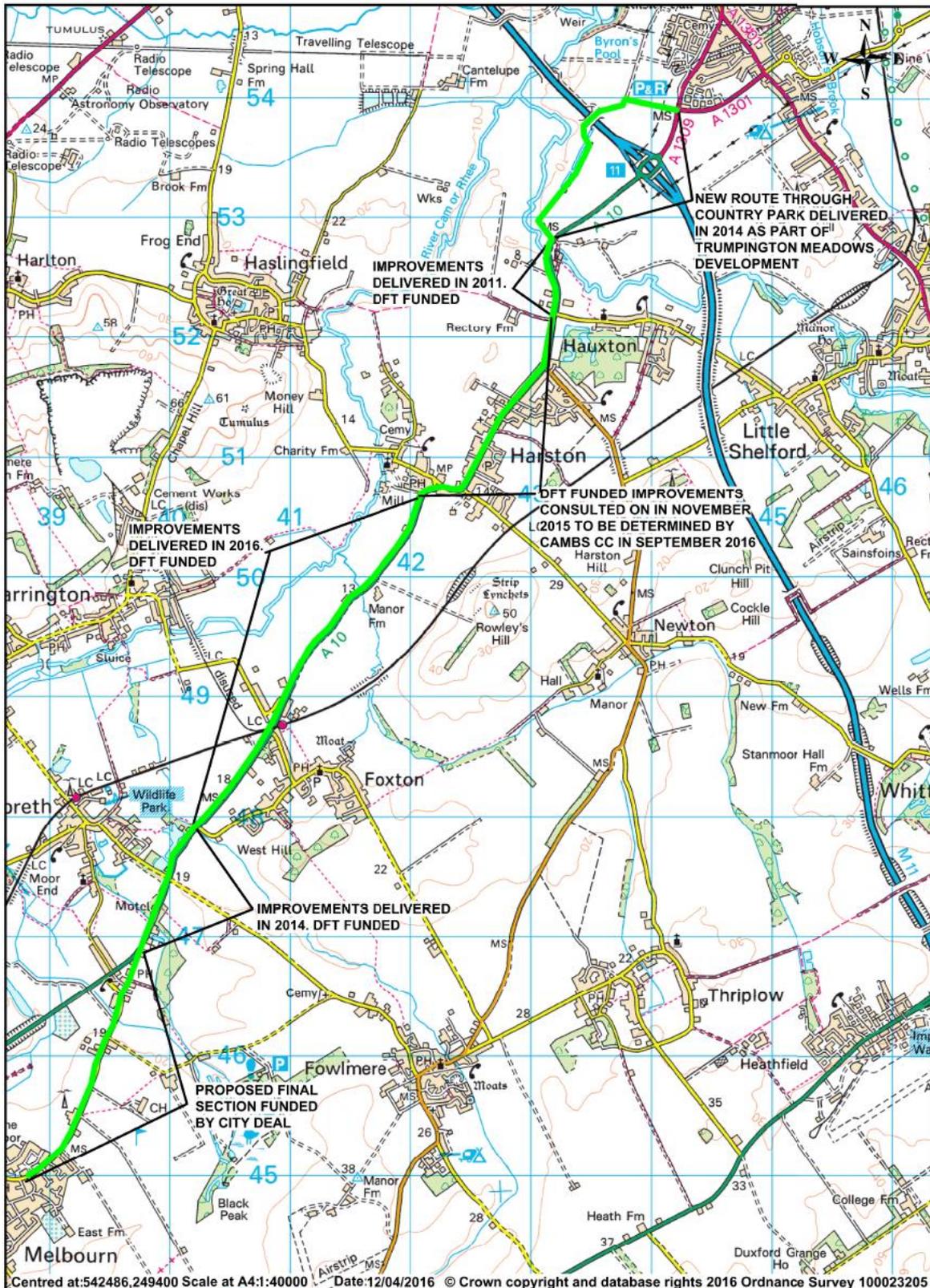
Risks, Implications and Next Steps

14. The proposed scheme is very low risk, well supported locally, and within the public highway so requires no planning consent or land agreements.
15. 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, there are no significant implications.
16. The next steps are:
 - Commence construction work

Report Author: Mike Davies –Team Leader (Cycling Projects), Cambridgeshire County Council Tel 01223 699913

PLAN 1 – Cambridge to Royston cycleway, section by section status

Cambridge to Melbourn Cycle Route



Agenda Item 13



Report To: Greater Cambridge City Deal Executive Board

9 June 2016

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

City Deal Urban and Environmental Design Guidance

Purpose

- 1 This report seeks the endorsement of a document setting out the principles to be followed and guidance that should be taken into account during the development of City Deal transport infrastructure projects on the major roads into Cambridge and city centre access routes.

Recommendations

- 2 The Executive Board is recommended to:
 - a. Endorse the 'City Deal Urban and Environmental Design Guidance' document;
 - b. Require that the document is proactively used and referenced by project managers during the development of relevant City Deal transport projects; and
 - c. Request that the document is updated periodically to reflect any significant changes in highway and planning design policy.

Reasons for Recommendations

- 3 City Deal transport projects aim to achieve an acceptable balance of high quality sustainable transport infrastructure and enhanced public realm and streetscape improvement. Utilising the guidance and principles set out in the document will support the achievement of this aim.

Background

- 4 At its meeting on 17th December 2015, the City Deal Joint Assembly received a presentation on opportunities for public realm and landscaping enhancement within the City Deal. Consequently, the Joint Assembly recommended the development of an Environmental Design Guide for City Deal Major infrastructure schemes.
- 5 At its meeting on 15th January 2016, the City Deal Executive Board accepted this recommendation and at its meeting on 3rd March re-emphasised it should be a statement of environmental and public realm guiding principles reflecting and summarising current national and locally determined good practices.

