

## **TRANSPORT & INFRASTRUCTURE COMMITTEE**

Date:Friday, 06 March 2020

10:00 AM

Democratic Services Dermot Pearson Interim Monitoring Officer

> The Incubator Alconbury Weald Cambridgeshire PE28 4WX

## Meeting Room 1 Incubator 2, Alconbury Weald Enterprise Campus, Huntingdon, Cambridgeshire, PE28 4WX

## AGENDA

## **Open to Public and Press**

Part 1 - Governance Items

- 1 Apologies and declarations of interest
- 2 Minutes 9th January 2020
- 3 Public Questions

Arrangements for public questions can be viewed in Chapter 5, Paragraphs 18 to 18.16 of the Constitution which can be viewed here - <u>Cambridgeshire and Peterborough Combined Authority: Constitution</u>

4 Combined Authority Forward Plan - February 2020

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Part 2: Delivery

5	Budget and Performance Report	27 - 34
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7	St Neots River Great Ouse Northern Crossing Cycle Bridge	161 - 164
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9	March Area Transport Strategy Progress Report	169 - 182
10	Lancaster Way A10-A142 Improvements	183 - 188
11	Ely Area Capacity Enhancement Progress Report	189 - 194
12	Local Transport Plan and The Cambridgeshire Autonomous Metro	195 - 198

## Part 3 - Date of Future Meeting

The next meeting of the Transport and Infrastructure Committee is scheduled to take place at 2pm on 29th April 2020.

The Transport & Infrastructure Committee comprises the following members:

Mayor James Palmer

**Councillor Ian Bates** 

Councillor Peter Hiller

Councillor Nicky Massey

Councillor Jon Neish

Cllr Joshua Schumann

**Cllr Chris Seaton** 

Councillor Aidan Van de Weyer

For more information about this meeting, including access arrangements and facilities for people with disabilities, please contact

Clerk Name: Daniel Snowdon

Clerk Telephone: 01223 699177

Clerk Email: Daniel.Snowdon@cambridgeshire.gov.uk

The Combined Authority is committed to open government and members of the public are welcome to attend Committee meetings. It supports the principle of transparency and encourages filming, recording and taking photographs at meetings that are open to the public. It also welcomes the use of social networking and micro-blogging websites (such as Twitter and Facebook) to communicate with people about what is happening, as it happens.



CAMBRIDGESHIRE<br/>& PETERBOROUGHJAMES PALMERCOMBINED AUTHORITYCAMBRIDGESHIRE &<br/>PETERBOROUGH MAYOR

## CAMBRIDGESHIRE & PETERBOROUGH COMBINED AUTHORITY TRANSPORT AND INFRASTRUCTURE COMMITTEE: MINUTES

Date: Thursday 9<sup>th</sup> January 2020

**Time:** 14.00pm – 15.29pm

**Present:** James Palmer (Mayor and Chairman), Councillors Ian Bates, Peter Hiller, Chris Seaton, Mike Sargeant, Joshua Schumann and Aidan Van de Weyer

**Apologies:** Councillor Nicky Massey (Councillor Mike Sargeant substituting)

## 48. APOLOGIES AND DECLARATIONS OF INTERESTS

None received.

## 49. MINUTES – 7 NOVEMBER 2019

The minutes of the meeting held on 7 November 2019 were agreed as a correct record and signed by the Chairman.

## 50. PUBLIC QUESTIONS

None received.

## 51. COMBINED AUTHORITY FORWARD PLAN – 6 DECEMBER 2019

It was resolved to note the Forward Plan.

## 52. BUDGET AND PERFORMANCE UPDATE

The Committee considered the Budget and Performance Update.

The Committee noted that there had been no change to the budget position since the November iteration of the report. Attention was drawn to the capital budget which reported limited spend to date primarily due to suppliers having not yet invoiced for services provided or where commissioned activities were in progress. The most significant variances of forecast outturn against the revised 2019/20 budget were highlighted.

A Member drew the Committee's attention to the decrease in the number of passenger journeys on local bus services in Cambridgeshire and Peterborough and clarified the bus subsidy arrangements. Officers commented that the decline in passenger numbers was reflected nationally and a strategy had been developed in order to tackle the decline. It was resolved unanimously to:

note the January budget and performance monitoring update

## 53. LOCAL TRANSPORT PLAN

The Committee received a report that presented the Local Transport Plan (LTP). The report summarised the key points of the LTP and highlighted the changes made to the document following the public consultation that took place during the summer of 2019. Members were informed that the LTP would be subject to continuous monitoring and review. The CPCA Board would also re-direct the LTP when appropriate.

During discussion:

- The disappointment of Wansford Parish Council was relayed to the Committee that there comments were not included within the LTP. Officers undertook to review the comments and incorporate within the LTP. **ACTION**
- Members welcomed the vision and in particular the focus on access to rural areas. A Member commented further that the number of responses to the consultation had been relatively low. However, the geographic spread of the responses was interesting as it was possible to identify orchestrated responses.
- Attention was drawn to climate change and air quality as priorities for the LTP and emphasised the difficulties in achieving 'Dutch-style' infrastructure for cycling and pedestrians.
- A Member highlighted and welcomed the commitment to achieve net zero carbon by 2050. Attention was drawn to the South Cambridgeshire and Cambridge City joint Local Plan and the ambition to ensure they complimented the LTP.
- A Member commented that there was a need to view cars holistically as technology developed and they became less polluting.
- Attention was drawn to the distinct rural and urban areas found within Cambridgeshire and commented that encouraging people out of their cars was much more difficult in rural areas.
- The importance of Stansted Airport and the associated tourism and businesses was highlighted by a Member. Officers undertook to ensure such links were incorporated within the LTP.
- The Mayor drew attention to the considerable investment being made in public transport by the Combined Authority. The LTP recognised the car and its usage within Cambridgeshire as it had to respond to the needs of residents of urban and rural areas which were very different. The LTP demonstrated the Combined Authority was taking transport seriously and was as ambitious as any in the country. The Mayor concluded by encouraging manufacturers to drive down the cost of zero emissions vehicles in order to make them a viable alternative for people.

It was resolved to:

- a) Note the Public Consultation Report and Final Local Transport Plan; and
- b) Recommend the approval of the Local Transport Plan to the CPCA Board.

## 54. COLDHAMS LANE ROUNDABOUT PROGRESS REPORT

The Committee received a report that provided an update to the Committee on the Coldhams Lane Roundabout project and outlined next steps.

The presenting officer drew attention to the main drivers for the project including, improving safety for all road users and an improved environment for pedestrians and cyclists that did not adversely affect traffic flows.

Studies to date provided four options for consideration that were set out at paragraph 3.3 of the report. The value for money assessments contained at paragraph 5.2 that showed all four options achieved at least medium value for money score.

During the course of discussion Members:

- Noted the concerns of Cambridgeshire County Council regarding the safety of the current roundabout and the support offered to achieve the best solution.
- Commented that safety should be the overriding priority for any proposed scheme which was not clear from the report. Officers informed the Committee that it would form part of the next stage of consultation.
- Noted the work of Cambridge City Council in relation to a development north of Cherry Hinton that wold impact on the flow of pedestrians and cyclists to the roundabout and emphasised the importance of working together on projects.

It was resolved to:

- a) note the progress report
- b) approve the release of £100,000 from design phase budget agreed previously by the CPCA Board at its meetings in October 2017 and March 2018; and
- c) Comment on the emerging Coldhams Lane Roundabout proposals

## 55. THE CAMBRIDGESHIRE AUTONOMOUS METRO PUBLIC CONSULTATION

Members considered a report that sought the agreement of the Transport Committee for a non-statutory public consultation in early 2020 to inform the Cambridgeshire Autonomous Metro (CAM) programme Outline Business Case.

Officers were engaged in developing consultation material and a report would be presented to the January meeting of the Combined Authority Board with greater detail on the content.

In discussing the report Members:

- Noted that two other consultations were due to take place in Cambridge in the next months and commented that it was essential that that as many people as possible were reached in the consultation.
- Clarified the deadline for the draft Outline Business Case. Officers informed Members that the deadline was towards the end of July 2020 and work was currently on schedule to meet that deadline.
- Welcomed the ambition and the proposed engagement of the public. Remind me of the timings of the consultation period and the elements that will be in there, it will generate a huge amount of scrutiny in a short period of time. – Officers informed Members that a full 6 week consultation was planned for the CAM. The consultation would look at the needs and the benefits of the overall network including several route options within the city and potential portals and station locations. Feedback and comments would be needed by April 2020 in order to incorporate the comments into the concept design. Areas of Cambridge were being identified that would be directly influenced by the CAM and social media and the local press would be utilised to disseminate information.
- Noted the ambition to capture the wider aspiration for the CAM and the intention to hold events were commuters were going to be in order to capture the views of regions as well as the views of Cambridge residents.
- Emphasised the importance of capturing as wide a cross-section of the county as possible.

It was resolved unanimously to:

- a) Agree in principle that a non-statutory public consultation on the CAM should be undertaken in the early part of the New Year; and
- b) Note that further details of the consultation will be provided to the CPCA Board for approval at its meeting on 29 January 2020.

## 56. THE CAMBRIDGESHIRE AUTONOMOUS METRO (CAM) – REGIONAL ARMS STRATEGIC OUTLINE BUSINESS CASE TENDER DOCUMENT PREPARATION

Members considered a report that sought approval and funding to commence with the development of the Strategic Outline Business Case (SOBC) brief and tender documents for the regional arms of the network. To achieve this the report sought approval for £100,000 drawn from uncommitted contingency within the CAM Outline Business Case (OBC) project to fund the early development of the regional arms SOBC tender documents.

In discussing the report Members:

- Sought clarification regarding the reasons for preparing SOBCs for routes to St Neots, Haverhill and Haverhill at this stage. Officers explained that the intention was for development work for the SOBC would be undertaken over the course of the next two years. The routes represented a series of aims and would not be delivered as one scheme.
- Requested further detail regarding the proposed timing of the SOBCs. Officers informed the Committee that the work was scheduled to take two years. While the timescale was ambitious, it was based upon learning and experience of the core CAM SOBC. Governance arrangements would develop as part of the planned activities and it was possible that the existing governance structures for the CAM may be utilised.
- Highlighted the relationship between the core CAM OBC and the Regional Arms OBC and questioned how it was ensured that they work together as it was possible that the SOBC for the Regional Arms could negatively impact the core CAM. Officers informed Members that an area that had not been effectively modelled was detailed projections of whole network demand. Consultants would be requested therefore to model demand for the next 25 years together with reviewing high level route options. The work would begin the development of a fully integrated network.

It was resolved unanimously to:

Recommend to the CPCA Board the approval of early development of the CAM regional arms SOBC tender documents as part of the wider CAM programme and fro £100,000 to be utilised from uncommitted contingency within the current 19/20 CAM OBC budget to fund the early development of these documents.

## 57. DELEGATION OF PASSENGER TRANSPORT POWERS AND THE TRANSPORT LEVY FOR 2020-21

Members were presented a report regarding the delegation of passenger transport powers and the Transport Levy for 2020-21. In presenting the report officers highlighted the key responsibilities of the Combined Authority set out at paragraph 2.8 of the report.

Members noted that following discussion with officers at Peterborough City Council there would be a minor alteration made to the figure of £3,849,906 Transport Levy contained at paragraph 2.13 of the report and would be revised in advance of its presentation to the Combined Authority Board.

In discussing the report Members:

- Sought clarity regarding paragraph 2.8 and make changes.

- Requested detail on the level of funding provided for concessionary fares. Officers confirmed that for Cambridgeshire County Council the level of concessionary fares was £5.7m. Officers undertook to provide details for Peterborough City Council following the meeting. **ACTION**
- Emphasised the value of effective communication to prevent incorrect messages reaching the public.
- Confirmed that of the 8,497,7333 levy amount proposed at paragraph 2.13 of the report for Cambridgeshire County Council consisted of £2.2m of subsidy, £5.7m for concessionary fares, £189k for community transport and £189k staff and support costs.
- Confirmed that existing arrangements for routes subsidised by the Combined Authority would remain in place.

It was resolved to:

- a) Recommend to the CPCA Board the delegation of the role of Travel Concessionaire Authority and other powers set out in paragraph 2.8 to Cambridgeshire County Council (CCC) and Peterborough City Council (CCC) for the 2020/21 financial year.
- b) Recommend the amount and apportionment of the Transport Levy (2020/21 financial year) set out in paragraph 2.13 of the report for agreement by the Combined Authority.

Upon the conclusion of the item, the Mayor informed the Committee of the intention for a meeting, including Cambridgeshire County Council and Peterborough City Council in order to move the function of the Travel Concessionaire and other roles set out in paragraph 2.8 of the report to the Combined Authority from April 2021.

## 58. HUNTINGDON TRANSPORT STRATEGIC STUDY

Members considered a report sought the Committee's approval to changes to the scope of the A141 Huntingdon Capacity Improvements study and St Ives Area Study to consider the impact of a third river crossing at Huntingdon.

In discussing the report Members:

- Drew attention to the potential impact on strategic development sites within the Huntingdon area and emphasised the need to ensure the strategic links with Huntingdonshire District Council were maintained. Officers explained that the expansion of the study to include a third river crossing was designed to ensure that its outcomes were as robust as possible to prevent delay in scrutiny of the eventual proposals. It was anticipated that potential outcomes of the study would be delivered by the end of April 2020 for a report to be presented to Committee in July 2020.

It was resolved to:

- a) Approve scope change on the A141 Huntingdon Capacity Improvements Study and St Ives Area Study to consider the impact of a Third River Crossing at Huntingdon
- b) To approve the drawdown of budget of £150,000 from the previously approved Huntingdon Third River Crossing budget within the MTFS; and
- c) Advise on any issues requiring consideration within these proposals.

## 59. DATE OF NEXT MEETING

Friday 6<sup>th</sup> March 2020, Incubator 2, Alconbury Weald Enterprise Campus, Huntingdon.

Chairman



# **CAMBRIDGESHIRE & PETERBOROUGH COMBINED AUTHORITY'S** FORWARD PLAN OF EXECUTIVE DECISIONS

PUBLISHED FRIDAY 14 FEBRUARY 2020

Agenda Item No: 1.4

# JAMES PALMER CAMBRIDGESHIRE &

## FORWARD PLAN

## <u>PURPOSE</u>

The Forward Plan sets out all of the key decisions which the Combined Authority Board and Executive Committees will be taking in the coming months. This makes sure that local residents and organisations know what key decisions are due to be taken and when.

The Forward Plan is a live document which is updated regularly and published on the <u>Combined Authority website</u> (click the Forward Plan' button to view). At least 28 clear days' notice will be given of any key decisions to be taken.

## WHAT IS A KEY DECISION?

A key decision is one which, in the view of the Overview and Scrutiny Committee, is likely to:

- i. result in the Combined Authority spending or saving a significant amount, compared with the budget for the service or function the decision relates to (usually £500,000 or more); or
- ii. have a significant effect on communities living or working in an area made up of two or more wards or electoral divisions in the area.

## **NON-KEY DECISIONS**

For transparency, the Forward Plan also includes all non-key decisions to be taken by the Combined Authority Board and Executive Committees.

## ACCESS TO REPORTS

A report will be available to view online one week before a decision is taken. You are entitled to view any documents listed on the Forward Plan after publication, or obtain extracts from any documents listed, subject to any restrictions on disclosure. There is no charge for viewing the documents, although charges may be made for photocopying or postage. Documents listed on this notice can be requested from Dermot Pearson, Interim Monitoring Officer for the Combined Authority at <a href="mailto:Dermot.Pearson@cambridgeshirepeterborough-ca.gov.uk">Dermot.Pearson@cambridgeshirepeterborough-ca.gov.uk</a>

The Forward Plan will state if any reports or appendices are likely to be exempt from publication or confidential and may be discussed in private. If you want to make representations that a decision which it is proposed will be taken in private should instead be taken in public please contact Dermot Pearson, Interim Monitoring Officer at <a href="mailto:Dermot.Pearson@cambridgeshirepeterborough-ca.gov.uk">Dermot.Pearson@cambridgeshirepeterborough-ca.gov.uk</a> at least five working days before the decision is due to be made. A definition of exempt and confidential information is set out at the end of this document.

## **NOTICE OF DECISIONS**

Notice of the Combined Authority Board's decisions and Executive Committee decisions will be published online within three days of a public meeting taking place.

## **STANDARD ITEMS TO COMMITTEES**

The following reports are standing items and will be considered by at each meeting of the relevant committee. The most recently published Forward Plan will also be included on the agenda for each Executive Committee meeting:

## Housing and Communities Committee

- 1. £100m Affordable Housing Programme Update
- 2. £70m Cambridge City Council Affordable Housing Programme: Update
- 3. £100k Homes and Community Land Trusts Update

## Skills Committee

- 1. Budget and Performance Report
- 2. Employment and Skills Board Update

## Transport and Infrastructure Committee

- 1. Budget Monitor Update
- 2. Performance Report

This makes sure that local residents . At least 28 clear days' notice will be to (usually £500,000 or more); or

DECISION REQUIRED	DECISION MAKER	DATE DECISION EXPECTED	KEY DECISION OR DECISION	PURPOSE OF REPORT	CONSULTATION	CONTACT DETAILS/ REPORT AUTHOR	LEAD MEMBER	DOCUMENTS RELEVANT TO THE DECISION SUBMITTED TO THE DECISION MAKER (INCLUDING EXEMPT APPENDICES)
Transport and Infrastructure	Committee							
1. Wisbech Rail	Transport and Infrastructure Committee	6 March 2020	Decision	To summarise work on the Wisbech Rail project to date and outline next steps and to consider whether the report should be referred to the Combined Authority Board.	Relevant internal and external stakeholders	Paul Raynes, Director of Delivery and Strategy	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
2. St Neots Foot and Cycle Bridge and Regatta Meadows	Transport and Infrastructure Committee	6 March 2020	Decision	To summarise work on the St Neots Foot and Cycle Bridge and Regatta Meadows to date and outline next steps.	Relevant internal and external stakeholders	Paul Raynes Director of Delivery and Strategy	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
3. A47 Dualling: Outcome of Strategic Outline Business Case	Transport and Infrastructure Committee	6 March 2020	Decision	To summarise the outcome of the A47 Dualling Strategic Outline Business Case, outline next steps and make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders	Paul Raynes Director of Delivery and Strategy	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
4. March Area Transport Study	Transport and Infrastructure Committee	6 March 2020	Decision	To summarise work on the March Area Transport Study to date and the outcomes of the Option Assessment Report (OAR) and agree next key milestone.	Relevant internal and external stakeholders	Director of Delivery and Strategy	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
5. Lancaster Way A142/ A10 Roundabout Improvements	Transport and Infrastructure Committee	6 March 2020	Decision	To confirm funding to support the delivery of the A10/A142 BP roundabout and the Lancaster Way roundabout to support continued investment in the Lancaster Way Enterprise Zone, and to make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders	Paul Raynes Director of Delivery and Strategy	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
6. Ely Area Capacity Enhancements	Transport and Infrastructure Committee	6 March 2020	Decision	To update the committee on progress on the Strategic Outline Business Page 15 of 198	Relevant internal and external stakeholders	Paul Raynes Director of Delivery and Strategy	Mayor James Palmer	It is not anticipated that there will be any documents other than the

DECI	SION REQUIRED	MAKER DECISION DECIS EXPECTED OR		KEY DECISION OR DECISION	PURPOSE OF REPORT	CONSULTATION	CONTACT DETAILS/ REPORT AUTHOR	LEAD MEMBER	DOCUMENTS RELEVANT TO THE DECISION SUBMITTED TO THE DECISION MAKER (INCLUDING EXEMPT APPENDICES)
					Case for Ely Area Capacity Enhancements.				report and relevant appendices.
7.	Cambridge South Station Update: March 2020	Transport and Infrastructure Committee	6 March 2020	Decision	To update the committee on progress on the Cambridge South Station development.	Relevant internal and external stakeholders	Paul Raynes Director of Delivery and Strategy	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
Hous	ing and Communities C	Committee	1	I	I	I	I		1
8.	£100m Affordable Housing Programme Scheme Approvals – March 2020 [May include exempt appendices]	Housing and Communities Committee	9 March 2019	Key Decision 2020/003	To consider and approve allocations to new schemes within the £100m Affordable House Programme	Relevant internal and external stakeholders	Roger Thompson, Director of Housing and Development	Councillor Chris Boden Lead Member for Housing	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
9.	£100m Affordable Housing Programme (Non-Grant) i. Proposed loan to Laragh Homes, Cambridge City Squash Club	Housing and Communities Committee	9 March 2020	Decision	To consider a scheme that forms a part of and will require an investment from the £40m revolving fund and to make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders	Roger Thompson Director of Housing and Development	Councillor Chris Boden Lead Member for Housing	It is not anticipated that there will be any documents other than the report and relevant appendices.
10.	Communities remit of the Housing and Communities Committee	Housing and Communities Committee	9 March 2019	Decision	To brief the committee on its communities remit.	Relevant internal and external stakeholders	Roger Thompson, Director of Housing and Development	Councillor Chris Boden Lead Member for Housing	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
11.	Standards for Residential Accommodation	Housing and Communities Committee	9 March 2019	Decision	To brief members on standards for residential accommodation and the Affordable Housing Programme.	Relevant internal and external stakeholders	Roger Thompson, Director of Housing and Development	Councillor Chris Boden Lead Member for Housing	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
	s Committee								
12.	Adult Education Budget Allocations for Academic Year 2020/21	Skills Committee	9 March 2019	Key Decision 2020/007	To outline and recommend approval of Grant and Procured Funding to Providers operating within the CPCA area for the provision of Adult Page 16 of 198	Relevant internal and external stakeholders	John T Hill, Director of Business and Skills	Councillor John Holdich Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.

DECISION REQUIRED		DECISION MAKER	DATE DECISION EXPECTED	KEY DECISION OR DECISION	PURPOSE OF REPORT	CONSULTATION	CONTACT DETAILS/ REPORT AUTHOR	LEAD MEMBER	DOCUMENTS RELEVANT TO THE DECISION SUBMITTED TO THE DECISION MAKER (INCLUDING EXEMPT APPENDICES)
					Education Budget for academic year 2020/21.				
13.	Adult Education Budget Commissioning Strategy 2020/21 and Redistribution System	Skills Committee	9 March 2020	Key Decision 2019/055	To consider proposals for the Adult Education Budget Commissioning Strategy 2020/21 and Redistribution System.	Relevant internal and external stakeholders	John T Hill Director of Business and Skills	Councillor John Holdich Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
	bined Authority Board ernance and Finance Iter	ns	<u> </u>	<u> </u>	L	l	L	1	1
14.	Minutes of the meeting on 29 January 2020	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Decision	To agree the minutes of the previous meeting.	Relevant internal and external stakeholders	Richenda Greenhill, Democratic Services Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
15.	Forward Plan	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Decision	To approve the latest version of the forward plan.	Relevant internal and external stakeholders	Richenda Greenhill, Democratic Services Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
16.	Appointment of Monitoring Officer	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Decision	To appoint the Monitoring Officer.	Relevant internal and external stakeholders	Dermot Pearson Interim Monitoring Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
17.	Designation of Scrutiny Officer	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Decision	To designate the Scrutiny Officer.	Relevant internal and external stakeholders	Dermot Pearson Interim Monitoring Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
18.	Budget Monitor Update	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Decision	To provide an update on the revenue and capital budgets for the year to date	Relevant internal and external stakeholders	Jon Alsop Section 73 Chief Finance Officer	Councillor Steve Count Lead Member for Investment and Finance	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.
					Page 17 of 198				

DECI	SION REQUIRED	DECISION MAKER	MAKER DECISION DECISION EXPECTED OR DECISION		PURPOSE OF REPORT	CONSULTATION	CONTACT DETAILS/ REPORT AUTHOR	LEAD MEMBER	DOCUMENTS RELEVANT TO THE DECISION SUBMITTED TO THE DECISION MAKER (INCLUDING EXEMPT APPENDICES)
19.	Treasury Management Strategies 2020/21	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Decision	To review and approve the Combined Authority's draft Capital, Treasury and Investment Strategies and Minimum Revenue Provision (MRP) Statement for 2020/21.	Relevant internal and external stakeholders	Jon Alsop Section 73 Chief Finance Officer	Councillor Steve Count Lead Member for Investment and Finance	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.
Comb	bined Authority Decision	ns							1
20.	Community Land Trusts	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Decision	To approve the business case for Community Land Trusts in Cambridgeshire and Peterborough.	Relevant internal and external stakeholders	Roger Thompson Director of Housing and Development	Councillor Chris Boden Lead member for Housing	It is not anticipated that there will be any documents other than the report and relevant appendices.
21.	Market Towns Programme – Approval of Masterplans for Huntingdonshire	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Key Decision 2020/015	To approve Market Town Masterplans for Huntingdonshire (Huntingdon, St Ives and Ramsey)	Relevant internal and external stakeholders	John T Hill Director of Business and Skills	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
22.	Innovation Body Outline Business Case	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Key Decision 2020/022	To approve the Innovation Body outline business case.	Relevant internal and external stakeholders	Kim Sawyer Chief Executive	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
BY R	ECOMMENDATION TO T			ARD	<u> </u>				1
Reco	mmendations from the	Housing and Com	munities Com	mittee					
23.	£100m Affordable Housing Programme (Non-Grant) i. Proposed loan to Laragh Homes, Cambridge City Squash Club	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Key Decision 2020/012	Requesting Board approval of a scheme that forms a part of and will require an investment from the £40m revolving fund.	Relevant internal and external stakeholders	Roger Thompson Director of Housing and Development	Councillor Chris Boden Lead Member for Housing	It is not anticipated that there will be any documents other than the report and relevant appendices.
Reco	mmendations from the	Transport and Inf	astructure Co	mmittee		·			
24.	Wisbech Rail	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Decision	To summarise work on the Wisbech Rail project to date and approve next steps. Page 18 of 198	Relevant internal and external stakeholders	Paul Raynes Director of Delivery and Strategy	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.

	SION REQUIRED	MAKER DECISION EXPECTED		DECISION OR DECISION	PURPOSE OF REPORT	CONSULTATION	CONTACT DETAILS/ REPORT AUTHOR	LEAD MEMBER	DOCUMENTS RELEVANT TO THE DECISION SUBMITTED TO THE DECISION MAKER (INCLUDING EXEMPT APPENDICES)
25.	A47 Dualling: Outcome of Strategic Outline Business Case	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Key Decision 2020/025	To consider the outcome of the A47 Dualling Strategic Outline Business Case and approve next steps.	Relevant internal and external stakeholders	Paul Raynes Director of Delivery and Strategy	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
26.	Lancaster Way A142/ A10 Roundabout Improvements	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Key Decision 2020/028	To confirm funding to support the delivery of the A10/A142 BP roundabout and the Lancaster Way roundabout to support continued investment in the Lancaster Way Enterprise Zone.	Relevant internal and external stakeholders	Paul Raynes Director of Delivery and Strategy	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
Recor	mmendation/s from the	Business Board	I	<u> </u>	L		<u> </u>	<u> </u>	1
	For approval as Accountable Body: Local Growth Fund Programme Management: March 2020	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Key Decision 2020/021	To review the Local Growth Fund Budget and amend as required.	Relevant internal and external stakeholders	John T Hill, Director of Business & Skills	Austen Adams, Chair of the Business Board Councillor John Holdich Lead Member for Economic Growth	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
	Business Board Governance Review	Cambridgeshire and Peterborough Combined Authority Board	25 March 2020	Decision	To review and approve recommended changes to the Constitution and the Assurance Framework.	Relevant internal and external stakeholders	Rochelle White Deputy Monitoring Officer	Austen Adams, Chair of the Business Board Councillor John Holdich Lead Member for Economic Growth	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
Skills	Committee								
29.	University of Peterborough – Full Business Case	Skills Committee	27 April 2020	Decision	To recommend the full business case for the new University of Peterborough	Relevant internal and	John T Hill	Councillor John Holdich	It is not anticipated that there will be any documents other than the

DEC	SION REQUIRED	DECISION MAKER	DATE DECISION EXPECTED	KEY DECISION OR DECISION	PURPOSE OF REPORT	CONSULTATION	CONTACT DETAILS/ REPORT AUTHOR	LEAD MEMBER	DOCUMENTS RELEVANT TO THE DECISION SUBMITTED TO THE DECISION MAKER (INCLUDING EXEMPT APPENDICES)
					to the Combined Authority Board for approval.	external stakeholders	Director of Business and Skills	Lead Member for Skills	report and relevant appendices to be published
30.	Careers Progression and Work Readiness (Hampton Academies Trust pilot) – Update Paper	Skills Committee	27 April 2020	Decision	To receive an update on the Careers Progression and Work Readiness (Hampton Academies Trust pilot)	Relevant internal and external stakeholders	John T Hill Director of Business and Skills	Councillor John Holdich Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.
31.	Adult Education Budget Top Slice Review [May contain exempt appendices]	Skills Committee	27 April 2020	Decision	To consider a review and recommendation for the future top slice required to implement the delivery of Adult Education Budget and make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders	John T Hill Director of Business and Skills	Councillor John Holdich Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.
32.	Adult Education Budget Innovation Fund	Skills Committee	27 April 2020	Decision	To consider the creation of an Innovation Fund for the Adult Education Budget (AEB) and make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders	John T Hill Director of Business and Skills	Councillor John Holdich Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.
33.	Skills Strategy Delivery Plans	Skills Committee	27 April 2020	Decision	To report on the Delivery Plans associated to the three key interventions that underpin the Combined Authority Skills Strategy.	Relevant internal and external stakeholders	John T Hill Director of Business and Skills	Councillor John Holdich Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.
Hous	sing and Communities C	committee		<u> </u>					
34.	£100m Affordable Housing Programme Scheme Approvals – April 2020 [May include exempt appendices]	Housing and Communities Committee	27 April 2020	Key Decision 2020/004	To consider and approve allocations to new schemes within the £100m Affordable House Programme	Relevant internal and external stakeholders	Roger Thompson, Director of Housing and Development	Councillor Chris Boden Lead Member for Housing	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
35.	Housing Market Assessment Update	Housing and Communities Committee	27 April 2020	Non-Key	To receive an update on the study into the Housing Needs of Specific Groups commissioned by the local authorities age 20 of 198	Relevant internal and external stakeholders	Roger Thompson, Director of	Councillor Chris Boden Lead Member for Housing	It is not anticipated that there will be any documents other than the report and relevant

DECI	SION REQUIRED	DECISION DATE MAKER DECISION EXPECTED		MAKER DECISION DECISION		PURPOSE OF REPORT	CONSULTATION	CONTACT DETAILS/ REPORT AUTHOR	LEAD MEMBER	DOCUMENTS RELEVANT TO THE DECISION SUBMITTED TO THE DECISION MAKER (INCLUDING EXEMPT APPENDICES)
							Housing and Development		appendices to be published	
	bined Authority Board rnance and Finance Iter	ns								
36.	Minutes of the meeting on 25 March 2020	Cambridgeshire and Peterborough Combined Authority Board	29 April 2020 [Reserve meeting date]	Decision	To agree the minutes of the previous meeting.	Relevant internal and external stakeholders	Richenda Greenhill, Democratic Services Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.	
37.	Forward Plan	Cambridgeshire and Peterborough Combined Authority Board	29 April 2020 [Reserve meeting date]	Decision	To approve the latest version of the forward plan.	Relevant internal and external stakeholders	Richenda Greenhill, Democratic Services Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.	
38.	Budget Monitor Update	Cambridgeshire and Peterborough Combined Authority Board	29 April 2020 [Reserve meeting date]	Decision	To provide an update on the revenue and capital budgets for the year to date	Relevant internal and external stakeholders	Jon Alsop Section 73 Chief Finance Officer	Councillor Steve Count Lead Member for Investment and Finance	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.	
	bined Authority Board A rnance Items	nnual Meeting	1	I	I	I				
<u>39</u> .	Minutes of the meeting on 29 April 20202	Cambridgeshire and Peterborough Combined Authority Board	3 June 2020	Decision	To agree the minutes of the previous meeting.	Relevant internal and external stakeholders	Richenda Greenhill, Democratic Services Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.	
40.	Forward Plan	Cambridgeshire and Peterborough Combined Authority Board	3 June 2020	Decision	To approve the latest version of the forward plan.	Relevant internal and external stakeholders	Richenda Greenhill, Democratic Services Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.	
41.	Membership of the Combined Authority	Cambridgeshire and Peterborough Combined Authority	3 June 2020	Decision	To note the appointment of Members of Constituent Councils and appointments to the Business Board for 20202/21 (and their Substitute Members) and to appoint any Non- Constituent Members of Co-opted Members	Relevant internal and external stakeholders	Dermot Pearson Interim Monitoring Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.	
42.	Appointments to Executive Committees, appointment of	Cambridgeshire and Peterborough	3 June 2020	Decision	To approve Lead Member responsibilities and appoint such executive	Relevant internal and	Dermot Pearson	Mayor James Palmer	It is not anticipated that there will be any documents other than the	

DECI	SION REQUIRED	DECISION MAKER	DATE DECISION EXPECTED	KEY DECISION OR DECISION	PURPOSE OF REPORT	CONSULTATION	CONTACT DETAILS/ REPORT AUTHOR	LEAD MEMBER	DOCUMENTS RELEVANT TO THE DECISION SUBMITTED TO THE DECISION MAKER (INCLUDING EXEMPT APPENDICES)
	Committee Chairs and Lead Members	Combined Authority			Committees as the Combined Authority considers appropriate, their membership and the Chair for 2020/21.	external stakeholders	Interim Monitoring Officer		report and relevant appendices.
43.	Appointment of the Overview and Scrutiny Committee	Cambridgeshire and Peterborough Combined Authority	3 June 2020	Decision	To appoint the Overview and Scrutiny Committee, including its terms of reference, size and allocation of seats to political parties in accordance with political balance requirements, according to the nominations received from constituent councils.	Relevant internal and external stakeholders	Dermot Pearson Interim Monitoring Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
44.	Appointment of the Audit and Governance Committee	Cambridgeshire and Peterborough Combined Authority	3 June 2020	Decision	To appoint the Audit and Governance Committee, including its terms of reference, size and allocation of seats to political parties in accordance with political balance requirements, according to the nominations received from constituent councils.	Relevant internal and external stakeholders	Dermot Pearson Interim Monitoring Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
45.	Calendar of meetings 2020/21	Cambridgeshire and Peterborough Combined Authority	3 June 2020	Decision	To agree the calendar of meetings for 2020/21.	Relevant internal and external stakeholders	Dermot Pearson Interim Monitoring Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
46.	Review of the new governance arrangements	Cambridgeshire and Peterborough Combined Authority	3 June 2020	Decision	To review the new governance arrangements introduced with effect from 1 November 2019 and agree any proposed changes to the Constitution.	Relevant internal and external stakeholders, including the Audit and Governance Committee	Dermot Pearson Interim Monitoring Officer	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
47.	Performance Monitoring Report: June 2020	Cambridgeshire and Peterborough Combined Authority Board	3 June 2020	Decision	To note performance reporting updates. Page 22 of 198	Relevant internal and external stakeholders	Paul Raynes Director of Strategy and Assurance	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.

DECI	ISION REQUIRED	DECISION MAKER	DATE DECISION EXPECTED	KEY DECISION OR DECISION	PURPOSE OF REPORT	CONSULTATION	CONTACT DETAILS/ REPORT AUTHOR	LEAD MEMBER	DOCUMENTS RELEVANT TO THE DECISION SUBMITTED TO THE DECISION MAKER (INCLUDING EXEMPT APPENDICES)
48.	Budget Monitor Update	Cambridgeshire and Peterborough Combined Authority Board	3 June 2020	Decision	To provide an update on the revenue and capital budgets for the year to date	Relevant internal and external stakeholders	Jon Alsop Section 73 Chief Finance Officer	Councillor Steve Count Lead Member for Investment and Finance	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.
Com	bined Authority Decision	ns							
49.	Market Towns Programme – Approval of Masterplans for East Cambridgeshire		3 June 2020	Key Decision 2020/018	To approve Market Town Masterplans for East Cambridgeshire (Littleport, Ely and Soham)	Relevant internal and external stakeholders	John T Hill Director of Business and Skills	Mayor James Palmer	It is not anticipated that there will be any documents other than the report and relevant appendices.
	ECOMMENDATION TO		AUTHORITY BC	DARD					
50.	University of Peterborough – Full Business Case	Cambridgeshire and Peterborough Combined Authority Board	3 June 2020	Key Decision 2020/014	To approve the full business case for the new University of Peterborough.	Relevant internal and external stakeholders	John T Hill Director of Business and Skills	Councillor John Holdich Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
51.	Adult Education Budget Innovation Fund	Cambridgeshire and Peterborough Combined Authority Board	3 June 2020	Key Decision 2020/024	To the creation of an Innovation Fund for the Adult Education Budget (AEB).	Relevant internal and external stakeholders	John T Hill Director of Business and Skills	Councillor John Holdich Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.
52.	Adult Education Budget Top Slice Review [May include exempt appendices]	Cambridgeshire and Peterborough Combined Authority Board	3 June 2020	Decision	To consider a review and recommendation for the future top slice required to implement the delivery of Adult Education Budget by the Combined Authority.	Relevant internal and external stakeholders	John T Hill Director of Business and Skills	Councillor John Holdich Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.
Reco	ommendations from the	Business Board	<u> </u>		1	<u> </u>		I	
53.	Local Growth Fund Programme	Cambridgeshire and Peterborough	3 June 2020	Key Decision 2020/027	To review the Local Growth Fund Budget and amend apதகுபர்ஒதி 198	Relevant internal and	John T Hill, Director of	Austen Adams, Chair of the	It is not anticipated that there will be any documents other than the

DECI	SION REQUIRED	DECISION MAKER	DATE DECISION EXPECTED	KEY DECISION OR DECISION	PURPOSE OF REPORT	CONSULTATION	CONTACT DETAILS/ REPORT AUTHOR	LEAD MEMBER	DOCUMENTS RELEVANT TO THE DECISION SUBMITTED TO THE DECISION MAKER (INCLUDING EXEMPT APPENDICES)
	Management: June 2020	Combined Authority Board				external stakeholders	Business & Skills	Business Board Councillor John Holdich Lead Member for Economic Growth	report and relevant appendices to be published
54.	Growth Service - Full Business Case [May include exempt appendices]	Cambridgeshire and Peterborough Combined Authority Board	3 June 2020	Key Decision 2020/029	To approve the Full Business Case for mobilisation of the Growth Service.	Relevant internal and external stakeholders	John T Hill, Director of Business & Skills	Austen Adams, Chair of the Business Board Councillor John Holdich Lead Member for Economic Growth	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
55.	Local Enterprise Partnership Partnering Strategy	Cambridgeshire and Peterborough Combined Authority Board	3 June 2020	Decision	To approve the Local Enterprise Partnership Partnering Strategy	Relevant internal and external stakeholders	John T Hill, Director of Business & Skills	Austen Adams, Chair of the Business Board Councillor John Holdich Lead Member for Economic Growth	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
56.	Strategic Partnership Agreements: June 2020	Cambridgeshire and Peterborough Combined Authority Board	3 June 2020	Decision	To recommend Memorandums of Understanding with the remaining seven neighbouring Local Enterprise Partnerships.	Relevant internal and external stakeholders	John T Hill, Director of Business & Skills	Austen Adams, Chair of the Business Board Councillor John Holdich Lead Member for Economic Growth	It is not anticipated that there will be any documents other than the report and relevant appendices to be published

## SUBMIT YOUR COMMENTS OR QUERIES TO CAMBRIDGESHIRE AND PETERBOROUGH COMBINED AUTHORITY

Please send your comments or queries to Dermot Pearson, Interim Monitoring Officer at <a href="mailto:Dermot.Pearson@cambridgeshirepeterborough-ca.gov.uk">Dermot.Pearson@cambridgeshirepeterborough-ca.gov.uk</a>

Your comme	nt or query:
How can we   (please inclu	contact you with a response? de a telephone number, postal and/or e-mail address)
Name	
Address	
Tel:	
Email:	

Who would you like to respond?



TRANSPORT AND INFRASTRUCTURE COMMITTEE	AGENDA ITEM No: 2.1
6 March 2020	PUBLIC REPORT

## **BUDGET AND PERFORMANCE UPDATE**

## 1.0 PURPOSE

1.1. This report provides the regular budget and performance reporting to the Transport and Infrastructure Committee, as agreed by Committee members.