Draft document

- 6 A draft document entitled “City Deal Urban and Environmental Design Guidance” is appended to this report.

Glen Richardson (Urban Design Manager, Cambridge City Council) and Andrew Cameron (Director of Urban Design) from consultants WSP, the joint authors of the document, will be in attendance to respond to questions on the draft document.

- 7 The document aims to establish the general design principles that should apply to the development of City Deal transport projects and to reference design guidance that has been developed by a wide range of organisations and professionals that should be used to influence and inform the design process. The document also references schemes that demonstrate the implementation of these principles and guidance.
- 8 The draft is intended as a dynamic document that would be updated periodically to reflect new developments in the design process and any relevant changes in national and local planning and highway design policy.

Implications

- 9 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

The production cost for the guidance document has been met from the City Deal funding stream.

Legal

No significant legal implications have been identified during the development of the guidance document.

Staffing

Project management for the production of the guidance document is undertaken by Cambridgeshire County Council’s Major Infrastructure Delivery Team in collaboration with the District Councils.

Risk Management

Failure to follow the guidance referenced in the guidance document could lead to flawed scheme designs and stakeholder challenge.

Equality and Diversity

There are no equality or diversity implications in this report.

Climate Change and Environmental

The guidance document underpins the development of sustainable scheme designs which have the potential to reduce congestion, improve air quality, reduce flooding and encourage a shift towards sustainable transport modes.

Consultation responses and Communication

No significant legal implications have been identified during the development of the guidance document.

Community Safety

No significant legal implications have been identified during the development of the guidance document.

Background Papers

Cambridgeshire Design Guide 2007:

<https://www.scambs.gov.uk/sites/default/files/documents/Cambridgeshire%20Design%20Guide%20for%20Streets%20and%20the%20Public%20Realm%202007.pdf>

Report Author: Richard Preston, Project Manager, Major Infrastructure Delivery Team, CCC

Email: richard.preston@cambridgeshire.gov.uk

Telephone: 01223 743701

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GREATER CAMBRIDGE CITY DEAL

Urban Design Guidance for Transport Infrastructure Projects



UNIVERSITY OF
CAMBRIDGE



Cambridgeshire
County Council



GREATER CAMBRIDGE
GREATER PETERBOROUGH

ENTERPRISE PARTNERSHIP



South
Cambridgeshire
District Council



CAMBRIDGE
CITY COUNCIL

KEY OBJECTIVES OF CITY DEAL

The City Deal aims to help Greater Cambridge maintain and grow its status as a prosperous economic area. The City Deal creates an infrastructure investment fund to accelerate the delivery of 33,000 planned homes and help create 45,000 new jobs through joint decision making between local councils.

Between 2015/16 and 2019/20, Government will provide Greater Cambridge with £100m and dependent on the economic impact of this local investment, Greater Cambridge will be able to access up to an additional £400m over 10-15 years.

The vast majority of this funding will be used to provide new sustainable transport infrastructure in and around Cambridge on new and existing transport corridors.

KEY OBJECTIVES OF THE DESIGN GUIDE

The purpose of this document is to ensure that infrastructure schemes are developed in the context of relevant national and local guidance and to comply with best practice. It sets out design

principles and processes to make the most of the opportunities that transport infrastructure schemes offer to improve the quality of the highway environment so that the City Deal contributes to maintaining Cambridge as an attractive place to live and to its quality of life. In the context of individual project objectives, it will aim to:

- Inform and influence the design of major routes into and out of the city and key city centre access streets.
- Achieve an appropriate blend of the needs for movement along these routes and the desire to make them attractive places to live, work and pass through.
- Engage with local communities and groups that represent movement modes to influence and inform the development of designs that meet project objectives in a balanced way.

1.0 CONTEXT

1.1 STATUS AND SCOPE OF THE GUIDE

The guidance in this document is advisory but should be considered in the design of projects being delivered by the Greater Cambridge City Deal. It has not been prepared as a Supplementary Planning Document (SPD) as set out in the Town and Country Planning (Local Planning) (England) Regulations 2012.

This guidance note should be read in with the Cambridgeshire Design Guide (2007) which has been prepared by the County and District Councils in partnership to provide guidance on the design of streets within new development.



Cambridgeshire Design Guide (2007)

Click here

<https://www.scambs.gov.uk/sites/default/files/documents/Cambridgeshire%20Design%20Guide%20for%20Streets%20and%20the%20Public%20Realm%202007.pdf>

Click here

South Cambridgeshire District Council's Biodiversity SPD

<https://www.scambs.gov.uk/content/biodiversity-spd>

Click here

County Council's Green Infrastructure Strategy

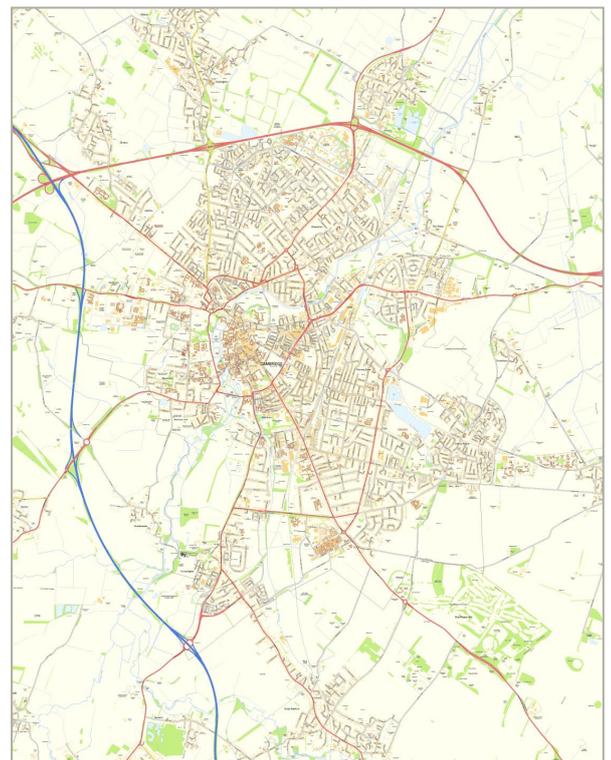
http://www.cambridgeshire.gov.uk/info/20012/arts_green_spaces_and_activities/344/protecting_and_providing_green_space

This guide is to be used in urban areas where City Deal transport infrastructure projects are undertaken, primarily on main radial routes in Cambridge and central access streets. It will assist with the design of these spaces highlighting some of the challenges where the existing street width is limited and the sometimes competing requirements for place and movement need to be balanced.

Some projects will be developed on routes which have both urban and rural environments along their length and reference should be made to the County Council's Green Infrastructure Strategy and South Cambridgeshire District Council's Biodiversity SPD as part of the design process for the development of transport infrastructure in rural settings:



Milton Road (1), Histon Road (2) and Maddingley Road (3) are radial routes into the city which exhibit typical cross-sections and features that need to be addressed as part of this process



2.0 STREET DESIGN PRINCIPLES

2.1 DESIGN PARAMETERS

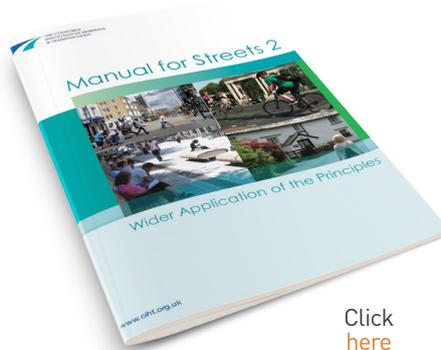
In many existing towns and cities streets have been designed where the transportation or movement elements dominate which has impacted on the quality of the environment experienced by those who walk, cycle and live in these streets; The development of new sustainable transport infrastructure should ensure that placemaking forms an integral part of the design process for streets within Greater Cambridge; to design them as quality places, with an appropriate blend of movement needs and making them liveable, inclusive, green places.

Better street design can be achieved through a blend of movement and place functions. The street 'place' functions deal with how the street feels as a pleasant and attractive environment and the street 'movement' functions address how it operates in terms of movement for a range of users (see Figure xx). These principles are set out in the Manual for Streets 1 and 2 national guidance documents for England and Wales and reference should be made to them to expand on these principles and for more detailed design guidance. Street Design for All also provides relevant guidance and design guidance.



Click here

Manual for Streets (2007)
<https://www.gov.uk/government/publications/manual-for-streets>



Click here

Manual for Streets 2 (2010)
<http://www.ciht.org.uk/en/document-summary/index.cfm/docid/055693F6-8DB0-4BBE-AA9FF1B5BC5E9412>



Click here

Street Design for All (2014)
http://www.civicvoice.org.uk/uploads/files/street_design_2014.pdf

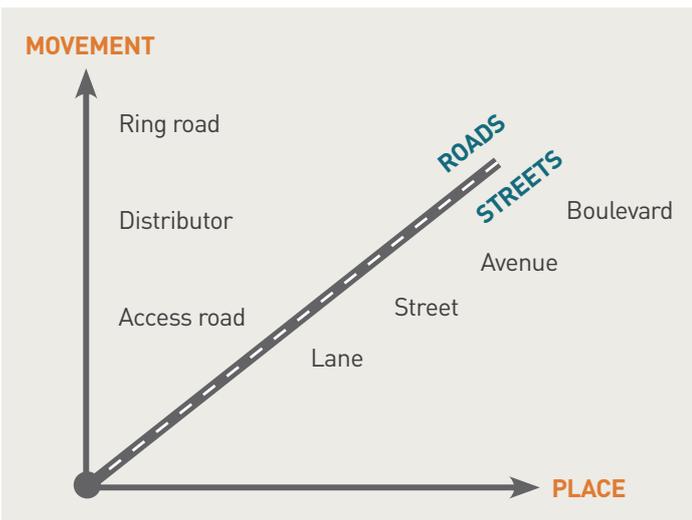
Reference should also be made to the Design Manual for Roads and Bridges Volume 10 which considers environmental design and management issues when improving existing roads:

Click here **Design Manual for Roads and Bridges Volume 10**
<http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol10/section2.htm>

The diagram below illustrates the move to street design from road design as 'placemaking' is brought into better balance.



Road dominated layout that segregates communities (above) compared to a street composition that creates a high quality place (below)



At times the 'highways design' of places is separated out from the overall design development of streets and this can lead to places where roads dominate and pedestrians, cyclists and public transport users are downgraded in terms of the environments that they have to use.

The positioning of buildings and the life they bring to the streets, landscaping, trees and other planting area and materials all have a role to play in making a good quality environment. To do this we need to bring together a synergy between the requirements of transport planning, engineering and the art of placemaking.