DECISION REQUIRED				
Lead	d Member:	James Palmer, Mayor		
Lead	d Officer:	Paul Raynes, Director of Delivery and Strategy		
Forv	vard Plan Ref:	Key Decision: No		
			Voting arrangements	
The Transport and Infrastructure Committee is recommended to:				
(a)	(a) Note the March budget and performance monitoring update		N/A	

## 2.0 BACKGROUND

- 2.1. The Combined Authority Board has decided that budget and performance reporting should be seen in the round.
- 2.2. At its January 2020 meeting, the Combined Authority Board approved a new Business Plan and Medium-Term Financial Plan (MTFP). This report shows the actual expenditure to date and forecast outturn position against those budgets.

## 3.0 BUDGET

## **Revenue Budget**

3.1. The revenue position for the Transport Directorate, for the ten-month period to 31<sup>st</sup> January 2020, is set out in the table below:

	19-20 Budget	Budget	19-20 Budget	Actuals to 31	Forecast	Forecast
	<u>(Nov)</u>	Adjustments	<u>(Jan)</u>	January 2020	Outturn (Jan)	Outturn
						Variance
	£'000	£'000	£'000	£'000	£'000	£'000
Transport						
CAM	1,907	0	1,907	1,043	1,907	-
A10 SOBC	0	250	250	75	250	-
A14 Revenue Feasibility	150		150	0	0	(150.0)
Huntingdon 3rd River Crossing	300		300	19	30	(270.0)
Bus Review Implementation	800		800	27	150	(650.0)
Cambridge South - Interim Concept	100		100	97	97	(3.0)
Transport Levy PCC	3,631		3,631	3,026	3,631	-
Transport Levy CCC	8,738		8,738	7,282	8,738	-
Local Transport Plan	377		377	316	355	(21.7)
Sustainable Travel	150		150	111	150	-
Schemes, Studies and Monitoring	100		100	58	100	-
Total Transport	16,253	250	16,503	12,054	15,408	(1,094.7)

- 3.2. The following budget change has been made since the last Committee finance report;
  - (a) A10 SOBC The Revenue budget has increased by £250k and the Capital budget has reduced by the same amount. This is because the project is now being delivered directly by the Combined Authority and does not meet the Combined Authority capitalisation requirements.
- 3.3. The Revenue forecast variances to budget are as follows;
  - (a) A14 Revenue Feasibility This is currently not a proceeding project and would require a promoter to bid for funding;
  - (b) Huntingdon 3<sup>rd</sup> River Crossing It was decided at the November 2019 meeting of the Transport and Infrastructure Committee to absorb the 3rd River Crossing project in the A141 Capacity Study, and so no separate budget is shown;
  - (c) Bus Review Implementation The 2019-20 outturn forecast has been reduced to £150k, which reflects a revised view of the phasing of the project, which is expected to come in on budget across its whole life of 12 months.

## Capital Budget

3.4. The capital position for Transport for the ten-month period to 31<sup>st</sup> January 2020, is set out in the table below.

Capital	19-20 Budget	Budget	19-20 Budget	1 1	Actuals to 31	Forecast	Forecast	Forecast
	(Nov)	Adjustments	(Jan)		Jan 2020	Outturn (Nov)	Outturn (Jan)	Outturn
			10.000					Variance
	£m	£m	£m		£m	£m	£m	£m
Kings Dyke CPCA Contribution	2.50		2.50		0.00	0.46	0.00	(2.50)
Cambridge South Station	0.75		0.75		0.00	0.75	0.75	0.00
A10 SOBC Capital	0.25	(0.25)	0.00		0.00	0.15	0.00	0.00
Soham Station	0.95		0.95		0.03	0.95	0.95	0.00
St Neots River Crossing Cycle Bridge	0.60		0.60		0.00	0.45	0.03	(0.57)
Wisbech Rail	1.48		1.48		0.83	1.48	1.05	(0.43)
Wisbech Access Strategy	0.30		0.30		0.30	0.30	0.30	0.00
A47 Dualling	0.41		0.41		0.11	0.41	0.31	(0.10)
Ely Rail Capacity next stage	1.00		1.00		0.00	0.00	0.00	(1.00)
Coldhams Lane roundabout improvements	0.53		0.53		0.06	0.13	0.06	(0.47)
Eastern Industries Access - Phase 1	0.43		0.43		0.08	0.15	0.27	(0.16)
University Access	0.10		0.10		0.01	0.03	0.11	0.01
March junction improvements	1.08		1.08		0.31	0.50	0.55	(0.53)
Investment into CAM Innovation Company	0.30		0.30		0.00	0.30	0.30	0.00
Regeneration of Fenland Railway Stations	0.09		0.09		0.00	0.09	0.00	(0.09)
Regeneration of Fenland Railway Stations - Non Platforms	0.61		0.61		0.17	0.61	0.17	(0.44)
A1260 Nene Parkway Junction 15	0.36		0.36		0.12	0.10	0.35	(0.01)
A1260 Nene Parkway Junction 32-3	0.32		0.32		0.18	0.19	0.28	(0.04)
A141 Capacity enhancements	1.27		1.27		0.07	0.50	0.15	(1.12)
A16 Norwood Dualling	0.05	0.01	0.06		0.00	0.13	0.06	0.00
A505 Corridor	1.00		1.00		0.05	0.17	0.15	(0.85)
A605 Oundle Rd Widening - Alwalton-Lynch Wood	0.51		0.51		0.11	0.40	0.54	0.03
Capital Total	14.89	(0.24)	14.65		2.42	8.24	6.38	(8.27)
Passported	19-20 Budget	Budget	19-20 Budget		Actuals to 31	Forecast	Forecast	Forecast
	(Nov)	Adjustments	(Jan)		Jan 2020	Outturn (Nov)	Outturn (Jan)	Outturn
								Variance
	£m	£m	£m		£m	£m	£m	£m
Passported								
Highways Maintenance Capital Grants	23.08		23.08		18.83	23.54	23.54	0.46
A47 J18 improvements	3.85		3.85		2.10	3.00	3.85	0.00
A605 Stanground East (whittlesea Access)	2.80		2.800		0.26	0.36	0.91	(1.89)
Passported Total	29.73	0.00	29.73		21.19	26.90	28.30	(1.43)
		ļ	1			-		
Growth Funds								
King's Dyke Crossing (Growth Fund)	0.78		0.78		0.55	0.45	0.64	(0.14)
Ely Area Capacity Enhancements	2.32		2.32		0.86	1.50	1.16	(1.16)
Wisbech Access Strategy - Delivery Phase	1.00		1.00		0.36	1.00	0.51	(0.49)
Soham Station Feasibility	1.00		1.00		1.00	1.00	1.00	0.00
Growth Funds Total	5.25	0.00	5.25		2.76	4.10	3.46	(1.79)
Transport total	49.87	(0.24)	49.63		26.37	39.24	38.14	(11.51)

- 3.5. As mentioned above, the A10 has been re-classified to Revenue.
- 3.6. The most significant variances from forecast against the revised 2019/20 budget are as follows:
  - (a) King's Dyke The forecast is considerably lower than the budget due to the project being retendered by the County Council, which means no further expenditure will be incurred this financial year;
  - (b) St. Neots River Crossing Bridge A separate paper is being presented to the Committee on this project which makes recommendations about the budget;
  - (c) Wisbech Rail The programme has been extended into next financial year because of the time taken by Network Rail to agree survey access to the disused track; the remaining budget will be spent in 2020/21;
  - (d) Ely Area Capacity Enhancements Forecast is based on Network Rail reprofiling expenditure into 2020/21;

- (e) Coldhams Lane The reduced forecast is due to delay with consultation and commencement of detailed design. A detailed programme for consultation and detailed design following the purdah period was agreed by the Committee at its January meeting and it is anticipated that the project will spend its full budget over the next 12 months;
- (f) March Junction Improvements A separate paper is being presented to the Committee making proposals relating to this budget;
- (g) Regeneration of Fenland Stations A number of deliverables have been delayed and are now expected to be completed in 2020-21;
- (h) A141 Capacity Enhancements Scope change to include 3rd River Crossing. Underspend assumptions due to programme not progressing in line with project expectation with SOBC to OAR/detailed design;
- A505 Corridor Underspend due to delay to tender process (July 2019). Commencement of actual work once contract award to Stantec started in December 2019;
- (j) A605 Stanground East The variance is due to statutory undertaker challenges in relation to a main gas supply. This has now been resolved and delivery remains within overall budget and programme;
- (k) Wisbech Access Strategy The underspend is a result of the land purchase strategy not coming to fruition this financial year, resulting in parcels of land not yet having to be purchased.

## 4.0 PERFORMANCE REPORTING

- 4.1. The Cambridgeshire and Peterborough Devolution Deal is about delivering better economic outcomes for the people of our area and commits us to specific results. The Combined Authority needs to monitor how well it is doing that.
- 4.2. Appendix 1 shows the Transport Performance Dashboard, with an update on the delivery against the following growth outcomes at the heart of the Devolution Deal (of which outcomes are embodied in the business cases which the Board and Committees consider):
  - Prosperity (measured by Gross Value Added (GVA))
  - Housing
  - Jobs
- 4.3. These metrics are updated to align with the Board Performance reports.
- 4.4. A Committee approved set of indicators relating to the Transport Directorate is also included, to supplement the corporate headline reporting on GVA, Housing and Jobs.
- 4.5. Also provided is the RAG status for the Transport portfolio. These are based on the January reporting month.

## 5.0 FINANCIAL IMPLICATIONS

5.1. There are no other financial implications other than those included in the main body of the report.

## 6.0 LEGAL IMPLICATIONS

6.1. The Combined Authority is required to prepare a balanced budget in accordance with statutory requirements.

## 7.0 SIGNIFICANT IMPLICATIONS

7.1. There are no other significant implications.

## 8.0 APPENDICES

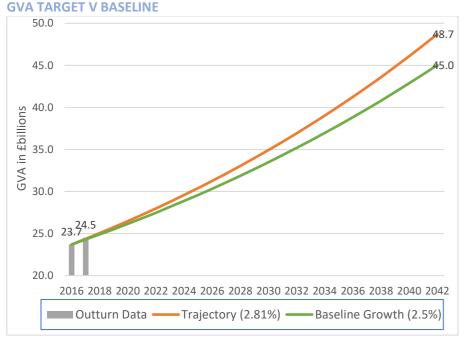
8.1. Appendix 1 – Transport Performance Dashboard

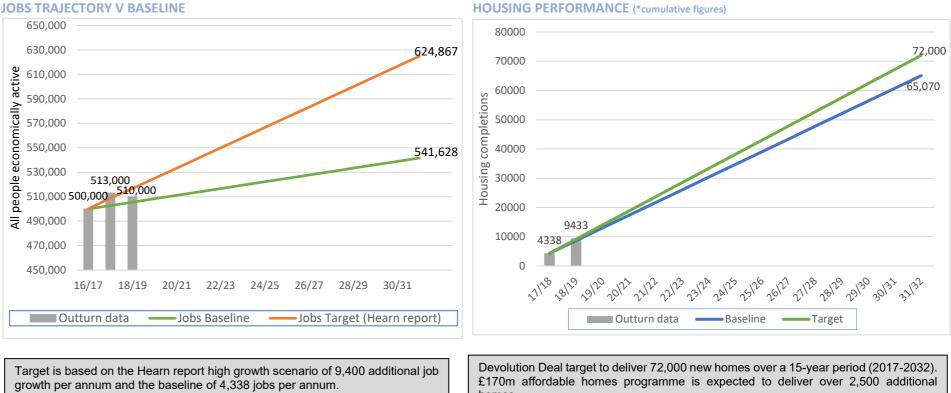
#### Sources:

**Baseline: Current trend without Devolution Deal interventions** Outturn data source: GVA and Jobs - Office of National Statistics (ONS); Housing - Council Annual Monitoring Reports/CambridgeshireInsights.

## TRANSPORT AND INFRASTRUCUTRE COMMITTEE

## COMBINED AUTHORITY PERFORMANCE DASHBOARD **DEVOLUTION DEAL TRAJECTORY**

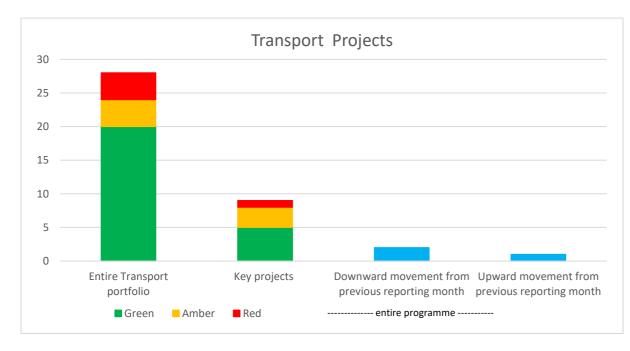




homes,

CPIER identified that to reach the Devolution Deal target of doubling GVA by 2042, Cambridgeshire and Peterborough must achieve an average of 0.31% growth each year on top of baseline growth of 2.5%.

**Combined Authority Transport Project Profile:** 



Transport key project breakdown				
Project name	RAG status			
A10 Corridor	Green			
A47 Dualling Study	Green			
Bus Reform Task Force	Green			
Cambridge South Station	Green			
Soham Station	Green			
Cambridgeshire Autonomous Metro (CAM)	Amber			
Regeneration of Fenland Railway Stations	Amber			
Wisbech Rail	Amber			
King's Dyke Level Crossing	Red			

#### **GVA TARGET V BASELINE**

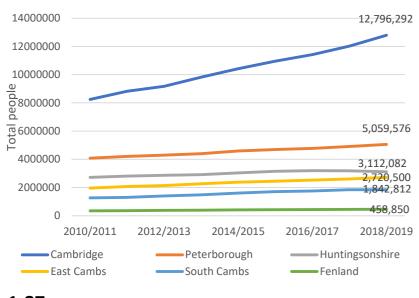
## Appendix 1

£170m affordable homes programme is expected to deliver over 2,500 additional

Project RAG status as at end of January 2020

Sources: CambridgeshireInsight (2018) Net Zero Cambridgeshire (2019) Cambridgeshire City Council Traffic Monitoring Report (2018) **Department for Transport (2019)** 

Entries and Exits across all train stations by District



## **1.87m** growth in station usage from 2016/17 to 2018/19



5905

2015

Motor Vehicle Traffic (Vehicle miles)

5725

2014

6000

5900 Ð

5700

5600

5500

5400

le 5800

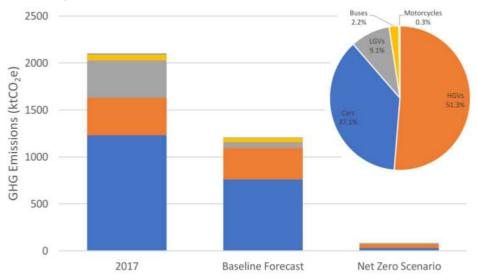
TRANSPORT METRIC REPORTING

6293

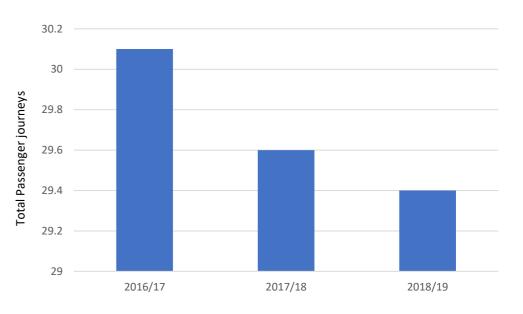
2018

**0.5%** decrease in motor vehicle traffic from 2017 to 2018

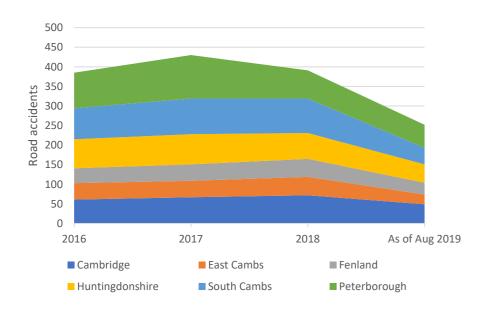
#### Total Green House Gas emissions for road transport (Cambridgeshire and Peterborough)



\*Emissions in 2050 for the baseline projection and emissions in 2050 for the net zero scenario 97% of transport emissions from road traffic; the major contribution from traffic on A-roads



### Total serious and fatal (KSI) road collisions by District

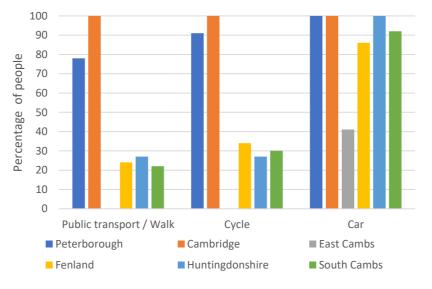


**9%** reduction in serious and fatal road collisions from 2017 to 2018

Within 30 mins travel of major employment centres (2017)

2016

2017



>95 of residents within 30 mins of a major employment centre (£500,000+ employees by car)

**3%** decrease in bus usage from 2016/17 to 2018/19

Passenger journeys on local bus services (Cambridgeshire and Peterborough)



TRANSPORT AND INFRASTRUCTURE COMMITTEE	AGENDA ITEM No: 2.2
6 MARCH 2020	PUBLIC REPORT

## WISBECH RAIL PROGRESS REPORT

## 1.0 PURPOSE

- 1.1. To summarise progress on the Wisbech Rail project to date and outline next steps.
- 1.2. To consider recommendations to the Cambridgeshire and Peterborough Combined Authority Board.

	DECISION REQUIRED				
Lea	d Member:	James Palm	er, Mayor		
Lea	d Officer:	Paul Raynes, Director of Delivery and Strategy			
Forv	ward Plan Ref: Insert ref no -P	n: No			
	The Transport and Infrastructure Committee is recommended to:		Voting arrangements A simple majority of members		
(a) Note the content of this report and proposed next steps					
(b)	(b) Identify any issues which the Committee would wish to escalate to the Combined Authority Board.				

## 2.0 BACKGROUND

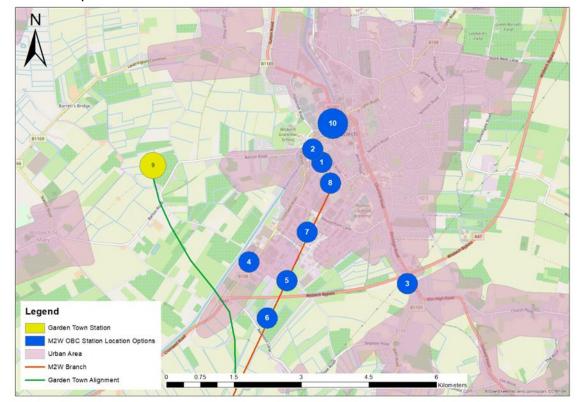
2.1. The Combined Authority and its partners aim to achieve sustainable growth by addressing the inadequate transport connectivity between Cambridge and North Cambridgeshire. While Cambridge is one of the fastest growing and most highly skilled economies in the UK, Wisbech, and the wider north Cambridgeshire area experiences high levels of socioeconomic deprivation.