2.2 DESIGN PARAMETERS

In the context of Greater Cambridge City Deal project objectives, the designers of streets should consider all users when thinking about how the streets are laid out in cross-section and plan and what they will feel like when completed. They should consider:

- Pedestrians and those who are disabled
- Cyclists
- Buses and Taxis
- Goods and servicing vehicles
- Cars

For many existing streets the availability of space may be limited and final designs will need to strike a balance between some of the requirements for these users. See section 3.0.

In addition, designers will need to look at the accessibility requirements for pedestrians and those who may be disabled. Reference should be made to the Equality Act (2010) and current guidance on the use of dropped kerbs and tactile paving for example. Consultation with local access groups should be undertaken.

3.0 THE STREET IN CROSS-SECTION

3.1 STREET SECTION DESIGN

Putting the street section together is one of the main tasks to start the design process. Good streets are a composition of many elements and they need to be pleasant places as well as functional and efficient movement routes.

The table below sets out some of the most common elements that need to be considered within the street section along with desirable and minimum dimensions for these. There may well be other

elements to consider and provide for (e.g. bus stops, the retention of existing trees, post boxes or other existing features) but below is a start point for design.

Based on individual scheme objectives, designers should use this to start to configure street sections so that a consultation can begin with businesses, residents, user groups and others.

STREET SECTION ELEMENT	DESIRABLE (metres)	IMAGES	MINIMUM (metres)	IMAGES
Pedestrian footway	2.00		1.50	
Tree planting / landscape zone (separate from the footway)	2.00 (minimum)		1.00	
Combined footway with trees	3.00		3.00	
Cycle lane (one way) Can be on carriageway or segregated / stepped	2.00		1.50 (absolute minimum 1.20)	
Cycle lane (two way) Can be on carriageway or segregated / stepped	3.00		2.50	

<p>Running lane for traffic (one direction)</p>	<p>3.00</p>		<p>3.00 (2.75 over short lengths)</p>	
<p>Bus lane (one direction)</p>	<p>3.00</p>		<p>3.00</p>	
<p>Median (i.e. design feature to separate functional uses and to add pedestrian crossing opportunities)</p>	<p>2.00</p>		<p>0.50 (absolute minimum 0.20)</p>	

When working with new development and unconstrained land then these dimensions can be achieved as the ideal section can be provided, however when looking at existing streets with a defined width of street section available (which is often less than desirable) then a balance needs to be struck between the widths used for each element. In striking this balance care needs to be taken not to undermine project objectives.

Priorities on radial routes in Cambridge should be determined at the outset within individual project briefs for each user type and street design element so that cross sections can be determined.

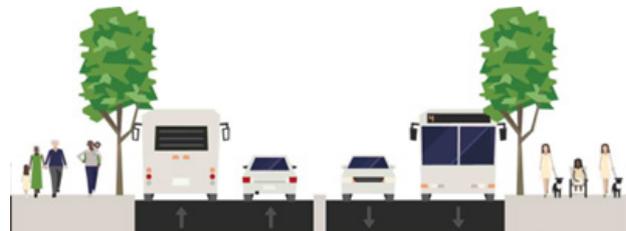
As an example, for a typical 20 metre wide existing street some of the options for street section design are set out below but other permutations are possible. As part of the design process these combinations should be explored.



'Movement only' scenario



Trees on one side with reduced width cycle and/or running lanes



Shared 3.0m footway/cycleway, reduced width running lanes and a median strip



Tree lined street with bus lane only in one direction



Central bus lane



Tree lined street with two way bike lane (3.0m) and bus lane in only one direction



Retained existing tree within 4.0m zone (left hand side), 1.0m wide cycle lanes

EXAMPLES

Other cities have addressed these issues in a variety of ways where the existing street dimension is limited and hence some street elements have had to be omitted or reduced in width.

Copenhagen: bus lane only in one direction to allow for wider cycle lanes and median provision



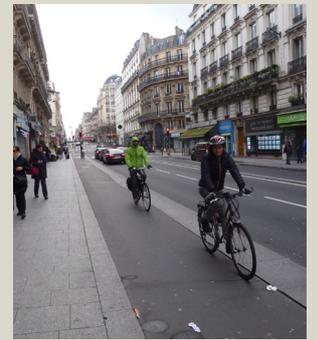
Dedicated cycle facilities, Huntingdon Road, Cambridge



Kensington High Street (two lanes in each direction, variable width median, no dedicated cycle lanes)



Paris: reduced with median and cycle lanes within existing streets



4.0 STREET ELEMENTS

4.1 CROSSING THE STREET AND JUNCTION DESIGN

Street design must also be considered in plan and in three dimensions; some of the main issues include:

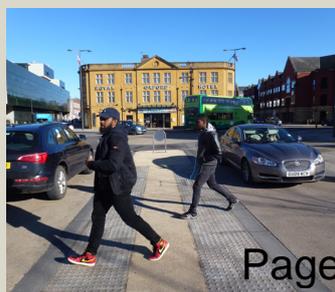
- 1 Junction design and 'crisscrossability'; i.e. the ability and desire for pedestrians to cross easily.
Provide cycling facilities, including priority over side roads, continuity, good quality surfaces, safer approaches and passage through junctions and cycle parking



- 3 Introduction of a median and/or refuge points to help pedestrians cross the street and to slow vehicles