- 2.2. Improving connectivity to Cambridge offers the opportunity to transform Wisbech as a place for inward investment and provide much enhanced accessibility to key services and employment opportunities for its residents.
- 2.3. Additionally, improved connectivity would ease the pressure on housing in Cambridge, with a reinstated rail link direct from Wisbech to Cambridge supporting the development of the Wisbech Garden Town.
- 2.4. At its meeting on 28 November 2018 the Combined Authority Board approved the budget of £1.5m for the GRIP3B Study for Wisbech to March rail and potential onward connections to Cambridge and Peterborough.
- 2.5. The GRIP 3b study objectives were to:
  - (a) Identify a single option solution between Heavy Rail or Non- Heavy Rail
  - (b) To establish a station location option
  - (c) To establish an engineering solution
  - (d) To establish a crossings solution for the 21 crossings between Wisbech and March
  - (e) To identify a direct link to Cambridge solution.
- 2.6. The study activities were to:
  - Review of Previous work including the GRIP2 work
  - A GRIP3 Options Selection Study
  - Appraisal Specification Report
  - Development Planning and Station location report
  - Scheme Delivery Report
  - Technical Notes on Key issues
  - Full Business Case
- 2.7. Key Drivers for the Project are to:
  - (a) Improve access to employment and education sites
  - (b) Improve connectivity to major centres for inward investment to Wisbech (Cambridge, Peterborough, London, and Stansted Airport)
  - (c) Supports delivery of housing Fenland Local Plan and Wisbech Garden Town
  - (d) Alternative mode of transport to car travel

## 3.0 **Progress to Date**

- 3.1. The Options Assessment Report (OAR) has been completed and the GRIP 3B Full Business Case is anticipated to be completed by the beginning of June. This is later than originally planned due to difficulties in arranging trackside surveys which have now been largely overcome.
- 3.2. The OAR sifted options to two main options for more detailed development:(a) Tram Train,

- (b) National Rail (Heavy Rail) proposals,
- (c) There was a third low cost option considered in accordance with Department for Transport's TAG guidance, but it represented poor value for money and not progressed further.
- 3.3. The two main options have been developed, resulting in a recommended National Rail option, offering more traditional mode, with established procurement and delivery routes.
- 3.4. The key objective is offering direct passenger transport services between Wisbech and Cambridge, which is currently constrained at Ely, but alternative work is progressing on this issue through the Ely Area Capacity Enhancement study which is the subject of a separate report.
- 3.5. Should direct Wisbech to Cambridge services not be immediately available at opening, the project retains a positive benefit cost ratio of 1.5 to 2.0.
- 3.6. A direct Wisbech to Cambridge service from opening would deliver a BCR of 2.0 to 2.5.
- 3.7. The preferred Wisbech Station location should be as close to the town centre as possible and land south of the Purina site has been identified but is subject to further assessment, design and consultation. The map below shows the other options considered for the Wisbech Station location and the preferred option is labelled 10,



3.8. Station Options considered for Wisbech

- 3.9. Further to the Options Assessment Report the Full Business Case includes analysis of railway operations. Network Rail have highlighted that the current restricted track layout at Ely, means there is not currently direct Wisbech to Cambridge availability, but 1 to 2 train paths per hour are potentially available once improvements are implemented at Ely North and Ely Station.
- 3.10. The capacity upgrade proposals for the Ely area are therefore a key dependency for any proposed Wisbech to Cambridge rail service.
- 3.11. To deliver an interim solution, based on initial 2 train paths per hour service between Wisbech and March, with one service operating through to Cambridge (subject to available capacity through Ely) and one reversing at March, the following infrastructure is required:
  - (a) At March Station a new operational platform at the West End of the old platform 3 should be re-instated
  - (b) A revised track layout at March is required to serve a reinstated platform 3.
  - (c) To accommodate a resilient 2 train paths per hour operation on the single line between Whitemoor Jn and Wisbech, a passing loop will be required at Coldham.
  - (d) A single platform is required at the new Wisbech Station. The new platform should be designed to accommodate a 2-car train, with passive provision for future extension to accommodate a 4-car train.

# 4. Next Steps

- 4.1 The Delivery Strategy is being developed as part of the Full Business Case and considers funding mechanisms, procurement and the structure of delivery.
- 4.2 Negotiations with Network Rail and Department for Transport will determine whether this is developed as a Network Rail or Third Party Deliver scheme.
- 4.3 Furthermore, the Department of Transport has recently published information inviting MPs, local councils and community groups across England and Wales to propose how funding could be used to reinstate axed local services and restore closed stations.
- 4.4 The Combined Authority is working with DfT to ensure that the Wisbech Rail project is considered for the restoring railways funding.
- 4.5 An indicative programme for developing the scheme has been produced by Mott McDonald and is set out in the table below,

Stage	Design and construction - Indicative duration	Statutory Process – Indicative duration
GRIP 3 - Option Selection & Full Business Case	12-15 months	
GRIP 4 – Single Option Development	6 months + 4 weeks NR approval	Prepare order documents and submit at end of Grip 4
GRIP 5 study – Detailed Design	9 months + 4 weeks NR approval	6-9 months Objection management and prep for Public Inquiry
Land Acquisition	2	9-12 months Public Inquiry and decision
GRIP 6 – Construction, Test and Commissioning	15 months construction 3 months route learning, rolling stock introduction, test & commission	

4.6 The Full Business Case is anticipated to be completed at the beginning of June 2020.

# 5.0 FINANCIAL IMPLICATIONS

- 5.1 The current 2019/20 financial year approved budget is £1,480,000 and the forecast cost for completing the full business case is £1,445,376 split between 2019/20 and 2020/21 financial years.
- 5.2 Next financial year an indicative budget in the Mid Term Financial Plan is £987,606 but this is subject to approval.
- 5.3 Current estimate of construction is £200.4m this includes a 20% risk allowance and based on 2019 prices. It does not include optimum bias or land acquisition costs. This figure will continue to be refined as the project develops.

# 6.0 LEGAL IMPLICATIONS

6.1 There are no direct legal implications at this stage. However, for the proposals to proceed to construction would require either a Transport Works Act Order or Development Consent Order.

# 7.0 OTHER SIGNIFICANT IMPLICATIONS

7.1 No significant implications at this stage.

# 8.0 APPENDICES

- 8.1 Appendix 1 Options Assessment Report
- 8.2 Appendix 2 Interim Report by Mott McDonald

Background Papers	Location
<ul><li>List background papers:</li><li>Options Assessment Report by Mott McDonald</li></ul>	
<ul> <li>Interim Report by Mott McDonald</li> </ul>	

Appendix 1

# March to Wisbech Transport Corridor

**Options Assessment Report** 

11 October 2019

Mott MacDonald 10 Fleet Place London EC4M 7RB United Kingdom

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# March to Wisbech Transport Corridor

**Options Assessment Report** 

05 February 2020

# **Issue and Revision Record**

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D	05.02.20	PG	RL	OS	Updated for comments

### Document reference: 398128 | 005 | D

#### Information class: Standard

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# **Executive Summary**

The Cambridgeshire and Peterborough Combined Authority (CPCA) objective for this project is to achieve sustainable growth by addressing inadequate transport connectivity between Cambridge and north Cambridgeshire. This Options Assessment Report (OAR) forms part of the business case development process for the March to Wisbech Transport Corridor. It sets out the process by which a preferred option has been identified for further development during the project's Full Business Case phase.

The OAR forms part of the wider March to Wisbech Transport Corridor Study which has been commissioned by Cambridgeshire County Council on behalf of CPCA. The study builds upon previous work commissioned by Cambridgeshire authorities and Network Rail from 2015-2018. The OAR has been developed by Mott MacDonald.

### Context

The combined authority seeks to double the size of the economy of Cambridgeshire and Peterborough over 25 years while ensuring all communities share in this increased prosperity. By better integrating north Cambridgeshire into the Cambridge labour market, the public transport options assessed in this study will help to support sustainable and inclusive growth while also alleviating stress on Cambridge's overheated housing market.

The economies and the population of Cambridge and north Cambridgeshire are distinctive and have limited interaction. Challenges in travelling between the two areas appears to be a significant factor behind this, with north/south corridors in the area being generally of limited capacity, low quality, and often indirect routing. Wisbech, in particular, suffers from poor connectivity, as one of the largest towns in the country without a dedicated rail link. As a result, travel by private vehicle from Wisbech to Cambridge takes over an hour (despite a distance of under 35 miles) and public transport between the two areas is not possible without interchange.

These transport challenges are a significant factor in preventing residents of Wisbech and north Cambridgeshire commuting to the employment opportunities in and around Cambridge and may also hinder inward investment into north Cambridgeshire.

Improved access to Wisbech also support the combined authority and Fenland District Council's ambitions to substantially grow the town via a major dedicated urban extension, known as Wisbech Garden Town. This planned development comprises 12,000 new homes in the town, with further growth proposed to double its size over a 40-year period

The CPCA's plans to provide a dedicated public-transport link between Wisbech and Cambridge are one aspect of its wider strategy for the region. In addition to the north-south public transport link between Wisbech and Cambridge assessed in this report, the CPCA also has plans to improve east-west connectivity to Wisbech via dualling the A47 corridor, along with a package of local measures to address congestion within Wisbech.

# Identifying potential options

In line with Department for Transport (DfT) Transport Analysis Guidance (TAG), the OAR has considered a wide variety of options to identify which best address the underlying challenges in the study area and the CPCA's objectives for the project. Options were structured around three main variables:

- **Mode** conventional National Rail options; a "hybrid" tram-train mode, able to run on both the dedicated extant rail corridor between Wisbech and March and on-street within Wisbech; and, in line with TAG, a lower cost alternative of a guided busway.
- Service Pattern between one and three services per hour from Wisbech, with destinations considered that include a "shuttle" service to March only, and "through" services to Cambridge and Peterborough.
- **Station location** a variety of locations for a new station or stations across Wisbech, including a parkway option, options of various degrees of proximity to the existing town centre, and options within the planned garden town urban extension.

#### Selecting the preferred option

Following identification of this "long list", Mott MacDonald undertook an initial sifting process based on a qualitative multicriteria assessment of their fit to the project's objectives. A short-list of three core options, with a number of sensitivities around these core options, was taken forward for more detailed assessment. A description of these options and a summary of findings from this appraisal are summarised in the table below.

ID	Mode	Service	Station Location	Estimate (£ Q2 2019)	Benefit Cost Ratio
DS1	Tram-Train	Wisbech-Ely- Cambridge 2tph	Wisbech Town	152.5	2.5 – 3.0
DS2	National Rail	Wisbech-Ely- Cambridge 2tph	Wisbech Town	200.4	2.0 – 2.5
DS3 (LC)	Guided Busway	Wisbech-March 3bph	Wisbech Town	75.1	0.5 – 1.0

Capital Cost

#### March to Wisbech Transport Corridor: Core Options

Source: Mott MacDonald analysis

Mott MacDonald prepared a capital cost estimate for each of these options to a GRIP 2 level of detail and also undertook an appraisal of their core ('established') monetised impacts based on passenger demand modelling. To be conservative, and consistent with TAG, demand modelling of the shortlisted options excluded growth associated with Wisbech Garden Town.

The key finding from this analysis was the importance of offering direct passenger transport services between Wisbech and Cambridge. This scheme is closely interdependent with the outcome of the proposed Ely North Junction works and the ability to operate the desired frequency between Wisbech and Cambridge. This OAR shows that even in a scenario where direct Wisbech to Cambridge services do not become possible for a decade after the March to Wisbech scheme opening, the project retains a positive benefit cost ratio of 1.5-2.0.

Related to this, the analysis showed that the location of the new station in Wisbech should be as close to the established town centre as possible to maximise the service's potential catchment area. One other finding was that tram-train-based option could potentially be more cost effective than a similar National Rail option as it may be able to be built to a lower design standard, however, the national rail option has a more certain delivery path.

These findings mean that only rail-based services (DS1 - tram-train and DS2 - National Rail) are viable for delivering the desired outcomes and impacts for the March to Wisbech corridor.

Finally, Mott MacDonald factored an assessment of the deliverability of the remaining rail-based options to ensure a comprehensive view was taken of business case considerations in selecting the project's preferred option, including project affordability, commercial risk and the combined

authority's delivery capability. This analysis found that, while a tram-train solution was estimated to be lower cost than a National Rail solution, it was judged that a National Rail solution offers a clearer structure for procurement and delivery than a tram-train solution, helping to reduce project construction and service delivery risks. It was also judged that a National Rail solution, whether delivered by Network Rail or a third party, presents lower interface risk than the tram-train option because a National Rail solution will be built to Network Rail standards.

Based on this analysis, Mott MacDonald recommend in the OAR that a National Rail option based on scenario DS2 be taken forward for further scheme development, with a lighter touch focus on the tram-train alternative.

#### Progressing the March to Wisbech transport corridor full business case

The OAR forms the first part of developing the March to Wisbech Transport Corridor full business case. Mott MacDonald is preparing designs and cost estimates of the preferred option to a broadly GRIP 3 level of detail, supported by wider technical work including refined passenger demand analysis (incorporating a sensitivity that includes Wisbech Garden Town levels of population growth in the study area), an operational planning study and a project delivery strategy (including assessment of third-party investment options for the scheme).

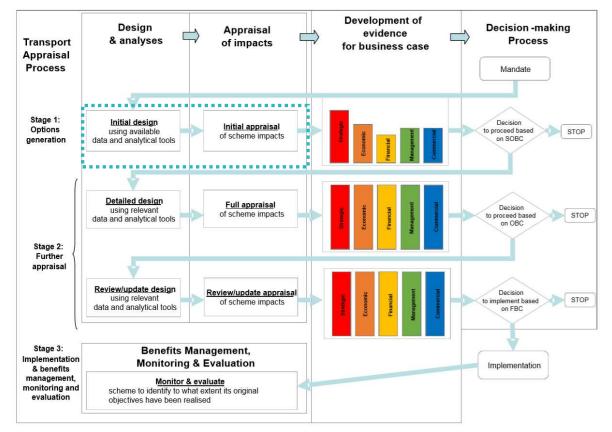
The full business case is planned for completion in Q2 2020.

# **1** Introduction

The purpose of this Options Assessment Report (OAR) is to document the processes undertaken to develop a 'long list' of potential solutions to connectivity issues to, from and between March and Wisbech, and how this has been evolved into a 'short list' for the Full Business Case (FBC). This OAR will be appended to the FBC, and summarised therein, including any updates to reflect information which emerges between the completion of the OAR and FBC.

### 1.1 **Option Development Process**

The OAR documents the steps highlighted in Stage 1 of Figure 1. For the March to Wisbech Corridor Study the early Stage 1 and 2 steps have been refreshed for the FBC, reflecting the significant lag between the completion of the Strategic Outline Business Case (SOBC) and Outline Business Case (OBC) in 2015 and the present day. This lag has necessitated the SOBC and OBC 'long list' to be revisited alongside the scheme objectives, and pre-existing economic assessments. This OAR, although ultimately part of the final FBC, has therefore advanced the option development to a comparable stage as would be expected at the end of the OBC, i.e. a preferred option including economic assessment of that and alternatives, proposed sensitivity testing around this to reflect key uncertainties, and a low cost alternative.



#### Figure 1: Transport Appraisal Process

Source: Department for Transport, TAG for the Technical Project Manager

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Further FBC stages will evolve the appraisal of the preferred option(s), building on the complementary design workstreams<sup>1</sup>. This will lead to changes in the economic assessment as detailed in this OAR.

# **1.2 Sifting Workshops**

The option generating, sifting and appraisal has been led by Mott MacDonald. This included an initial workshop on 8<sup>th</sup> April 2019. The outcomes of this workshop were then reviewed as part of a client workshop, with representatives of the Cambridgeshire and Peterborough Combined Authority (CPCA) and Cambridgeshire County Council (CCC), on 29<sup>th</sup> April 2019.

Following further analysis and scheme development, a series of further workshops were held on:

- 8<sup>th</sup> July 2019;
- 16<sup>th</sup> July 2019; and
- 22<sup>nd</sup> July 2019.

These workshops focussed on mode selection, and in continuously updating levels of certainty around key assumptions and risks.

# 1.3 OAR structure

Subsequent sections of this OAR:

- Summarise the need for intervention, i.e. the issues and challenges the option(s) aim to address<sup>2</sup>;
- Define the scenarios to be used in option appraisal, including the Do Minimum (DM) against which Do Something (DS) options will be judged;
- State the intended outcomes and anticipated impacts for the preferred option and the accompanying objectives which have been used to select it, including the geographic area which could be affected;
- Stakeholder strategy, including consultation;
- Document the initial options generation, sifting and assessment process;
- Provide additional evidence, particularly regarding economic assessment, of the shortlisted options being considered for further development through the FBC and complementary design stages; and
- A synopsis of processes and findings, highlighting the options which are advanced for further consideration as part of the wider business case and design stages. Key assumptions and risks are provided to help inform subsequent appraisal stages and FBC development.

<sup>&</sup>lt;sup>1</sup> These are the Governance for Railway Investment Projects (GRIP) stages for the National Rail alternative(s).

<sup>&</sup>lt;sup>2</sup> This is a summary of the Strategic Case refresh (the first section of the FBC) which has been developed in parallel to this OAR.

# 2 The need for intervention

This section provides a summary of the evidence gathered, and considered, as part of the Strategic Case of the FBC. It provides context for the challenges and issues the subsequent options are seeking to address, and the rationale behind subsequent objectives and option generation.

Appendices A to C provide supporting content for this section.

### 2.1 Socio-economic context

#### 2.1.1 Cambridgeshire – disconnects between the north and south

Wisbech typifies the disconnect in the economic performance of north and south Cambridgeshire. With each displaying very different economic characteristics, there is currently limited interaction between the economies of north and south Cambridgeshire.

North Cambridgeshire's economy, and particularly Fenland District (in which both March and Wisbech are located) underperforms on key economic indicators compared to CPCA and national averages (see analysis in Appendix A). To consider, for example, wages, Fenland's workplace median annual pay is £21,900, c.£7,000 below the UK average. Greater Cambridge, to the south of the CPCA, in contrast, has grown into a highly successful city region where economic success, high quality of life and quality of place are inextricably linked, and boasting a high productivity and high levels of private sector jobs growth, all supporting high wages. Cambridge's median workplace pay is £33,199, more than £3,000 higher than the UK average, implying there is a significant opportunity for growth in Fenland<sup>3</sup>. However, it's worth noting that Fenland has a stronger resident wage than Peterborough, by just over £2,500.

Cambridge's success and high levels of productivity are driven by a thriving hi-tech and biotech industry, which has developed since the 1960s and is known as the "Cambridge Phenomenon". Today Cambridge is one of the UK's fastest-growing and most productive cities and looks likely to continue to be a key hotspot for regional and national job creation should supply side constraints, such as labour market accessibility, be addressed.

The disconnect in the north and south of Cambridgeshire economies is also mirrored in sociodemographic measures and most clearly in levels of deprivation. Figure 2 shows a clear transition in levels of deprivation experienced across the county. Generally, the most deprived areas are located in pockets in the north of the county as well as in and around Peterborough, with lower levels of deprivation more widespread across the south and west of Cambridgeshire. Fenland, in particular, has higher levels of deprivation and has 12 Lower-layer Super Output Areas (LSOAs)<sup>4</sup> in the 20% most deprived nationally. This compares to just two LSOAs in Cambridge City and two in Huntingdonshire in this category. Within Fenland there are severe pockets of deprivation in and around both Wisbech and March.

<sup>&</sup>lt;sup>3</sup> Annual Survey of Hours and Earnings, ONS, 2018

<sup>&</sup>lt;sup>4</sup> Out of a total of 32,844 LSOAs.

verview hastar South South Holland Kesteven Wisbech Downham Market Contains OS data O Crown Copyright and database right 2018 Breckland Peterborough King's Index of multiple deprivation Lynn and •Peterborough West Norfolk Most deprived quintile March Second most deprived quintile Third most deprived quintile Fourth most deprived quintile Least deprived quintile Fenland - Proposed March to Wisbech line East Northamptonshire Local authority boundaries · Key residential centres Ely Forest Heath East Huntingdonshire Cambridgeshire index of Vella as OS OpenCo attan 2215 Huntingdon Royal Liver Building Liverpool United Kingdom Μ Μ MOTT South T: +44 (0)151 482 9910 W: www.mottmac.com MACDONALD Cambridgeshire March to Wisbech Transport Corridor Study St Neots Cambridge

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Figure 2: Map of Index of Multiple Deprivation (IMD), 2015

Source: Index of Multiple Deprivation (IMD), Ministry for Housing, Communities and Local Government (MHCLG)

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Cambridge and Peterborough are the primary employment centres for the CPCA area, with much smaller pockets of medium-to-high density employment also evident in Huntingdon, St Neots, Cambourne, St Ives, Waterbeach, Ely, March and Wisbech. Analysis of travel-to-work journeys for Wisbech, central Cambridge and central Peterborough has identified their relatively polycentric labour markets, with fewer journeys from Wisbech to both Cambridge and Peterborough than would be expected given their spatial proximity and their role as the CPCA area's main employment and urban centres.

Wisbech remains one of the largest towns in the UK without a rail connection, with an estimated population of 32,000 in the town itself from the 2011 Census, and a wider catchment, which views Wisbech as the main local centre, estimated at approximately 50,000 people<sup>5</sup>. Lack of intra-regional connectivity, and alternatives to the private car, is likely to be a contributory factor in a number of the observed outcomes for Wisbech and its surrounding area, as it will:

- Constrain access to employment, services and opportunities, particularly existing higher value jobs which are currently too distant to render them attractive alternatives;
- Diminish its attractiveness for inward investment;
- Stymie markets for businesses already located in the area; and
- Promote a high degree of car dependency, with associated adverse externalities from car use, in an area where highway supply is also constrained and subject to a lack of resilience.