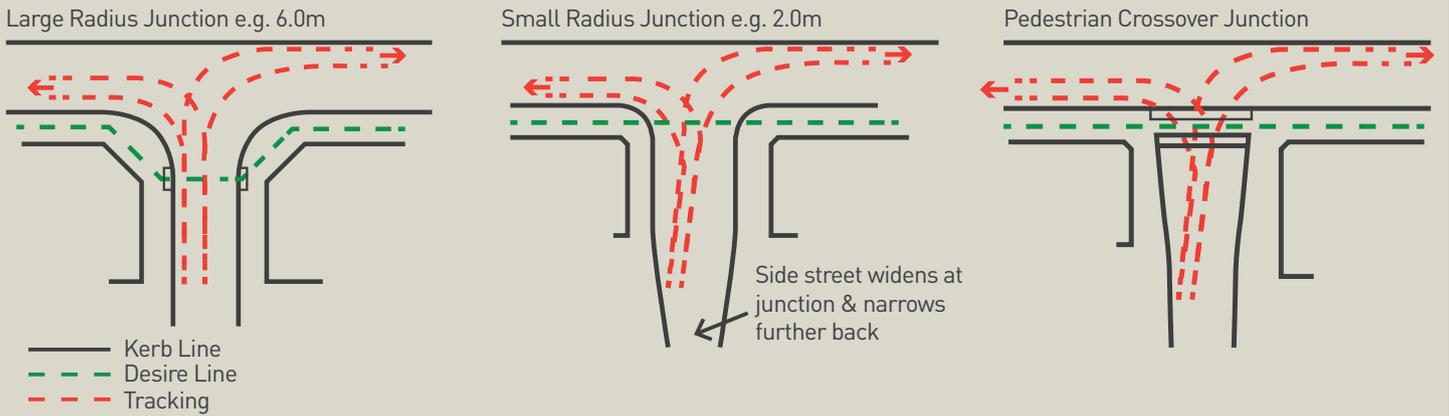
- 2 Crossing types: use of designated crossings e.g. zebras, pelicans, toucans, or more informal types such as a courtesy crossings or changes in materials / surfacing.



- 4 Incorporation of pedestrian crossings at junctions to facilitate level movement for pedestrians.



Junction radii: reduce in dimension to assist pedestrian desire lines and consider removing completely



4.2 HIGHWAY PUBLIC REALM AND STREETScape

The choice and use of materials and trees must not be considered as an 'add on' or last minute thought. They should be integral in the design to help create high quality, welcoming streets. Key considerations include:

- Material choice to be based on whole life cost.
- Some differentiation between footway and road materials helps break up the ground-scape.

- A high quality kerb is desirable.
- Landscaping and the retention / planting of new trees and verges to help create green streets.
- Maintainability and the ongoing cost of maintenance to be considered; along with the adoption of streets and public realm.
- Keep signs and lines to a minimum to satisfy statutory needs; consider bespoke elements:

EXAMPLES

High quality design with minimal 'highway engineering', Trumpington Meadows



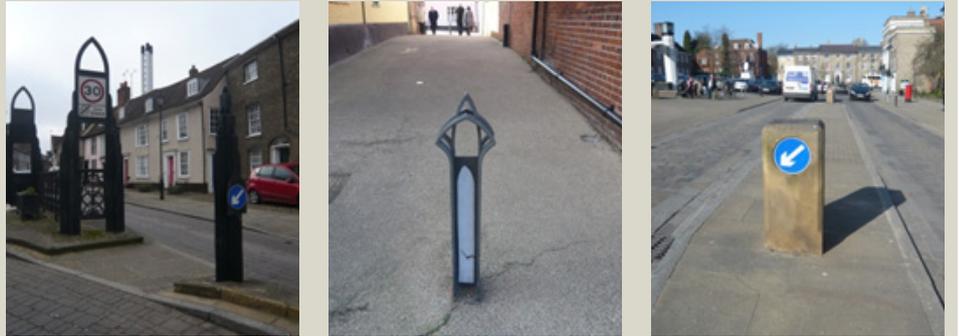
Minimal signage and attention to detail, lighting columns carrying traffic lights and footpath lighting, Kensington High Street



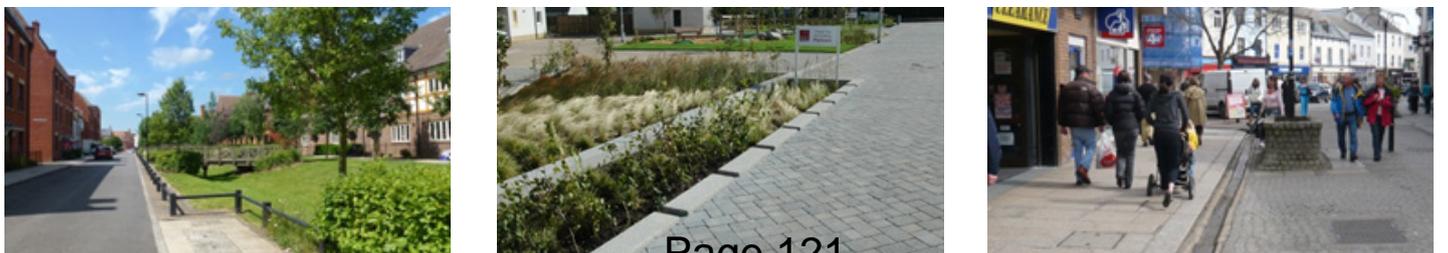
Bespoke cycle lane markings



Bespoke signage and public realm, Bury St Edmunds



Consider placing of bus stops, bus shelters, on street car parking requirements and servicing and deliveries requirements. Street furniture needs to earn its place; consider carefully the use of bollards but look for opportunities to site benches, public art, waste bins and other useful items of street furniture as required. Consider use of Sustainable Urban Drainage Systems (SUDS):



4.3 HIGHWAY TREES AND PLANTING AREAS

- Protect and retain existing quality trees where practicable and desirable.
- Determine early the scope for new tree planting.
- Consider at an early stage maintenance and operational requirements.
- Specify the right tree using native species considering both functional and aesthetic requirements including future canopy spread.
- Consider design detailing to protect green landscaping from vehicle overrun.
- Planting conditions have to be good (consider both the use of structural soil and cells).
- Planting in and around existing infrastructure where conditions allow, requires time (investigation of utility services) and investment. At times the constraints of existing utilities may prevent planting.
- Consider other areas for greenscape and habitat creation (although the opportunities may be very limited in existing highways).
- Explore opportunities for local community stewardship of green landscaping.



Planting trees in Silva Cells, Riverside, Cambridge

Reference should be made to the Trees and Design Action Group document: Trees in Hard Landscapes:

Click **Trees in Hard Landscapes**
here <http://www.tdag.org.uk/trees-in-hard-landscapes.html>

4.4 INFRASTRUCTURE REQUIREMENTS

- Identify existing utilities and accommodate them where possible and appropriate.
- Allow for new utilities to be provided and the potential to upgrade as works are undertaken.
- Future-proofing of new designs should be considered now for the utilities that may come later.
- Opportunities for additional ducting and spare capacity to be made in the designs now; to help reduce the need for major street works in the future.

5.0 PUTTING IT ALL TOGETHER

5.1 SUMMARY

The City Deal offers a great opportunity to improve accessibility along key routes and in city centre locations for pedestrians, cyclists and bus users. Precedents elsewhere show that it is possible to achieve the infrastructure to support more sustainable modes of travel and deliver high quality inclusive places, but ultimately there will be choices to be made in order to strike the right balance of infrastructure and the amount and type of public realm (soft and hard landscape)

Detailed investigation of constraints (services etc.) and the development of design options to integrate soft and hard landscaping

will be an important stage of the design development of the streets to be improved along with consultation with local residents, businesses and user groups.

The options that are developed need, as much as possible, to respond to their context (urban, historic, residential, suburban, etc.) and the improvements to mobility must be blended with creating attractive places and streets that will enhance the experience for all users.

Making use of the design references set out in this document will ensure that relevant policies and guidance are taken into account during the design process and that legal expectations are satisfied.

6.0 OTHER REFERENCES

Conservation Area Appraisals for Cambridge. These can be found at the attached link:

Click **Conservation Area Appraisals**
here <https://www.cambridge.gov.uk/conservation-areas>

Sustainable Urban Drainage Guidance can be found at:

Click **Sustainable Urban Drainage Guidance**
here http://www.cambridgeshire.gov.uk/info/20099/planning_and_development/49/water_minerals_and_waste/10

Suburbs and Approaches Studies for Cambridge. These can be found at the attached link:

Click **Suburbs and Approaches Studies**
here <https://www.cambridge.gov.uk/content/suburbs-and-approaches>

Greater Cambridge City Deal Executive Board

9 June 2016 – City Deal progress report

Workstream	Update	Upcoming milestones
INFRASTRUCTURE PROGRAMME		
Create and deliver an infrastructure investment programme that draws together national and local funding streams to invest in infrastructure that will drive economic growth in the area.		
<p>A1307 corridor to include bus priority / A1307 additional Park & Ride Achieve faster and more reliable bus journey times between Haverhill, Cambridge and key areas in between, through bus priority at key congestion points on the A1307 and provision of an outer Park & Ride site on the corridor.</p>	<ul style="list-style-type: none"> Public consultation is due to take place shortly on a series of high-level options for the corridor. 	<ul style="list-style-type: none"> 16 June: Start of public consultation 1 August: End of public consultation
<p>A428-M11 segregated bus route / A428 corridor Park & Ride / Madingley Road bus priority Ensure that bus journeys between Cambourne and Cambridge are direct and unaffected by congestion by providing high quality bus priority measures between the A428/A1303 junction and Queen’s Road, Cambridge and one or more Park & Ride or rural interchange sites on the corridor.</p>	<ul style="list-style-type: none"> Further technical work is being undertaken to establish the costs and benefits of the existing options and of hybrid suggestions received through the public consultation. 	<ul style="list-style-type: none"> 1 September: Executive Board to select a preferred option for each of the projects along the corridor for Full Business Case preparation and detailed design, to be subject to further public consultation.
<p>Chisholm Trail cycle links A high quality strategic cycle route from Cambridge Station in the south of the city through to the new [Cambridge North] Station, providing connections between the Science and Business Parks in the north and the commercial hub around Cambridge Station and the Biomedical Campus.</p>	<ul style="list-style-type: none"> The Executive Board in March approved the submission of the planning application for the route and the start of land negotiations, which are now taking place. 	<ul style="list-style-type: none"> June: Anticipated submission of planning application for Chisholm Trail cycle links and Chesterton-Abbey Bridge. 13 October: Executive Board (subject to planning consent) to approve delivery of the scheme.