# 2.1.2 Socio-economic context – implications for the March to Wisbech Transport Corridor

- The continued economic success of Greater Cambridge and the "Cambridge phenomenon" presents a growth opportunity for Fenland and other areas in north Cambridgeshire to share in its success, however this is dependent on increased interaction between the north and south areas of county – both commuting and in attracting businesses with synergies which can help provide local higher value employment. Increased interaction may also help to ease some of Greater Cambridge's housing and infrastructure burden.
- We note that The Cambridgeshire and Peterborough Independent Economic Review (CPIER), published in Autumn 2018, concluded that future employment growth in the CPCA area could be much higher than the levels set out in Local Plans.
- Investment in infrastructure to better connect areas in north Cambridgeshire, such as enhancements to the March to Wisbech transport corridor, presents an opportunity to overcome current trends and extend Cambridge's core commuter belt further into north Cambridgeshire.

# 2.2 Connectivity synopsis

#### 2.2.1 Local connectivity

#### **Highway Network**

March and Wisbech are approximately 8.5 miles (14km) apart. Multiple highway options exist between the two, shown in Figure 3 below, but these are less direct than the former rail alignment. Peak hour travel times from centre to centre are estimated at 20 to 35 minutes (average based on typical traffic conditions from Google Maps journey planning facility), implying an average speed of approximately 30km/h. By comparison, a segregated public

<sup>&</sup>lt;sup>5</sup> Usual resident population, Census 2011, ONS

transport alignment offers the opportunity for station-to-station journey times of 10 to 15 minutes<sup>6</sup> based on the standard segregated operational speeds for heavy or light rail operation.

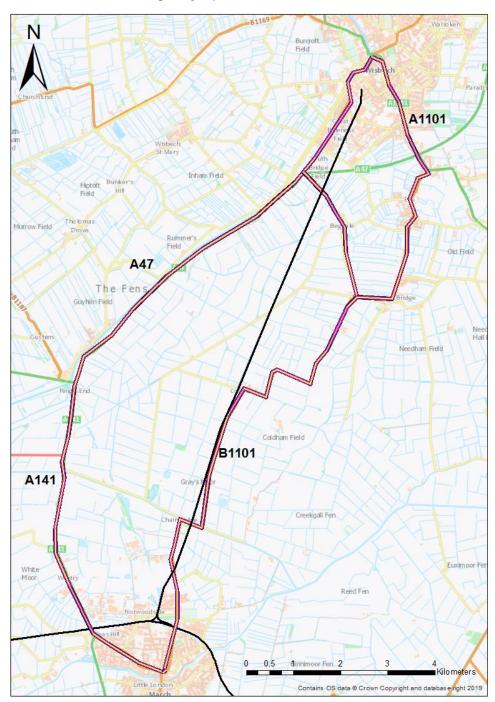


Figure 3: March to Wisbech Highway Options

Source: Mott MacDonald

<sup>&</sup>lt;sup>6</sup> The timing will be dependent on the location of the station(s) at the Wisbech end, alignment, mode, and the treatment of junctions with the local highway network.

#### Local buses

Service buses 46 and 56 connect March and Wisbech. Other local bus provision is discussed in Appendix B.

#### Table 1: March-Wisbech Bus Services

Number	Route	Operator	Approximate Mon-Fri Weekday Headway (minutes)	Journey Time (minutes)
46	Wisbech - Wisbech St Mary - Guyhirn - Murrow - March	Stagecoach in Cambridge	90	34
56	Wisbech - Elm - Coldham - March	Stagecoach in Peterborough	60	35

Source: Cambridgeshire County Council

#### 2.2.2 Regional connectivity

#### **Highway Connectivity**

The regional highway network serving Wisbech is dominated by the A47, a Highways England maintained road connecting Norwich with Peterborough and the East Midlands. North-south connections are provided by the A141, to March, Chatteris and Huntingdon, and the A10 to Ely and Cambridge, accessed from Wisbech via the A1122. Table 2 summarises average peak hour travel times, distances and speeds from Wisbech to a set of major attractors within the CPCA area.

Destination	Distance (km)	Time (minutes)	Speed (kilometres per hour)
Addenbrooke's	67.6	85	47.7
Cambridge	63.3	82	46.3
Cambridge Science Park	59.6	67	53.4
Chatteris	29.6	34	52.2
Downham Market	22.0	30	44.0
Ely	37.4	43	52.2
Huntingdon	52.0	60	52.0
March	16.8	21	48.0
Peterborough	36.3	48	45.4
Waterbeach	55.6	60	55.6

#### Table 2: Wisbech Highway Journey Time Analysis (departing 08:00)

Source: Google Maps, July 2019

#### March Rail Connectivity

March Station is on the Peterborough to Ely line. The former is on the East Coast Mainline (ECML) with onward connectivity towards London, the Midlands, and Northern England. Services to/from Ely operate to Norwich, Cambridge, Stansted Airport and/or Ipswich. It is currently served by approximately three trains per hour across both directions, or three trains every two hours in each direction. The stylised two-hour service pattern, as of July 2019, is shown below. Ipswich services operate via Bury St Edmunds and Stowmarket (and do not serve Cambridge). The Cross Country service calls at Ely between March and Cambridge (with a peak period call at Manea), meaning interchange is required to access Waterbeach and Cambridge North (as it is for Downham Market).

ID	From	То	Operator
1	Birmingham New Street	Stansted Airport	Cross Country
2	Ipswich	Peterborough	Greater Anglia
3	Birmingham New Street	Stansted Airport	Cross Country
4	Stansted Airport	Birmingham New Street	Cross Country
5	Peterborough	Ipswich	Greater Anglia
6	Stansted Airport	Birmingham New Street	Cross Country

#### Table 3: March Rail Services, across a standard two hours

Source: National Rail Enquiries

#### Summary of Rail Provision

Direct comparison of station-to-station, as a proxy for centre-to-centre, journey times and speeds show that rail is generally competitive with the car from March (see Appendix B for further details):

- Average speeds are greater, and this is particularly true for access to Cambridge and Peterborough where lower average highway speeds on radial approaches help to provide rail with a competitive advantage;
- However, when frequencies of service are taken into account, through their associated wait times and constraints on preferred departure or arrival times, then rail's competitive advantage is dramatically reduced. As an example, for March to Cambridge, the single hourly service means that the journey time is effectively doubled and the speed is halved – bringing the highway and rail speeds to a comparable level;
- Requirements to interchange diminish the attractiveness of rail further, but March does offer direct connections to Cambridge and Peterborough – the principal centres in the CA area and
- Access and egress to and from the stations is a critical factor, alongside monetary costs (fares and parking) in determining the overall demand between two localities and rail's mode share.

# Current local and regional connectivity – implications for the March to Wisbech Transport Corridor

- March and particularly Wisbech are, at present, on the periphery in terms of regional connectivity, with relatively slow peak-time journey times via the highway network to major attractors in the CPCA area.
- Bus connectivity is limited with approximately with one or two buses per hour connecting March and Wisbech. An express bus service links Wisbech to Peterborough. There are no direct bus services from Fenland to Greater Cambridge. This, in part, due to the elongated travel times which means the service would not be sufficiently attractive to generate a financially viable customer base.
- Travel by rail firstly requires travel to March and is then subject to infrequent services which pose a deterrent to use of rail travel. The re-opening of the March to Wisbech transport corridor presents the opportunity to re-integrate Wisbech more fully into the regional transport network and enhance service levels to/from March itself.
- For centre-to-centre travel, rail has the potential to offer attractive journey speeds, including competitiveness with car and bring Cambridge with an approximate 45-minute travel time of Wisbech which is likely to be attractive to commuters and other regular travellers.

### 2.3 Policy context - capacity for growth

Appendix C provides a detailed summary of the key policies and strategies of relevance to the scheme. For the purpose of this OAR, to succinctly demonstrate the need for intervention, the key outcomes and implications of these policies and strategies for the March to Wisbech Transport Corridor are summarised below.

#### Cambridgeshire and Peterborough Combined Authority Devolution Deal (2017)<sup>7</sup>

Cambridgeshire and Peterborough's role as a world-leader in science and technology and its contribution to the UK economy is explicitly documented in the Cambridgeshire and Peterborough Devolution Deal. One of a handful of UK devolution deals awarded to date, the Cambridgeshire and Peterborough Devolution Deal, published in March 2017, awarded Cambridgeshire and Peterborough increased power and accountability over transport, planning and skills development, and funds to support economic and housing growth<sup>8</sup>.

The CPCA Devolution Deal aims to enable significant economic growth, building on Cambridgeshire and Peterborough economic success to date, increasing economic output by nearly 100% over 25 years with GVA increasing from £22 billion to more than £40 billion. The Deal also aims to accelerate the delivery of 72,000 new homes with £170 million investment.

The Devolution Deal states the importance of investing in transport and infrastructure to enable Cambridgeshire and Peterborough to realise its growth ambitions.

"Cambridgeshire and Peterborough recognise that for the Combined Authority to meet and exceed its ambitious targets for growth and wealth creation it needs to connect people and

<sup>&</sup>lt;sup>7</sup> Cambridgeshire and Peterborough Combined Authority Devolution Deal, Ministry of Housing, Communities & Local Government and Department for Business, Energy & Industrial Strategy, March 2017

<sup>&</sup>lt;sup>8</sup> Cambridgeshire and Peterborough Combined Authority Devolution Deal, Ministry of Housing, Communities & Local Government and Department for Business, Energy & Industrial Strategy, March 2017

places. Better connecting the whole of Cambridgeshire and Peterborough has the potential to reduce city pressures and give the Cambridge hub access to wider areas of housing growth."<sup>9</sup>

The Deal includes direct reference to a new Fenland settlement based on garden town principles and which is aligned to improvements on the A47 and potential rail connectivity from Wisbech to Cambridge.

## Fenland Local Plan

At a more local level, Fenland's Local Plan, adopted in 2014, outlines targets for providing 11,000 new homes and 7,200 jobs during the plan period to 2031<sup>10</sup>. 4,200 new homes are allocated in March and 3,550 homes in Wisbech. Wisbech is earmarked as a key growth area for both housing and jobs in the Local Plan. Like the Devolution Deal, the Local Plan also includes direct reference to the reopening of the March to Wisbech rail line.

Fenland's Local Plan is currently undergoing review and refresh. At the time of writing no updates to the Local Plan are available in the public domain.

### Wisbech Garden Town

Housing growth in Wisbech could, however, significantly exceed current targets set out in Fenland's adopted Local Plan. Proposals for extending Wisbech to create 'Wisbech Garden Town' have gained traction since the Local Plan was adopted five years ago. Initial proposals for the development of Wisbech Garden Town set out plans for 12,000 new homes (including the existing allocations), new primary schools and a second secondary school, a 170ha country park and multiple employment sites including a new Enterprise Zone to the south of the Wisbech. If such development goes ahead, the population of Wisbech could double over a 40-year period.

Proposals for 'Wisbech Garden Town' are heavily dependent on improving the town's infrastructure and connectivity. The re-opening of the March to Wisbech Transport Corridor is a critical for supporting future growth in Wisbech as without a new segregated public transport link to and from Wisbech, the 'Wisbech Garden Town' proposals are not likely to be viable or feasible, thus limiting future investment in the town.

# The Cambridge and Peterborough Independent Economic Review (CPIER)<sup>11</sup>

Whilst appreciating that Fenland's Local Plan is currently undergoing review and refresh, there is growing evidence that Local Plan targets across the wider CPCA area are pessimistic and that much higher employment growth can be achieved by building on the success of the 'Cambridge Phenomenon'. This has been most clearly demonstrated in the Cambridgeshire and Peterborough Independent Economic Review (CPIER), which was published in Autumn 2018.

The CPIER developed an evidence base on the economic performance and growth potential of Cambridgeshire and Peterborough, which has included consideration of a range of different growth scenarios beyond those set out in the Local Plans. Significantly, the CPIER<sup>12</sup>

<sup>&</sup>lt;sup>9</sup> Cambridgeshire and Peterborough Combined Authority Devolution Deal, Ministry of Housing, Communities & Local Government and Department for Business, Energy & Industrial Strategy, March 2017

<sup>&</sup>lt;sup>10</sup> Fenland Local Plan (2014) Fenland District Council

<sup>&</sup>lt;sup>11</sup> Cambridgeshire and Peterborough Independent Economic Review (CPIER) Final Report, Cambridgeshire and Peterborough Independent Economic Commission, September 2018

<sup>&</sup>lt;sup>12</sup> Cambridgeshire and Peterborough Independent Economic Review (CPIER) Final Report, Cambridgeshire and Peterborough Independent Economic Commission, September 2018

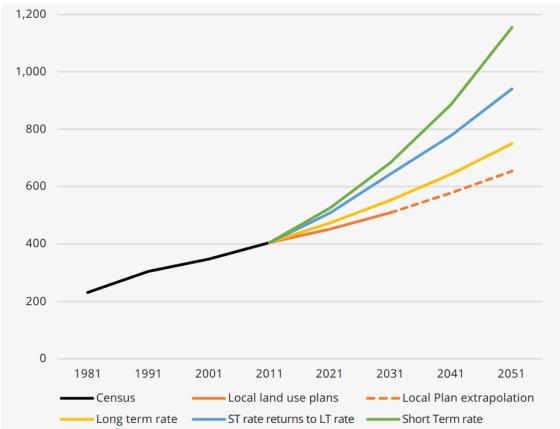


Figure 4: Employment projections for Cambridgeshire and Peterborough – 000's of people

Source: Dr Ying Jin, Department of Architecture, University of Cambridge, extracted from Cambridgeshire and Peterborough Independent Economic Review (CPIER) Final Report, Cambridgeshire and Peterborough Independent Economic Commission, September 2018

Higher levels of employment growth will add further pressure to housing markets and infrastructure, particularly in and around Cambridge. Critically, the CPIER identify that already house building and other infrastructure developments have not kept pace with employment growth in Greater Cambridge. As a result, many people have been priced away from the city, and journey times into work have risen significantly, causing many to endure longer commutes. The CPIER found there to be a large number of people in Cambridgeshire and Peterborough that commute over 60 minutes, some 90 minutes, one-way on a daily basis. It warns that this is unsustainable and could even risk future economic growth by making the city less attractive to even high-value businesses.

## • The Cambridgeshire and Peterborough Local Industrial Strategy

The Cambridgeshire and Peterborough Local Industrial Strategy recognises the importance of infrastructure development as a key requirement for both maintaining current positive growth trends in the area, as well as building upon those trends. The strategy cites

businesses that operate in Cambridgeshire and Peterborough as being concerned that recent growth may be hindered by the poor infrastructure in the area:

"The views of businesses surveyed and engaged in the development of place and sector strategies is that poor infrastructure is hampering growth and is set to increase as a problem over the next decade. Sustaining and de-risking the area's full potential for economic growth relies on transforming the transport, housing and infrastructure capacity in Greater Cambridge and improving the transport system for market towns. Improving connectivity is vital if recent growth is not to stall and will contribute to addressing the Future of Mobility Grand Challenge."

The Cambridgeshire and Peterborough Local Industrial Strategy states that demand for transportation into Cambridge has tripled since 1997/98, hence the report's ambition to establish the CAM in the area. The future investment strategy currently in place outlines plans for c.£600m worth of transformative infrastructure in the area up to 2031, including Phase 1 of the CAM.

#### The draft Cambridgeshire and Peterborough Local Transport Plan<sup>13</sup>

The draft Plan outlines the CPCA's priority transport schemes. The March to Wisbech transport corridor is clearly mapped as one of the priority schemes which will transform accessibility for residents and businesses in the town.

"Construction of a new link to Wisbech will transform accessibility to the town...Residents and businesses in Wisbech would benefit from being able to reach Cambridge directly, connecting them to the opportunities within Greater Cambridge, including well-paid, skilled roles in the knowledge economy, and education and training opportunities at The University of Cambridge, Anglia Ruskin University and Cambridge Regional College. It will also play a key role in supporting the ambition for Wisbech Garden Town, helping to secure the viability and delivery of additional development."<sup>14</sup>

<sup>&</sup>lt;sup>13</sup> Draft Cambridgeshire and Peterborough Local Transport Plan, prepared by Steer for the Cambridgeshire and Peterborough Combined Authority, 20 May 2019

<sup>&</sup>lt;sup>14</sup> Draft Cambridgeshire and Peterborough Local Transport Plan, prepared by Steer for the Cambridgeshire and Peterborough Combined Authority, 20 May 2019

#### Policy context – implications for the March to Wisbech Transport Corridor

- North Cambridgeshire lags behind the economic prosperity of south Cambridgeshire. Whist the latter suffers from housing affordability and labour supply issues which may constrain growth, residents in Wisbech in north Cambridgeshire face challenges relating to labour market access and connectivity with constrained travel opportunities. Both north and south could thus mutually benefit from enhanced connectivity between them.
- The CPCA Devolution Deal aims to enable significant economic growth, building on Cambridgeshire and Peterborough economic success to date, increasing economic output by nearly 100% over 25 years with GVA increasing from £22 billion to more than £40 billion. The Deal also aims to accelerate the delivery of 72,000 new homes with £170 million investment.
- Across the CPCA area, levels of future employment growth could be higher than currently set out in Local Plans, as presented in a 2018 report by the CPIER. Higher levels of employment growth will add further pressure to housing markets and infrastructure, particularly in and around Cambridge. Investment in housing and infrastructure is critical to support future employment growth.
- The re-opening of the March to Wisbech Transport Corridor is consistently referenced throughout local and regional transport and planning policies and strategies as an enabler to future growth, both locally in Wisbech and across the wider Cambridgeshire area.
- Whilst enhanced connectivity between, to and from March and Wisbech will play a role in delivering on local and regional economic, social, and environmental objectives, maximising the potential benefits will require complementary investment in non-transport measures. These include, but will not be limited to, housebuilding, quality of life, and skill and qualifications interventions.

# 3 Scenarios

The assessment of the options being appraised in this report needs to be made against a 'without scheme' scenario. That is the most likely future situation given existing commitments. This includes consideration of both exogenous influences, such as land use change, and other changes in transport supply. These combine to form a Do Minimum (DM) scenario against which options can be appraised.

# 3.1 Do minimum

The 'Do Minimum' (DM) scenario entails a continued reliance on the private car and local bus services. After some small-scale incremental enhancements to rail services during the 2010s, the only future committed changes which are material to the core modelled area are the increases in frequency of the:

- King's Lynn to London King's Cross, via Ely and Cambridge, service to half hourly from current hourly provision; and
- Ipswich Peterborough, via March, service from 1 train every 2 hours to hourly.

The forthcoming acquisition of new 'hybrid' Class 755 rolling stock for the Greater Anglia franchise is noted, but this is not deemed material to transport supply within the corridor or a wider geographical area in which the options could produce impacts. It does though have implications for scheme design and the environmental impacts associated with additional National Rail services.

The Wisbech Access Strategy (WAS) has been developed for the area immediately north of the A47. Subject to final funding agreement, elements of the WAS proposals can now be considered as committed, including the Southern Access Road (SAR) – this is discussed in more detail in Section 3.3.5.

This will mean that current constraints on travel opportunities, particularly for those without access to a car, will largely persist, whilst economic growth in sub-regional centres and hubs will be hindered by a lack of access to labour. No changes have been assumed to the bus network, but the continuing pressures on operation from increases in running costs, and constraints of levels of local authority funding for tendered services should be noted.

Land use change is taken from local planning documents, e.g. the Fenland Local Plan, and is controlled to CPCA area totals from either the DfT's National Trip End Model (NTEM) or the local CCC High Growth Scenario (HGS). For the core assessment, the Wisbech Garden Town proposals are not at a sufficient stage of planning or commitment for them to be included in the core tests. They are therefore included as part of sensitivity testing around applicable options.

The context is therefore strong local growth from new development, set against no committed DM changes to transport supply, with the exception of WAS investments.

# 3.2 Do something

The Do Something (DS) scenario(s) overlay the change in transport supply (times and costs of travel) on the DM situation. There are no other changes in transport supply or land use. Wisbech Garden Town proposals are included in sensitivity testing, and in some cases this may involve adaptation of the DS schemes, and therefore changes in transport supply (e.g. changes to alignment and station location) relative to other DS scenarios. In all cases of additional

development, the DM land use is also changed, and is therefore consistent between the DM and DS scenarios, i.e.at this stage consideration is not being given to dependent development and/or dynamic land use scenarios.

## 3.3 Transport scheme interdependencies

#### 3.3.1 Rail infrastructure proposals

There are a number of related proposals which will either have a direct influence on the proposed project and/or generate interdependencies. Although these proposals are not committed (if they were, they would be incorporated in the DM scenario) they are documented here for consideration as part of future sensitivity testing stages.

Previous network enhancement proposals have included:

- Romford Remote Operating Centre (ROC), which could have alleviated the needs for any
  resignalling of March East signal box to connect the March-Wisbech line back into the
  network;
- Electrification of the line between Ely and Peterborough, as part of the Felixstowe to Nuneaton scheme. As for Romford ROC, if a rail-based scheme between March and Wisbech is advanced as a result of this study then there could be substantial efficiencies, and the potential for additional benefits from the type of stock deployed and increase in paths, if this link was also electrified and operated using Electric Multiple Units (EMUs).

Potential rail services to/from Wisbech are only one of a number of proposed service enhancements on the Anglia rail network. Other proposals also exist to:

- Provide a half hourly service in each direction between Norwich and Cambridge via Ely;
- Provide an hourly service between Ipswich and Peterborough (noted above for DM); and
- Enhance the Birmingham to Stansted service to half hourly in each direction.

Given known pathing constraints in the area, all of the above conflict with options which involve services on the existing rail network beyond March. Allocation of any additional train paths would be subject to NR and DfT approval.

In addition, options are separately being considered, by Network Rail, for enhancing capacity and resilience at Ely North Junction. This is a critical constraint on the network, and services between Wisbech/March and Cambridge would need to operate through the junction. If a scheme is advanced which provides additional paths then, as previously noted, there may be competition from other passenger service proposals alongside aspirations to increase the number of freight paths which are made available through the junction. The 'Ely Area Capacity Enhancement' (EACE) scheme has recently been granted 'decision to design' status through the DfT's Rail Network Enhancements Pipeline (RNEP).

Analysis of capacity at the existing Ely North Junction has been carried out in the parallel 'Assessment of Rail Operations'. This analysis shows that there is scope, with some marginal retiming to run one Wisbech-Cambridge service per hour through Ely North (in each direction). This includes the increase in frequency of the Ipswich-Peterborough service (see above), and would provide an assumed 9 or 10 tph in each direction. Under current DM arrangements it is therefore assumed that a path is available for one Wisbech-Cambridge service per hour.

The understanding of the EACE proposals is that:

- A 'base' scenario for EACE could unlock an additional 1 or 2 tph in each direction (assumed to deliver 11 tph). A second Wisbech-Cambridge service per hour could potentially be accommodated by this enhancement, but would need to be considered alongside other potential service changes; and
- An uplifted alternative for EACE would provide for 14 tph. It is assumed, based on all known service enhancement proposals, that this uplifted EACE scenario could provide capacity for 2tph in each direction between Wisbech and Cambridge.

Sensitivity testing will be required around options with interdependencies, i.e. in the form of reduced service patterns through Ely North Junction on the assumption that the desired number of paths may not be available with or without the 'Ely Area Capacity Enhancement'.

### 3.3.2 Rail freight possibilities summary

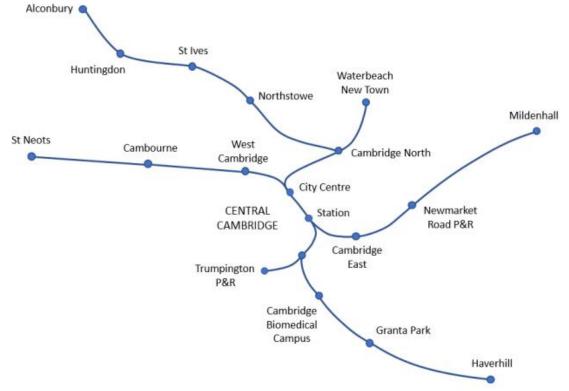
Appendix D contains consideration of the potential market for freight services on a reopened rail alignment between March and Wisbech. Reinstatement of the line for freight services would incur additional costs over and above those for passenger services alone. This potential market must take into account the changed nature of rail freight operations since the cessation of previous services in 2000, which currently focuses on large-scale intermodal (Deep Sea and Domestic), coal and Biomass movements. In addition, the use of the line for freight services would preclude any light rail-based option due to inter-operability standards.

While sufficiently sized markets may emerge in the future, and the scheme design should not, as far as reasonably practicable, preclude future provision of freight facilities at Wisbech, the current business case development processes should best proceed on the working assumption that rail freight services will not be delivered on the March-Wisbech corridor.

#### 3.3.3 Cambridge Autonomous Metro

Cambridge Autonomous Metro (CAM) is an emerging concept for a 'metro-style' network focussed on Greater Cambridge but with the potential for expansion across the wider region. The proposals are at their early stage of development, with an SOBC for a CAM network published in February 2019<sup>15</sup>. The emerging network is shown in Figure 5.

<sup>&</sup>lt;sup>15</sup> See: https://www.cambridgeshirepeterborough-ca.gov.uk/assets/Uploads/CAM-SOBC-v2.1.pdf



# Figure 5: Cambridge Autonomous Metro Emerging Network Proposals

Source: Steer (2019)

The line to St Ives, already served by a guided busway between there and Cambridge City Centre, has the potential for a northern spur towards Chatteris and, from there, a further connection to March and the wider Fenland district. This could then link to the March-Wisbech corridor. This potential is contained within the draft CPCA Local Transport Plan (LTP), is shown in the image for Huntingdonshire area proposals in Figure 6.

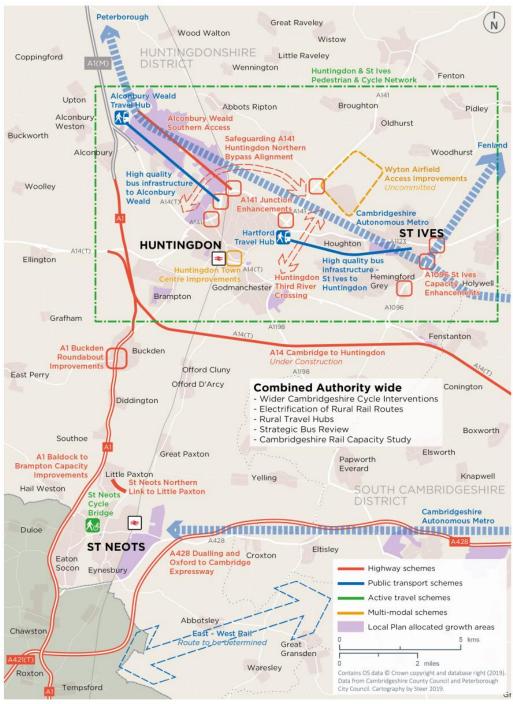


Figure 6: Huntingdonshire Key Transport Projects

Source: The Cambridgeshire & Peterborough Local Transport Plan (May 2019)

The CAM SOBC currently assumes an opening year of 2029 for the full network previously shown in Figure 5. It would have to be assumed that any further extensions, such as St Ives to Chatteris, Chatteris to March, and March to Wisbech would therefore follow in the 2030s, after the proposed opening of the March to Wisbech scheme.

An extension of the CAM to Wisbech could have impacts on the demand for rail services from Wisbech to March and Cambridge. However, as the CAM is at a relatively early stage of development and not 'committed' in formal terms, it has not been included in the demand modelling developed for this study. The longer-term timeframes anticipated for a potential CAM extension to Wisbech also means that CAM has not been assessed as a potential mode in this OAR.

### 3.3.4 A47 proposals

There is a concurrent study into the A47(T) which is likely to identify enhancements to this route which runs to the south of Wisbech. This would deliver journey time savings to car travel, and potentially bus travellers, but these are not 'committed' for this study and have therefore not been included. In addition to these competitive considerations, there may be opportunities to provide a single integrated design solution which could result in cost efficiencies across the two schemes. Indicative efficiencies for relevant options, i.e. those which involve crossing the A47 with segregation between rail and road, will be addressed through sensitivity testing.

#### 3.3.5 Wisbech Access Strategy

The Wisbech Access Strategy<sup>16</sup> (WAS) is a package of schemes aiming to enhance accessibility and support delivery of housing aspirations in the Fenland Local Plan. WAS objectives are to:

- Enable housing and employment growth in Wisbech;
- Enable and encourage sustainable modes;
- Provide an efficient, safe and secure network for all; and
- Sustain and enhance the environment.

Emerging proposals are split over three phases. Funds were provided by the Government Growth Fund to deliver a set of short-term Phase 1 schemes and undertake more detailed design work on the Phase 2 and 3 schemes.

The most pertinent scheme in the WAS proposals is for the Southern Access Road (SAR). Two outline designs have been progressed for SAR, with (see Figure 7 below) and without the reopening of the March to Wisbech corridor for a segregated public transport alignment. The SAR aims to enable the proposed industrial and commercial development in Wisbech South from the Fenland Local Plan. The 'with rail' plans would see the removal of the rail crossing at New Bridge Lane between the A47 and Weasenham Lane. In totality, both SAR proposals aim to reduce the pressure placed on Weasenham Lane by existing and development related traffic. With certain station location options, traffic in Weasenham Lane would reduce accessibility to new public transport services. Additionally, depending on the mode and associated requirement for level crossing works (or a new overbridge), traffic on Weasenham Lane may be subject to delays.

Subject to a final funding agreement, the SAR can now be considered as 'committed' and included in the DM scenario. It is assumed that the 'with rail' proposal will now be progressed. Other wider elements of the WAS will require integration with station accessibility proposals should a 'town centre' location for Wisbech emerge as the preferred option.

<sup>&</sup>lt;sup>16</sup> See: https://www.cambridgeshire.gov.uk/transport-funding-bids-and-studies/wisbech-access-strategy/



## Figure 7: Wisbech Access Strategy – Southern Access Road with Rail Proposal

# **3.4** Appraisal scenarios – critical considerations

- Local Plan proposals for Fenland can be considered as committed for transport appraisal purposes, i.e. they are sufficiently certain in planning status.
- Other development proposals are not at a sufficient level of commitment for them to be included in the core appraisal, i.e. Wisbech Garden Town can only be considered through sensitivity testing.
- Greater Anglia is scheduled to introduce Class 755 'hybrid' trains across routes with only
  partial Overhead Line Electrification (OLE) coverage. This presents an opportunity for the
  potential services between Wisbech and Cambridge where the line between Ely and
  Cambridge has OLE. Greater Anglia is also scheduled to increase the frequency of the
  existing Ipswich to Peterborough service, calling at March, to hourly. This would increase
  the total level of service at March to 2tph in each direction, albeit only 1tph would run directly
  to/from Cambridge.

- The WAS SAR component is now at a sufficiently advanced stage to be considered as 'committed'. This is expected to reduce highway traffic on Weasenham Lane to the south of the town centre which bisects the former rail alignment between March and Wisbech.
- Ely North junction is a critical constraint on the network. Network Rail is considering options to improve network capacity and resilience in this area at present through the 'Ely Area Capacity Enhancement' scheme study. Enhancements to Ely North junction capacity have been assumed in the DS options modelled in the OAR.

# **4** Scheme objectives and expected impacts

This section details a set of scheme specific objectives against which options are initially appraised. The objectives are translated into a set of expected outcomes and impacts, for which a number of the latter are subsequently quantified as part of an initial economic assessment of shortlisted options.

#### 4.1 Scheme objectives

The OBC study (2015) defined a set of scheme objectives for use in option appraisal. As part of this FBC these have been refreshed in light of changes in the regional governance context and associated strategy and planning documentation (see Section 2 for a synopsis and supporting appendices A, B, and C; the Strategic Case section of the business case will provide further detail). The full set of scheme objectives is shown in Table 4. These are structured around the main impacts which the DfT define for transport interventions:

- Economic;
- Environmental;
- Societal; and
- Financial.

Overarching these are some policy objectives which align with one or more of the above.

ID	Impact	Objective	Source(s)
A(i)	Economic Provide enhanced access to new employment and training opportunities, which will help to raise educational attainment, skills and average incomes/GVAs per capita in and around Wisbech; in particular Alconbury Weald Enterprise Campus, Local FE colleges, Higher Education establishments, and strategic employment sites in Peterborough centre, Ely, Alconbury, Waterbeach, Cambridge Science Park, Cambridge Biomedical Campus (Addenbrooke's) and Cambridge centre (station area), by reducing travel time(s) and cost(s)		GC&GP SEP; Cambridgeshire LTTS
A(ii)	_	Provide enhanced connections for new or future businesses (inward investment) in the Wisbech area, with respect to access to labour, supply chains, customers and supporting services, supporting inward investment, by reducing travel time(s) and cost(s) to the major regional centres	Fenland Local Plan 2014
A(iii)	_	Help regional employers gain access to an enlarged and suitably skilled workforce, specifically in the employment growth areas of Cambridge centre (station area), Cambridge Biomedical Campus (Addenbrooke's), Cambridge Science Park, Ely, Waterbeach, Peterborough and Alconbury in Greater Cambridge and Greater Peterborough area	GC&GP SEP; Wisbech 2020 Vision; Cambridgeshire LTTS
A(iv)		Support the delivery of housing and employment land in Wisbech and March as envisaged in the Fenland Local Plan, by attracting, and bringing forward, inward investment due to better connectivity	Fenland Local Plan 2014
A(v)	_	Address the current deficit in transport infrastructure across Cambridgeshire which is required to align with significant growth aspirations of the CA and prevent deterioration to the quality of life which will result if this growth is not matched by the means of achieving it in sustainable way through better infrastructure.	Cambridgeshire and Peterborough Independent Economic Review

#### Table 4: March to Wisbech Transport Corridor Detailed Scheme Objectives

ID	Impact	Objective	Source(s)
A (vi)		Increase capacity for rail travel across Cambridgeshire and Peterborough and create better connectivity to meet the needs of travel demand which is expected to grow by 28% in Cambridge and 30% in Peterborough up to 2031.	CA Spatial Plan
B (i)	Environmental	Provide an attractive, sustainable, alternative to the private car on key local movements, helping to reduce current and future vehicle-kms, congestion and resulting emissions	Fenland Local Plan 2014; Cambridgeshire LTTS
C (i)	Societal	Provided enhanced access to key medical facilities, colleges, universities, and leisure/retail opportunities, through improved connectivity to major regional centres and facilities (e.g. Peterborough, Cambridge and King's Lynn)	Fenland Local Plan 2014; Cambridgeshire LTTS
C (ii)	_	Provide enhanced access for specific local groups; in particular young people Not in Education, Employment or Training (NEET), low income households, those with Level 2 qualifications or lower, and those on incapacity benefits	Fenland Local Plan 2014
D (i)	Policy	Enable the delivery of the Wisbech Garden town proposals which are enhanced by the provision of a rail link, and provide sustainable access to 11, 500 additional homes, 97 hectares of employment space and 4 new schools.	Wisbech Garden Town
D (ii)	_	Support the Town & Country Planning Act (TCPA) Garden Town Principles in relation to Wisbech Garden Town which states Garden Cities should be designed to encourage walking, cycling and low-carbon public transport and should be located 'only where there are existing rapid public transport links to major cities, or where plans are already in place for their provision.	Wisbech Garden Town
D (iii)	_	Support key components of the Wisbech Garden Town Vision to create: 'A connected town' which is supported locally and generates	Wisbech Garden Town
		the values needed to regenerate the town; and 'A sustainable community' that is not predicated on car use and has within it, an integrated system for public transport.	
D (iv)	_	Support the key recommendations outlined within the CPIER including: Increasing the level of infrastructure investment to create better places; and Developing a package of transport and other infrastructure projects to alleviate the growing pains of Greater Cambridge which should be considered the single most important infrastructure priority facing the Combined Authority in the short to medium term.	CP CA Spatial Plan

ID	Impact	Objective	Source(s)
D (v)		Support the aspirations and key principles of the Combined Authority Spatial Plan which include:	CP CA Spatial Plan
		Working with planning authorities, developers, Homes England and other agencies to ensure the effective delivery of the strategic housing sites;	
		Developing and maintaining a long-term investment programme of infrastructure projects	
		Working with local planning authorities to assess the need for and delivery of infrastructure to address future environmental sustainability;	
		Taking a positive view of, and prioritising, investment that tackles deprivation and which increases sustainable, inclusive growth in disadvantaged areas of Cambridgeshire and Peterborough;	
		Work with neighbouring authorities through their strategic partnerships and national initiatives to ensure a complementary, integrated approach to growth and to optimise investment opportunities to achieve mutually beneficial outcomes;	
		Embrace positively the need to build new homes, create jobs, and improve infrastructure;	
		Embrace positively the need to build new homes, create jobs, and improve infrastructure potentially along key dedicated public transport routes;	
		Work with neighbouring authorities, Government, and other partners to develop strategic connections between areas; and	
		Be an exemplar of low carbon living, efficient use of resources, sustainable development and green infrastructure.	
E (i)	Financial	To minimise long term commitments for public revenue support	
Source:	Mott MacDonald		

For the purposes of the subsequent option sifting, these objectives have been distilled to those in Table 5.

# Table 5: March to Wisbech Transport Corridor Distilled Scheme Objectives

ID	Impact	<b>Detailed Objectives</b>	Detail
A	Economy	A i), iii) and vi)	Improve access to key employment and education sites (Alconbury, Peterborough Centre, Ely, Cambridge Science Park, Cambridge Biomedical Campus & Cambridge Centre)
	Economy	A ii), v) and vi)	Improved connectivity to major centres for inward investment to Wisbech (Cambridge, Peterborough, London and Stansted Airport)
	Economy	A iv), v) and vi), D i), iv) and v)	Support delivery of housing - Fenland Local Plan and Wisbech Garden Town which allows key employment locations to continue to grow
В	Environmental	B i) and D ii), iii) and v)	Help to support economic growth in a sustainable manner by providing an attractive alternative to car travel, reducing associated externalities
С	Social	C i) and ii), and D v)	Improve local access to key services, e.g. medical facilities, colleges and universities (located in major centres, e.g. Cambridge, Huntingdon, King's Lynn and Peterborough)
	Social	D iii)	Support the regeneration of the town centre and existing urban area
D	Financial	E i)	To minimise long term commitments for public revenue support
Sourco	Mott MacDonald		

#### 4.2 Expected Outcomes and Impacts

Although the exact detail of the options, and thus the outputs and finalisation of outcomes, cannot be included at this stage, the logic map in Figure 8 shows how a potential scheme in the March to Wisbech corridor could, through its primary and secondary outcomes, impact on the economy, society, and the environment in a beneficial manner.

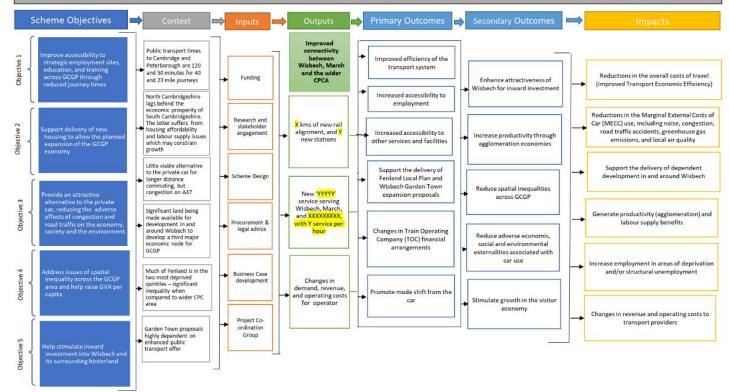
#### Figure 8: March to Wisbech Corridor Logic Map for a Potential Scheme

#### **Cambridgeshire & Peterborough Area**

- By 2036, deliver more than 90,000 new jobs and over 100,000 new homes
- Ensuring consistency between transport and strategic transport infrastructure so that growth and regeneration is properly serviced and the effects of
  congestion on productivity are addressed access to a good job within easy reach of home
- Build on and enhance the competitiveness and success of existing sectors and places, while ensuring all residents can benefit from growth
- Maintain and enhance quality of life and natural and built heritage of the area
- Creating healthy, thriving and prosperous communities
- · Environmentally sustainable delivery of growth

#### Fenland & Wisbech

- A minimum of 11,000 new homes by 2031. The 'Garden Town' proposals extend this to include 13,200 new homes in Wisbech and 11,000 new jobs
- Helping people gain access to a range of employment and training opportunities. Invest in infrastructure to improve efficiency, competitiveness and vitality
- Improve the quality, range, and accessibility of services and facilities, redressing inequalities related to location and socio-demographic characteristics





#### 4.3 Geographic Extent of Impacts

Although the focus of the study is on addressing challenges and issues facing Wisbech and the wider Fenland area including March, options which extend their range beyond the immediate corridor between the two settlements will naturally have a wider geographical influence. In the context of options for this corridor, these are principally rail-based interventions which involve through running beyond March to major centres such as Cambridge and/or Peterborough. As well as additional impacts for Wisbech and March, there will therefore be further impacts to capture for other intermediary communities along the route, with this being dependent on the proposed calling pattern.