<p>City centre capacity improvements Improve the reliability of, and capacity for public transport, cycling and walking movements in the city centre through a variety of potential measures to relieve congestion and manage the city's transport network.</p>	<ul style="list-style-type: none"> Following the Call for Evidence in late 2015, further work has been undertaken to consider responses received and develop a proposed package of measures (which is the subject of a paper on the agenda for this meeting). 	<ul style="list-style-type: none"> July to October: (Subject to Executive Board decision) Engagement on proposed package of measures.
<p>Cross-city cycle improvements Facilitate continued growth and an increased proportion of cycling trips in Cambridge, lifting cycling levels to around 40% by enhancing the connectivity, accessibility and safety of the cycling network.</p>	<ul style="list-style-type: none"> Following public consultation in January/February, detailed schemes have been developed in five areas, which are the subject of a paper on the agenda for this meeting. 	<ul style="list-style-type: none"> September: (Subject to Executive Board decision) Anticipated start of construction.
<p>Histon Road bus priority / Milton Road bus priority Ensure that bus journeys along Histon and Milton Roads are direct and unaffected by congestion through the provision of high quality on-line bus priority measures between the Histon and Milton Interchanges and Cambridge city centre.</p>	<ul style="list-style-type: none"> Following public consultation in January/February, further work has been undertaken to reflect the responses received and to propose preferred measures for each corridor, which are the subject of a paper on the agenda for this meeting. 	<ul style="list-style-type: none"> Summer: (Subject to Executive Board decision) Detailed work on preferred measures to prepare for public consultation. November: Anticipated start of public consultation, with detail to evolve in the meantime.
<p>Tranche 2 programme development Develop a prioritised programme of infrastructure investments, informed by an analysis of their anticipated economic impacts, to be delivered during the tranche 2 period (2020/21-2024/25).</p>	<ul style="list-style-type: none"> Public consultation on initial options for the Western Orbital closed in March. 	<ul style="list-style-type: none"> Autumn: Initial sift and assessment of the long-list of schemes. Winter: Agreement of initial priorities for preparatory work on tranche 2 schemes to develop to 'options assessment' stage.
OTHER WORKSTREAMS		
<p>Communications Communicate the vision and aims of the City Deal to a range of audiences</p>	<ul style="list-style-type: none"> The City Deal Communications Group has been established to lead the communications work. The vision and objectives have been 	<ul style="list-style-type: none"> Update communications and engagement strategy. Completion and publication of brand guidelines and house-style document,

	<p>developed to inform the City Deal brochure, refreshed web pages and fact file.</p> <ul style="list-style-type: none"> • Branding and template products have been produced. • A professional image library is being commissioned to support marketing and communications. • A communications forward planning calendar has been established to proactively manage communications. 	<p>and communications response policy.</p> <ul style="list-style-type: none"> • Quarterly stakeholder newsletters to be produced. • E-newsletters to be produced. • Review of digital and design resource.
<p>Economic development and promotion Enhance the alignment of public and private sector partners in Greater Cambridge to enhance the attractiveness and promotion of the Greater Cambridge economy to high-value investors around the world, and align appropriate activities that support existing businesses to develop.</p>	<ul style="list-style-type: none"> • The Cambridge Promotions Agency (CPA) has already handled over 100 enquiries, and built up a pipeline of inward investment intelligence. • Those enquiries have been qualified and responded with a variety of information, conference calls and customised visits. • The CPA has evidence of at least 12 direct investments, additionally, a number of 'heads of terms' with start-ups, direct corporate collaborations with universities and a \$2 billion enquiry for ARM. • The CPA is filming a 'Next Big Thing' series with Cambridge TV for international audiences. 	
<p>Finance Manage and monitor the delivery of the infrastructure investment programme and relevant City Deal-related expenditure, and bring together appropriate local funding streams to complement and enhance the delivery of City Deal objectives.</p>	<ul style="list-style-type: none"> • The Executive Board in March approved the City Deal budget for 2016/17. • The Government consultation on the future of New Homes Bonus has closed and responses are being reviewed. It is not clear when an update will be published. 	<ul style="list-style-type: none"> • 13 July: Executive Board to consider end of year financial reporting from 2015/16.

<p>Governance Create a governance arrangement for joint decision making between the local Councils that provides a coordinated approach to the overall strategic vision, including exploring the creation of a Combined Authority to allow the Councils to collaborate more closely to support economic development.</p>	<ul style="list-style-type: none"> • Discussions around a prospective devolution deal, which could have significant implications for City Deal governance, are ongoing. • Discussions are fast-paced and the situation is continuing to evolve. 	<ul style="list-style-type: none"> • Government is seeking decisions from Local Authorities by the end of June on the potential three counties deal.
<p>Housing Explore the creation of a joint venture to drive quicker delivery of 2,000 of the affordable new homes envisaged in the draft Local Plans, potentially drawing in land holdings from the partners and external investment to deliver more affordable housing, and deliver 1,000 extra new homes on rural exception sites.</p>	<ul style="list-style-type: none"> • The Member Reference Group has met and considered a business plan for the HDA for 2016/17, which indicates the number of schemes that the HDA will deliver and its operational costs – due to quorum not being met this could not yet be approved. 	<ul style="list-style-type: none"> • 13 July: Executive Board to consider annual housing review from 2015/16.
<p>Payment-by-results mechanism Implement a payment-by-results mechanism where Greater Cambridge is rewarded for prioritising and investing in projects that deliver the greatest economic impact over 15 years, commencing in 2015-16.</p>	<ul style="list-style-type: none"> • Officers are working with counterparts from several city-regions around the UK to procure the economic assessment panel, which will serve the city-regions' payment-by-results mechanisms up to 2021. • The framework contract for the economic assessment panel is to be retendered shortly, following a review of scope. 	<ul style="list-style-type: none"> • June: Anticipated launch of new tender exercise. • August: Anticipated contract award.
<p>Skills Create a locally responsive skills system that maximises the impact of public investment, forges stronger links between employers and skills providers, and drives growth across Greater Cambridge, including delivering 420 additional apprenticeships in growth sectors over five years.</p>	<ul style="list-style-type: none"> • 'Form the Future' is delivering the City Deal skills service. • The Joint Assembly sub-group met in March and agreed to produce an action plan to outline how the skills targets are to be met, which will be fed into the July report. 	<ul style="list-style-type: none"> • 13 July: Executive Board to receive annual report on skills work in 2015/16.