The area of influence therefore covers the entire CPCA, but with a tighter focus for transport modelling and economics on the locations served by the existing rail lines between Peterborough and Ely, and Cambridge and King's Lynn via Ely.

# 5 Stakeholder strategy

This section provides an overview of the strategy for engaging with stakeholders.

#### 5.1 **Promotion**

The main local stakeholders are the CPCA as the scheme promoters and the main strategic transport planning authority affected by the options, CCC, as the main strategic highway authority affected by the options, FDC, as the local district authority with planning powers, and local land owners and businesses. It is expected that the scheme, subject to the gateway decisions on the FBC and the GRIP reports, would be taken forward through the emerging CPCA assurance framework and major schemes programme.

Both CPCA and CCC have been engaged throughout the option generation, sifting and appraisal stages via a series of workshops.

The Office for Rail & Road (ORR) have also been engaged and contributed to the evidence base and assumptions for the study, particularly with regard to the status of the level crossings between March to Wisbech.

At this stage the DfT and Network Rail have been informed of the study's remit and timescales, but have not been actively engaged in option development and appraisal.

Further engagement will be undertaken with all parties once the option assessment is finalised.

## 5.2 Delivery

Given the range of model options being considered, and the recent Hansford Review of the UK rail industry<sup>17</sup>, there are multiple paths to scheme delivery:

- If a National Rail, or similar, option is progressed, Network Rail may be the delivery body. Other options for delivery for a heavy rail scheme may exist, including CPCA taking the lead for the reinstatement works or a private-sector third party;
- Lighter rail, bus-based, and other options between these, would be led by CPCA and partners such as CCC; and
- Walk or cycle options may be most effectively progressed by CCC in partnership with FDC.

Regardless of whether Network Rail or another body delivered a reinstated rail option between March and Wisbech, there will be a need to engage with Network Rail regarding connections at March and any aspirations for onward operation on the existing network beyond this location.

Network Rail have been engaged during the early stages of the FBC and concurrent GRIP3 study, including incorporation of latest outcomes from the Ely North Junction study.

Four franchises currently serve the area

- Abellio Greater Anglia;
- Govia Thameslink
- East Midlands Trains; and
- Arriva Cross Country.

<sup>&</sup>lt;sup>17</sup> See: <u>http://www.cepa.co.uk/userfiles/The-Hansford-Review.pdf</u>

Abellio Greater Anglia are considered the most likely operator of a National Rail service (or similar) and will be engaged following selection of a preferred option. They are also operators of March Station, albeit this is a function of geography rather than service levels, with Arriva Cross Country the main service provider. It is recognised though that delivery timescales mean that it would be the next incumbent at that franchise which would be affected.

For bus options, First Essex, Suffolk and Norfolk, the operator of the current XL service between Peterborough and Norwich, via Wisbech, has been informed of the study at OBC stage and contributed to the analysis.

The extension of the line to a site in close proximity to Wisbech town centre would necessitate crossing the A47(T). CPCA are undertaking a concurrent study for this route, and their consultants and Highways England (HE), will be kept informed of the emerging findings from this study.

Discussions have also been held by the CPCA representatives promoting the Wisbech Garden Town concept.

A dedicated delivery strategy will be developed for the scheme preferred option as part of the FBC.

# 6 Option generation, sifting and appraisal

This section provides an overview of the full list of options available for the corridor, documents those which have been removed, and provides details of the initial sifting and appraisal exercise to produce the refreshed short list for further assessment

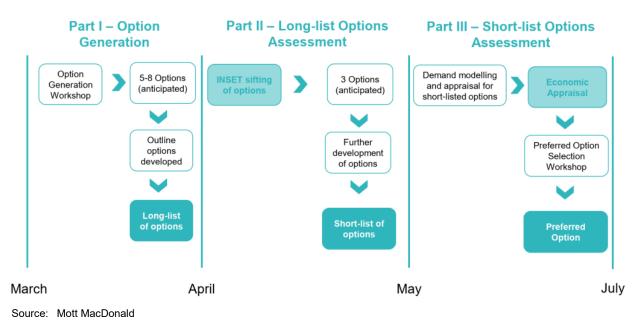
#### 6.1 Overview of processes

Figure 9 provides an overview of the complete option appraisal process. There are essentially three stages:

- Early option generation, sifting, and packaging to generate the 'long list' of options (Phase 1
   – Part I);
- Appraisal of the 'long list' against scheme objectives to produce a 'short list' of options (Phase 1 - Part II); and
- Demand modelling and economic appraisal for the 'short list' options.

This section details the outcomes of Parts I and II from the above.

#### Figure 9: Option Generation, Sifting and Appraisal Cycle



# 6.2 Option definition

In line with DfT guidance<sup>18</sup>, a wide range of possible alternatives to address an identified problem or meet a particular objective should be considered before recommending a specific proposal. These should reflect a variety of approaches and scales of intervention and should not be limited to infrastructure or single mode solutions where alternatives might be feasible.

<sup>&</sup>lt;sup>18</sup> See: <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/630704/value-for-money-framework.pdf</u>

Connectivity enhancements between March and Wisbech could also be facilitated by:

- Highway enhancements; and
- Improvements to walking and cycling.

Both these modal alternatives have been eliminated at this early stage:

- Highway enhancements for east-west movements along the A47 are being investigated by a separate study; and
- Walk and cycle connectivity between the two settlements would be possible by converting the former alignment to a 'greenway'. However, distances and times for walking and cycling are prohibitive, especially when the need for stronger connectivity between north and south Cambridgeshire are considered. The potential for a complementary facility alongside a public transport alignment remains.

The focus therefore falls on public transport options.

For public transport schemes, options should include different technologies and lower cost alternatives. For example, where national rail schemes are being considered then 'lighter' solutions should also be identified, and, likewise, when light rail schemes are being considered, alternative bus-based options should also be identified<sup>19</sup>.

The public transport options for improving connectivity in the March to Wisbech corridor span:

- Station or stop locations;
- Modes; and
- Service patterns.

A number of the combinations within these are mutually exclusive. For example:

- Wisbech would only ever be served by a single National Rail station. This relates principally
  to proposals which involve serving the Garden Town and the existing settlement. Curvatures
  and the need to integrate with Garden Town planning principles mean that a heavy rail
  alignment could not be provided which simultaneously serves the Garden Town and existing
  settlement with two separate stations;
- Bus based options would not operate all the way to Cambridge as the journey times would be unattractive and prohibitive (instead an interchange at March can be assumed);
- Selected station locations make little sense for bus-based modes.

A number of other considerations are relevant for some modes:

- It is unlikely that direct journey times for non-rail-based modes to Cambridge from Wisbech would provide a viable and attractive alternative for regular travellers (see Section 6.5); and
- It is assumed, following engagement with the Office for Rail and Road (ORR), that heavy rail
  options would require existing level crossings along the route between March and Wisbech
  to be closed or grade separated, consistent with Network Rail policy. Other modes may
  support lower standard solutions to manage risks associated with level crossings.

## 6.3 Key Considerations and Assumptions

The option appraisal process detailed in this report is dependent on a number of assumptions regarding either scheme components and/or interdependent schemes or planning proposals – see Section 3 for the earlier definition of DM and DS scenarios and identification of critical

<sup>&</sup>lt;sup>19</sup> See: <u>https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/712965/webtag-transport-appraisal-process-may-2018.pdf</u>

These assumptions have been treated equally across the appraised options. Some of the assumptions do though result in variations between options, as detailed in Table 6.

Issue	Considerations	OAR assumption(s)
Ely North Junction	<ul> <li>Limited existing capacity for new train paths through Ely North Junction</li> <li>Proposed enhancement scheme at an early stage of scheme development (SOBC), with uncertainty around how many additional paths could be created</li> <li>No commitment to funding</li> <li>Other proposals for additional services Ely North exist which are likely to compete with Wisbech-Cambridge proposals</li> </ul>	<ul> <li>Paths available through Ely North at the date of scheme opening which permit either 1 or 2 tph to/from Cambridge</li> </ul>
Level crossings	<ul> <li>If level crossings are not considered a safe means of operation, then there are significant costs associated with highway diversions and overbridges</li> <li>Light rail solutions have different standards for highway crossings, and therefore the potential for lower cost solutions</li> </ul>	<ul> <li>National Rail options require level crossing closures in line with the findings of the 2016 Network Rail risk assessment. These include a combination of new highway overbridges, formal closures and re-routings to combine existing crossings.</li> </ul>
A47	<ul> <li>Traffic volumes necessitate a fully segregated solution at this location</li> <li>Proposals under development by CPCA for A47 upgrades which could lead to efficiencies and cost sharing</li> </ul>	<ul> <li>Highway overbridge required</li> <li>Required for all options except Wisbech Parkway station location</li> <li>As a worst case alternative for costs, assume 100% borne by the rail scheme. It is noted that a combined alternative may offer efficiencies and/or a chance for sharing scheme costs</li> </ul>
Spatial development	<ul> <li>Garden Town proposals would approximately double the size of Wisbech</li> <li>Other wider CPCA area proposals for 'above plan' growth</li> </ul>	<ul> <li>Core scenario consistent with DfT guidance and levels of certainty around development</li> <li>'Above plan' and Garden Town growth to be considered through later sensitivity tests for shortlisted options</li> </ul>
Interdependent transport schemes	<ul> <li>Schemes under development include Cambridge Autonomous Metro (CAM), A47 dualling, Romford ROC (see below), and Peterborough- Ely electrification</li> </ul>	<ul> <li>None of these schemes are sufficiently committed to include in the core assessment as part of the Do Minimum</li> <li>Consider through sensitivity testing</li> </ul>
Romford Remote Operating Centre (ROC)	<ul> <li>Transfer of signalling to Romford could lead to efficiencies for required upgrades to signalling</li> </ul>	<ul> <li>Assume Romford ROC post- dates and scheme on the March-Wisbech line</li> <li>Costs for upgrading March East signalbox are required</li> </ul>

Table 6: Key Considerations and Assumptions

case development cycle.

Source: Mott MacDonald

These assumptions are based on the best available information as of August 2019 and are as agreed with the CPCA.

#### 6.4 Station or Stop Locations

Figure 9 shows the ten potential station locations for rail-based options considered in the Part I option appraisal. Segregated bus-based solutions could use similar locations, but with greater flexibility. On-street bus-based solutions obviously offer even greater flexibility but with the downside of lack of segregation from general traffic which can lead to journey time and punctuality issues. Location 9, to the west of Wisbech, is linked to the most significant component of the Garden Town proposal. Locations have been selected for their land availability given an estimated size for the station or stop plus associated ancillary facilities such as car parking, network access for maintenance, etc. The exceptions are Sites 2 and 10. As noted in Table 7, Site 2 would require land to become available on the current Nestle Purina site – this is noted as an aspiration and Sites 1 and 8 provide alternatives on the same alignment which can be further developed as options now. Site 10, which is linked to non-National Rail, alternatives could take the form of a transit stop with a much smaller footprint than a National rail station. A potential location is closely linked to the preferred tram-train alignment and provision of links to/from the Garden Town site (#9).

Lighter rail or rapid transit solutions offer the opportunity for multiple stops or stations, and this is reflected in the final 'long list' of options shown in Section 6.7.1.



#### Figure 10: Wisbech Station and Stop Locations

# **Table 7: Wisbech Station Location Options**

ID	Location	Notes
1	Town (currently available)	2000s housing and industrial development mean that the closest town centre site is north of Weasenham Lane, at the southwest end of Hilburn Road.
2	Town (future development)	Changes in land use may permit a site closer to the town centre to become available at a later date (at southwest end of Kingsley Avenue).
3	Wisbech Meadowgate (A1101)	Proposals for site close to junction of A47 and A1101, which could enable a future onward connection to King's Lynn following the A47 alignment.
4	Cromwell Road area	Option explicitly linked to providing a service to King's Lynn, by increasing the radius of the curve for direct working, following a turn back, towards King's Lynn in a North-easterly direction. Requires crossing of Cromwell Road (in addition to A47), and may necessitate land take from local businesses.
5	North of A47	Site in centre of Wisbech Enterprise Park proposals (currently car parking for local industrial sites).
6	South of A47	Avoids highway overbridge for A47. Can be considered a 'classic' parkway site. Could be north or south of Redmoor Lane.
7	Site between Enterprise Way and Europa Way (on existing alignment)	Centred on land with immediate development potential, and potential for car parking provision.
8	Town, NE of Weasenham Lane (slightly east of existing alignment at terminus)	Changes in land use may permit this site to be used for the new rail station, to the south of Victory Road.
9	Garden Town	Alignment to serve the proposed Garden Town should this be taken forward for development
10	Town centre	Transit stop in close proximity to the River Nene, adjacent to town centre. Exact location is being examined through further alignment work as part of the tram-train proposals.
11	1 and 5	Combination possible with lighter mode
12	8, 9 and 10	Combination possible with lighter mode and additional alignment
Source:	Mott MacDonald	

Source: Mott MacDonald

# 6.5 Modes

The previous OBC considered different modal options, and this list has been refreshed in light of technological developments in Table 8.

#### Table 8: March to Wisbech Corridor Mode Options

ID	Mode	Image	Notes
1	National Rail		<ul> <li>Diesel, electric or bi-mode traction – Greater Anglia TOC is currently introducing new bi-mode stock</li> <li>Through running possibilities beyond March (with capacity interactions to EACE)</li> <li>Technology well established</li> <li>High standards re level crossings etc.</li> </ul>

Mode	Image	Notes
Tram-Train		<ul> <li>Diesel, electric or hybrid alternatives, including battery for on-street running (DC required otherwise – National Rail between Ely and Cambridge is AC)</li> <li>Through running possibilities beyond March (with capacity interactions to EACE)</li> <li>Would require high floor platforms on any on-street sections</li> <li>Potential on-street running in Wisbech</li> <li>Technology evolving</li> <li>Medium standards re level crossings etc.</li> </ul>
Light Rail		<ul> <li>Electric traction or hybrid alternatives</li> <li>Limited to March-Wisbech only</li> <li>Potential on-street running in Wisbech</li> <li>Technology well established</li> <li>Medium standards re level crossings etc.</li> </ul>
Guided Busway		<ul> <li>Diesel or hybrid</li> <li>Different levels of segmentation possible on March-Wisbech existing rail alignment</li> <li>Limited to March-Wisbech only</li> <li>Potential on-street running in Wisbech</li> <li>Technology well established – wide choice of vehicle and "track" specification</li> <li>Medium standards re level crossings etc.</li> </ul>
Bus		<ul> <li>Diesel or hybrid</li> <li>Assumed to use existing highway network</li> <li>Flexibility on destinations served, but limited by journey times</li> <li>On-street running in Wisbech</li> <li>Technology well established</li> <li>Low standards re level crossings etc.</li> </ul>
ULTRA - light rapid transit		<ul><li>Electric or hybrid</li><li>Limited to March-Wisbech only</li><li>Potential on-street running in Wisbech</li></ul>

Technology still emerging for an operation in an urban area Medium standards re level crossings etc. (assumed)

Source: Mott MacDonald

ID

2

3

4

5

6

#### 6.5.1 **Tram-Train**

Section 6.5.1 describes the tram-train mode in more detail, as a novel option in the UK context.

Tram-train operation, whereby lighter street running vehicles co-operate with heavy rail units on National Rail infrastructure have been common across Western Europe for many decades. Karlsruhe (Germany) is the most extensive example. They have primarily been developed to allow:

- Cost effective expansion of regional rail systems, or a more efficient means of operating existing heavy rail lines; and
- On-street operation which helps to minimise access and egress distances to passengers' ultimate origins and destinations.

In the UK the Tyne & Wear Metro shares common infrastructure with heavy rail on the Sunderland line, albeit the Metro vehicles do no provide on-street running on this network. The first trial of tram-train technology in the UK was the Sheffield-Rotherham pilot service which opened in October 2018. The new services operate on a combination of Sheffield Supertram and National Rail infrastructure, which were both upgraded as part of the scheme to enable

through running. Importantly, this pilot involved the combination of two pre-existing networks with associated new infrastructure to enable the connections.

A number of other UK city regions are actively pursuing tram-train schemes. The most advanced of these include:

- South East Wales this would involve on-street running from the Valleys lines in Cardiff City Centre and/or the Cardiff Bay area as part of the 'South Wales Metro'<sup>20</sup> concept;
- Greater Manchester a number of existing National Rail lines into Manchester City Centre have been proposed for conversion to tram-train technology, using the existing Metrolink network for on-street running; and
- Glasgow proposals were developed for a line between Glasgow Airport and Glasgow Central Station using the National Rail network between Paisley and Glasgow City Centre; however, lack of capacity at Central Station has meant that current development work has been paused.

Because tram-train vehicles have different operational characteristics, and have different standards applicable when in tram/light rail mode of operation, they can offer the:

- Ability to increase catchments through on-street running which brings stops closer to residential locations and clusters of economic activity;
- Potential for more closely located stops or stations. This is linked to quicker acceleration than heavy rail units, but also by necessity as the on-street running brings more origins and destinations within its potential catchment; and
- Scope for alternative solutions when considering level crossings as tram-style operation can be undertaken using 'driver line of sight' as opposed to the increasing requirement of complete segregation to ensure safe operation of National Rail solutions.

Tram-train options were included in the modes assessed for this OAR because they appeared to be consistent with the transport needs of Wisbech as described in Section 2, in particular the town's significant planned expansion through the Wisbech Garden Town proposal.

### 6.6 Service Options

Table 9 below summarises potential service options, with principal stops and stations only, and an indicative number of services per hour (sph) in each direction. There is the potential for these to extend beyond the stated stops and stations, i.e. Stansted Airport could be served beyond Cambridge. Clearly the greater the service level the greater the level of performance against scheme objectives which aim to deliver economic, social and environmental benefits. However, these aims must be balanced against:

- Deliverability Ely North Junction is already a major constraint on network capacity (see Section 3.3.1 for detail on current and potential capacity assumptions). As noted previously, Network Rail is currently developing options for EACS enhancement (to SOBC level). Based on current understanding (as of September 2019), the number of tph which could operate between Peterborough (or March or Wisbech) and Norwich or Cambridge could remain constrained under a smaller scale enhancement. A larger scale EACS would unlock a minimum of 2 paths per hour in each direction; and
- Sustainability principally financial. There will be incremental increases in demand and revenue from a better service offer, but we would expect the percentage gap between revenue and operating cost to initially close as a viable, attractive, service is offered,

<sup>&</sup>lt;sup>20</sup> See: https://gov.wales/sites/default/files/publications/2018-06/south-wales-metro-summary-brochure.pdf

followed by a widening as there in insufficient base demand to justify the increased service level (this likelihood is illustrated in Figure 11 below where subsidy requirement, operating expenditure minus revenue, is minimised at 2 trains per hour ( $\Delta_2$ )). In practice, while the absolute gap is likely to be lowest at the corresponding lowest level of service, the percentage gap may be higher than the next increment.