<p>Smart Cambridge Explore, in partnership with academic and business expertise, technological opportunities to complement the aims of the infrastructure investment programme and improve the functioning of the Greater Cambridge economy, finding smart solutions to a series of issues constraining the economic growth potential of the area and positioning the area as a Smart Cities leader.</p>	<ul style="list-style-type: none"> • The Executive Board in March approved the investment of £300,000 to develop a first stage 'smart technology city management platform' for Greater Cambridge, with a business plan and progress report to be brought back in July. 	<ul style="list-style-type: none"> • 13 July: Executive Board to receive an update on the smart infrastructure platform business plan implementation.
<p>Strategic planning Underpin and accelerate the delivery of the Cambridge City and South Cambridgeshire Local Plans, including undertaking an early review of the Local Plans beginning in 2019 to take into account the anticipated changed infrastructure landscape, and work towards developing a combined Local Plan that includes other relevant economic levers.</p>	<ul style="list-style-type: none"> • Cambridge City and South Cambridgeshire District Councils submitted further work and proposed modifications in March to the Inspectors, following decisions at their respective Council meetings. 	<ul style="list-style-type: none"> • June 2016: Local Plan hearings recommence.

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Greater Cambridge City Deal Executive Board Forward Plan of decisions

Notice is hereby given of:

- Decisions that that will be taken by the Greater Cambridge City Deal Executive Board, including key decisions as identified in the table below
- Confidential or exempt executive decisions that will be taken in a meeting from which the public will be excluded (for whole or part)

A 'key decision' is one that is likely:

- a) to result in the incurring of expenditure which is, or the making of savings which are, significant having regard to the budget for the service or function to which the decision relates; or
- b) to be significant in terms of its effects on communities living or working in the Greater Cambridge area.

Item title	Summary of decision (including notice of confidential or exempt information, if appropriate)	Officer lead(s)	Key decision?
Joint Assembly: 7 July Executive Board: 13 July		Reports for each item to be published: 29 June	
Update and business plan on smart infrastructure platform	To receive an update on the smart infrastructure platform business plan implementation	Noelle Godfrey	No
Intelligent Mobility phase one work packages	To consider proposals for a first phase of work packages exploring options to move towards technology-enabled transport services, including research into travel mode choices, integrated ticketing and autonomous vehicles	Noelle Godfrey	No
Annual skills review	To note progress made in 2015/16 on delivering the skills workstream and consider any issues arising.	Graham Hughes	No
Annual housing review	To note progress made in 2015/16 on delivering the housing workstream and consider any issues arising.	Alex Colyer	No
2015/16 end of year financial monitoring report	To note financial information from the 2015/16 financial year.	Chris Malyon	No

Safeguards on delegated powers	To consider safeguards to be put in place when exercising powers delegated from the Councils.	Tanya Sheridan	No
City Deal progress report	To note and discuss progress across the City Deal workstreams.	Tanya Sheridan	No
Joint Assembly: 25 August Executive Board: 1 September		Reports for each item to be published: 17 August	
Selection of preferred options for schemes along the A428 corridor and coming in to western Cambridge: <ul style="list-style-type: none"> • Madingley Road • A428-M11 • Bourn Airfield / Cambourne busway 	To select a preferred option for each of the three schemes for Full Business Case preparation and detailed design, to be subject to further consultation once prepared before being brought back to the Executive Board.	Graham Hughes	Yes
Western Orbital – consultation results	To consider the outcomes of the public consultation on the initial options.	Graham Hughes	No
2016/17 Quarter 1 financial monitoring report	To note financial information from April-June 2016.	Chris Malyon	No
City Deal progress report	To note and discuss progress across the City Deal workstreams.	Tanya Sheridan	No
Joint Assembly: 29 September Executive Board: 13 October		Reports for each item to be published: 21 September	
Chisholm Trail – approval of construction	To approve construction of the scheme.	Graham Hughes	Yes
City Deal progress report	To note and discuss progress across the City Deal workstreams.	Tanya Sheridan	No

Joint Assembly: 3 November Executive Board: 10 November		Reports for each item to be published: 26 October	
A1307 corridor to include bus priority—consultation results and selection of preferred option	To consider the outcomes of the public consultation on the initial options and to select a preferred option to develop in greater detail, to be subject to public consultation before being brought back to the Executive Board for approval to progress to detailed design.	Graham Hughes	Yes
Six-monthly report on skills	To note progress on delivering the skills workstream and consider any issues arising.	Graham Hughes	No
Six-monthly report on housing	To note progress on delivering the housing workstream and consider any issues arising.	Alex Colyer	No
2016/17 Quarter 2 financial monitoring report	To note financial information from July-September 2016.	Chris Malyon	No
Western Orbital – consultation results	To consider the outcomes of the public consultation on the initial options.	Graham Hughes	No
Tranche 2 initial prioritisation	To receive the results of an initial sift and assessment of the long list of potential tranche 2 schemes and agree schemes to be developed to 'Options Assessment' stage.	Graham Hughes	No
City Deal progress report	To note and discuss progress across the City Deal workstreams.	Tanya Sheridan	No
Joint Assembly: 1 December Executive Board: 8 December		Reports for each item to be published: 23 November	
City Deal progress report	To note and discuss progress across the City Deal workstreams.	Tanya Sheridan	No

Comment [BA1]: To be rescheduled for February/March 2017 (Precise date TBC pending meeting dates being agreed)

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