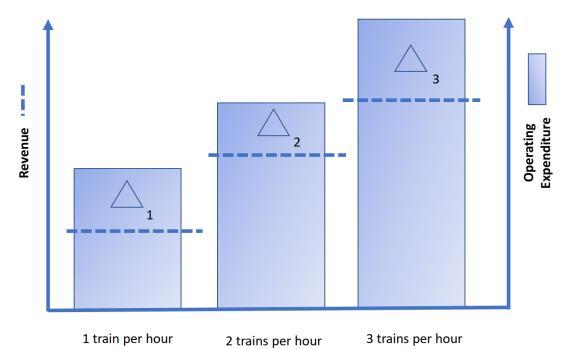


Figure 11: Illustrative Operating Expenditure versus Revenue by Level of Service

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Source: Mott MacDonald
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Another consideration which needs to be brought to bear in the option appraisal is the incremental improvement offered to other intermediary communities which could be served. In the case of tram-train type services this includes opportunities around new stops or stations, or diversion, e.g. to avoid Ely North Junction and better serve local communities. Three 'end destinations' are shown in Table 9:

- March a number of modes would, under current and foreseeable standards, be limited to this location as there is no viable means of segregated onwards running. Under these circumstances, interchange is therefore required for onward connections, e.g. to Cambridge or Peterborough. There are no substantial intermediary communities between March and Wisbech which are likely to justify a stop or station. The possibility of onward running to Chatteris and St Ives was considered as a possibly intermediary for non-rail based options (see Section 3.3.3 in the context of CAM, but this was thought unlikely to offer significant benefits and value for money without subsequent through running to Cambridge);
- Peterborough the configuration of (existing, albeit some are currently redundant) platforms at March Station and track infrastructure could make concurrent serving of March and Peterborough to/from Wisbech either costly or operationally impractical. Capital expenditure for alternatives with this service specification would therefore differ from March and/or Cambridge. Between Peterborough and March there is only one intermediary settlement of any note, Whittlesea, which has a National Rail station. There may be capacity constraints at Peterborough which would limit this opportunity, including 'through running' possibilities to

destinations further afield, especially when the necessity to prioritise the efficient and reliable operation of East Coast Mainline (ECML) services is considered; and

Cambridge - through running, calling at March is operationally more feasible, but is likely to require bringing the redundant platforms back into use, particularly for terminating services to avoid lengthy, capacity eroding, 'turn around' times in the platforms. March would therefore be served by all services, and there are further existing intermediary stations at Manea, Ely, Waterbeach, and Cambridge North. It is our understanding that Cambridge Station has sufficient platform capacity to accommodate terminating services, e.g. Platforms 5 and 6 for services terminating from the north (most services run through the station). This is based on the current 2019 timetable and there may be other proposed rail services which could, in the future, make use of these platforms instead of the Wisbech services. It is recognised that accessing Platforms 5 and 6 could create conflicts with through services, but operational analysis of existing services and commitments, overlain by proposed Wisbech services, suggest that they can be accommodated. Through running from Wisbech may be possible to destinations such as Stansted Airport, but the capacity analysis to examine this is beyond the scope of this study. There are also understood to be capacity constraints on the leads into Stansted Airport which make Cambridge a more viable terminus.

ID	Service Pattern (selected stops or stations only)	
Cambrid	ge	
1	Wisbech-Ely-Cambridge 3sph	
2	Wisbech-Ely-Cambridge 2sph	
3	Wisbech-Ely-Cambridge 1sph	
Peterbor	ough	
4	Wisbech-Peterborough 2sph	
5	Wisbech-Peterborough 1sph	
March		
6	Wisbech-March 3sph	
7	Wisbech-March 2sph	
8	Wisbech-March 1sph	
Combina	tions	
9	Wisbech-Ely-Cambridge 2sph; Wisbech-March 1sph	
10	Wisbech-Ely-Cambridge 1sph; Wisbech-March 1sph	
11	Wisbech-Ely-Cambridge 1sph; Wisbech-March 2sph	
12	Wisbech-Ely-Cambridge 1sph; Wisbech-Peterborough 1sph	
13	Wisbech-Peterborough 1sph; Wisbech-March 1sph	
14	Wisbech-March-Chatteris 3sph (bus or similar only)	

#### Table 9: March to Wisbech Corridor Service Pattern Options

Source: Mott MacDonald

#### Part I option sift 6.7

The initial sifting exercise sought to reduce the possible permutations to a manageable 'long list' for more detailed appraisal. This was achieved by firstly excluding mutually exclusive, or impractical, combinations of station/stop location, mode, and service pattern, and then examining each item again in turn to identify those which would offer greatest impact against scheme objectives and/or be most deliverable (accounting for risk etc.). Appendix F details station/stop, modes, and service patterns which were excluded at the Part I option sift stage, and the supporting rationale for doing so. This station/stop location design aspect was informed by a separate discrete exercise, documented in '*March to Wisbech Rail Re-Opening: Station Location Appraisal – Strategic Context & localised Spatial Assessment*' (see Appendix E).

# 6.7.1 Long list of options

The initial sift left the potential combinations of scheme components in Table 10, where their key merits are detailed.

ID	Location	Rationale for Inclusion			
Stati	Station or Stop Locations				
1	Town (currently available)	<ul> <li>Provides closest physical location to the town centre on the former rail alignment – supports regeneration, accessibility and demand, with lower levels of car travel</li> <li>Access could be provided by Oldfield Lane, Nestle Purina, Victory Road, and/or Kingsley Avenue</li> <li>Land likely to be available to provide P&amp;R provision</li> </ul>			
6	South of A47	<ul> <li>Avoids highway overbridge for A47 and potential associated costs (depending on A47 proposals)</li> <li>Land likely to be available to provide P&amp;R provision, albeit there are flood risks in this area</li> </ul>			
8	Town, NE of Weasenham Lane (slightly east of existing alignment at terminus)	<ul> <li>Potential alternative to Site 1 depending on station accessibility findings– supports regeneration, accessibility and demand, with lower levels of car travel</li> <li>Assumed small capital cost saving relative to Site 1 due to shorter length of reinstated track</li> <li>Would improve accessibility to destinations in south of town</li> </ul>			
9	Garden Town	Stop/station on new alignment to serve Garden Town			
		<ul> <li>Helps support higher quantum of development in Garden Town and more sustainable/transit orientated development</li> <li>By directly serving the Garden Town, in much closer proximity than other sites, new public transport demand would be significantly increased. Scheme revenue and economic impacts would increase accordingly</li> <li>Could be combined with extension to serve town centre station/stop in vicinity of Site 10</li> </ul>			
10	Town centre	<ul> <li>Maximises accessibility, and therefore demand, for residents of, and visitors to, Wisbech – supports regeneration, accessibility and demand, with lower levels of car travel</li> <li>Most likely to support direct town centre regeneration ambitions</li> </ul>			
Mod	es				
1	National Rail	<ul> <li>Diesel, electric or bi-mode traction – Greater Anglia TOC is currently ntroducing a new bi-mode fleet which would provide efficiencies for Wisbech-Cambridge services. Electric or bi-mode offer the potential or lower local and global emissions</li> <li>Easily integrated into existing franchise(s) and fares and ticketing Through running possibilities beyond March (capacity permitting at locations such as Ely North Junction)</li> <li>Technology well established</li> <li>Procurement and delivery routes well established</li> <li>High safety standards re level crossings etc.</li> <li>Potential for direct links to Ely, Cambridge North, Cam bridge, and/or Peterborough, depending on Ely North capacity, with associated accessibility benefits to Fenland residents and businesses</li> </ul>			

ID	Location	Rationale for Inclusion	on
2	Tram-Train	street runnir otherwise – or hybrid off Through run at El North J thoroughly to Would requi integrate wit Potential on Technology Potential for Peterboroug accessibility Medium star cost efficient	tric or hybrid alternatives, including battery for potential on- ng in Garden Town and town centre (DC required National Rail between Ely and Cambridge is AC). Electric er the potential for lower local and global emissions ning possibilities beyond March (capacity permitting, e.g. Junction), but this concept would need to be more ested with Network Rail and the DfT re high floor platforms on any on-street sections to th existing National Rail network -street running in Wisbech evolving direct links to Ely, Cambridge North, Cam bridge, and/or ph, depending on Ely North capacity, with associated benefits to Fenland residents and businesses ndards re level crossings etc., which are likely to result in cies versus National Rail (except at the A47 where total will be required)
4	Guided Busway	Diesel or hy minimising a Different lev rail alignmer Potential on- network Technology specification Medium star cost efficient segregation	brid alternatives available. The latter would assist in adverse local and global environmental impacts els of segmentation possible on March-Wisbech existing
Serv	ice Patterns		
2	<ul> <li>Wisbech-Ely-</li> </ul>	Cambridge 2sph	<ul> <li>Provides desired accessibility to major centres and associated services and opportunities</li> <li>Two direct services per hour deemed a desired minimum threshold for encouraging economic connections between Wisbech and Cambridge</li> </ul>
6	<ul> <li>Wisbech-Mar</li> </ul>	rch 3sph	<ul> <li>Alternative solution which, depending on mode, either avoids pathing constraints through El North Junction or reflects the lack of opportunities for segregated onward operation beyond March</li> <li>Potential for integration with existing rail services at March Station (principally the hourly Arriva Cross Country services)</li> </ul>
9	<ul> <li>Wisbech-Ely- 1sph</li> </ul>	Cambridge 2sph; Wisbech-March	<ul> <li>Provides desired accessibility to major centres and associated services and opportunities</li> <li>Additional infill shuttle to integrate with hourly Arriva Cross Country service</li> </ul>
10	<ul> <li>Wisbech-Ely- 1sph</li> </ul>	Cambridge 1sph; Wisbech-March	<ul> <li>Alternative option which reflects potential for fewer paths being available through Ely North Junction, but maintains direct Cambridge connectivity</li> <li>Infill hourly shuttle to integrate with hourly Arriva Cross Country service at March Station</li> </ul>
11	<ul> <li>Wisbech-Ely- 2sph</li> </ul>	Cambridge 1sph; Wisbech-March	<ul> <li>Alternative option which reflects potential for fewer paths being available through Ely North Junction</li> </ul>
12	<ul> <li>Wisbech-Ely- Peterborough</li> </ul>	Cambridge 1sph; Wisbech- n 1sph	<ul> <li>Alternative option which reflects potential for fewer paths being available through Ely North Junction, but maintains direct Cambridge connectivity</li> <li>Provides dual focus with connection to Peterborough with the associated onward connectivity opportunities this provides</li> </ul>

Remaining scheme components were then packaged into a set of holistic viable options. The results of this packaging is the 'long list' shown in Table 11. This combines the modes, service patterns and station/stop locations into a set of discrete 'packages'. Flexibility remains, e.g. the potential station or stop locations for a tram-train mode will be determined through the parallel station location study.

ID	Mode	Service	Wisbech Stations	Station Names	Notes
1	National Rail	<ul> <li>Wisbech-Ely-Cambridge 2tph</li> </ul>	1	Town centre (currently available)	<ul> <li>Option to iterate station to site 2 should it become available</li> </ul>
2	National Rail	<ul> <li>Wisbech-Ely-Cambridge 2tph</li> </ul>	6	South of A47	<ul> <li>Avoids A47(T) highway overbridge</li> </ul>
3	National Rail	<ul> <li>Wisbech-Ely-Cambridge 2tph</li> </ul>	9	Garden Town	<ul> <li>New alignment to west of town</li> </ul>
4	National Rail	<ul> <li>Wisbech-Ely-Cambridge 1tph;</li> <li>Wisbech-March 1tph</li> </ul>	1	Town centre (currently available)	<ul> <li>Iteration of Option 1 assuming only 1tph possible through Ely North Junction</li> </ul>
5	National Rail	<ul> <li>Wisbech-Ely-Cambridge 1tph;</li> <li>Wisbech-March 1tph</li> </ul>	6	South of A47	<ul> <li>Iteration of Option 2 assuming only 1tph possible through Ely North Junction</li> </ul>
6	National Rail	<ul> <li>Wisbech-Ely-Cambridge 1tph;</li> <li>Wisbech-March 1tph</li> </ul>	9	Garden Town	<ul> <li>Iteration of Option 3 assuming only 1tph possible through Ely North Junction</li> </ul>
7	National Rail	<ul><li>Wisbech-Ely-Cambridge 1tph;</li><li>Wisbech-Peterborough 1tph</li></ul>	1	Town centre (currently available)	<ul> <li>Iteration of Option 1 assuming only 1tph possible through Ely North Junction</li> </ul>
8	National Rail	<ul> <li>Wisbech-Ely-Cambridge 1tph;</li> <li>Wisbech-Peterborough 1tph</li> </ul>	6	South of A47	<ul> <li>Iteration of Option 2 assuming only 1tph possible through Ely North Junction</li> </ul>
9	Tram-Train	<ul> <li>Wisbech-Ely-Cambridge 2tph</li> </ul>	12	8, 9 and 10	<ul> <li>Tram-Train alternative to Option 1</li> </ul>
10	Tram-Train	<ul> <li>Wisbech-Ely-Cambridge 2tph;</li> <li>Wisbech-March 1tph</li> </ul>	12	8, 9 and 10	<ul> <li>Adds third March- Wisbech service due to local connectivity possibilities</li> </ul>
11	Tram-Train	<ul><li>Wisbech-Ely-Cambridge 1tph;</li><li>Wisbech-March 1tph</li></ul>	12	8, 9 and 10	Tram-Train alternative     to Option 4
12	Tram-Train	<ul> <li>Wisbech-Ely-Cambridge 1tph;</li> <li>Wisbech-March 2tph</li> </ul>	12	8, 9 and 10	<ul> <li>Adds March-Wisbech service due to local connectivity possibilities</li> </ul>
13	Tram-Train	<ul> <li>Wisbech-Ely-Cambridge 1tph;</li> <li>Wisbech-Peterborough 1tph</li> </ul>	12	8, 9 and 10	<ul> <li>Tram-Train alternative to Option 7</li> </ul>
14	Guided Busway	<ul> <li>Wisbech-March 3tph</li> </ul>	12	8, 9 and 10	<ul> <li>Low cost alternative – assumed maximum level of provision within financial constraints</li> </ul>

#### Table 11: March to Wisbech Corridor Long List of Options

#### 6.7.2 Part II option sift

Table 12 details the outcomes of the Part II appraisal. Within this, each:

- Objectives from Table 5 are given a weighting;
- Objective within a given impact is given equal weighting; and
- Option is scored on a scale of +3 to -3 against each objective.

Weighted scores and ranks are then produced. Weights for the four themes were agreed at the sifting workshop on 16<sup>th</sup> July 2019 and reflect the rationale for intervention detailed in Section 2 which drove the objectives described in Section 4.1. This places the greatest emphasis on the:

- Economy, seeking to twin address both the lower levels of earnings and productivity observed in Wisbech and the pressures which constrained labour supply are exerting on the potential expansion of Cambridge; followed by
- Environment, recognising that sustainable modes which maximise their effectiveness in reducing car-kms will provide significant contributions to reductions in global greenhouse gas and local NOx and particulate emissions.

Consistent with TAG, major risks around feasibility, deliverability and constructability are noted, but do not form part of the appraisal. These risks will be formally quantified as part of the subsequent economic appraisal of 'short listed' options.

Theme	Weight	Sub-Criteria	Sub-Weight
Economy	0.4	3	0.13
Environmental	0.3	1	0.30
Social	0.2	2	0.10
Financial	0.1	1	0.10

#### Table 12: March to Wisbech Objective Weighting

Source: Mott MacDonald

The results in Figure 12 were the result of an internal Mott MacDonald workshop, with results subsequently validated in a separate client workshop (where the weights to objectives were also applied).

As the options introduce a new mode, and an associated increase in connectivity, the options score positively on most objectives. Other key features of the scoring include:

- A greater number of employment and service related (e.g. health and education establishments) attractions for services to Cambridge, with direct services and higher frequencies to this location naturally scoring higher;
- Tram-Train options score higher due to their greater accessibility to existing and potential future populations around Wisbech, particularly with regard to town centre regeneration as they also offer opportunities for local travel; and
- Financial scores are negative as it is likely that, depending on the scale of new development, all options will require some degree of ongoing public subsidy. This will be tested further in the demand modelling, featuring in the Economic Case, and being explored further in the Financial Case.

# Figure 12: Part II Option Appraisal Results

						Improve access	<u>Economy</u>		<u>Environmental</u>	Improve local	al	<u>Financial</u>				
Opti	ons						Improved connectivity to major centres for inward investment to Wisbech (Cambridge, Peterborough, London and Stansted Airport)	Plan and Wisbech Garden Town which allows key	attractive alternative to car travel, reducing associated	access to key services, e.g. medical facilities, colleges and universities (located in major centres, e.g. Cambridge, Huntingdon, King's Lynn and Peterborough)	regeneratio n of the town centre and existing	To minimise long term commitmen ts for public revenue support				
ID	Mode	Service	Stat	io Variants/Description	Station Names	0.13	0.13	0.13	0.30	0.10	0.10	0.10	Score	Rank	Economic Case Option	<u>e</u> <u>Risks / Deliverab</u>
1	National	Wisbech-Ely-Cambridge 2tph	Stat	Assume (i) or (viii) but with scope to	Town centre (currently	CONTRACTOR NO.	3	2	2	3	2		Score	3		Ely North Junctio
2	Rail National	Wisbech-Ely-Cambridge 2tph	vi	extend to (ii) if site becomes available	available) South of A47	2	2	1	1	2	0	-1 -2	2.1	12	DS2	Ely North Junctio
3	Rail National Rail	Wisbech-Ely-Cambridge 2tph	ix		Garden Town	1	2	3	2	1	0	-1	1.4	8		Ely North Junctio
4	National Rail	Wisbech-Ely-Cambridge 1tph; Wisbech- March 1tph	i		Town centre (currently available)	2	2	2	1	2	2	-1	1.4	8		Ely North Junctio
5	National Rail	Wisbech-Ely-Cambridge 1tph; Wisbech- March 1tph	vi		South of A47	1	1	1	1	1	0	-2	0.6	14		Ely North Junctio Wisbech catchme
6	National Rail	Wisbech-Ely-Cambridge 1tph; Wisbech- March 1tph	ix		Garden Town	1	2	3	1	1	0	-2	1.0	11		Ely North Junctio
7	National Rail	Wisbech-Ely-Cambridge 1tph; Wisbech- Peterborough 1tph	i		Town centre (currently available)	2	3	2	1	2	2	-2	1.4	7	DS2a	Works at March S may have to byp
8	National Rail	Wisbech-Ely-Cambridge 1tph; Wisbech- Peterborough 1tph	vi		South of A47	1	2	1	1	1	0	-3	0.6	13		Works at March 5 may have to byp significant new in skewed to north
9	Tram-Train	Wisbech-Ely-Cambridge 2tph	xii	Potential for Ely North bypass and new station at Milton; also opportunity to extend network north to Holbeach, King's Lynn et al; only run to existing Wisbech urban area in absence of Garden Town	VIII, X and IX	3	3	3	3	3	3	-1	2.6	1	<u>D51</u>	Cost per km of ex alignments on w Town Centre); El
10	Tram-Train	Wisbech-Ely-Cambridge 2tph; Wisbech- March 1tph	xii	Potential for Ely North bypass and new station at Milton; also opportunity to extend network north to Holbeach, King's Lynn et al; only run to existing Wisbech urban area in absence of Garden Town	VIII, X and IX	3	3	3	3	3	3	-1	2.6	1	<u>DS1a</u>	Cost per km of ex alignments on we Town Centre); Ely
11	Tram-Train	Wisbech-Ely-Cambridge 1tph; Wisbech- March 1tph	xii	Potential for Ely North bypass and new station at Milton; also opportunity to extend network north to Holbeach, King's Lynn et al; only run to existing Wisbech urban area in absence of Garden Town	VIII, X and IX	2	2	3	2	2	3	-2	1.8	5		Cost per km of ex alignments on w Town Centre); El
12	Tram-Train	Wisbech-Ely-Cambridge 1tph; Wisbech- March 2tph	xii	Potential for Ely North bypass and new station at Milton; also opportunity to extend network north to Holbeach, King's Lynn et al; only run to existing Wisbech urban area in absence of Garden Town	VIII, X and IX	2	2	3	2	2	3	-2	1.8	5		Cost per km of ex alignments on w Town Centre); Ely
13	Tram-Train	Wisbech-Ely-Cambridge 1tph; Wisbech- Peterborough 1tph	xii	Potential for Ely North bypass and new station at Milton; also opportunity to extend network north to Holbeach, King's Lynn et al; only run to existing Wisbech urban area in absence of Garden Town	VIII, X and IX	2	3	3	2	2	3	-2	2.0	4		Cost per km of ex alignments on w Town Centre); Ely with infrastructu
14	BRT	Wisbech-March 3tph	xii	Network of routes connecting existing and garden town to new segregated alignment; only run to existing Wisbech urban area in absence of Garden Town	VIII, X and IX	1	1	2	2	1	2	-1	1.3	10	LC	What is the exact through ticketing

-Lifes at-
ability etc. tion; level crossings; March East signalbox
tion; level crossings; March East signalbox
tion; level crossings; March East signalbox
tion - 1tph unfeasible; level crossings; March East signalbox tion - 1tph unfeasible; level crossings; March East signalbox;
ment likely to be heavily skewed to north
tion - 1tph unfeasible; level crossings; March East signalbox
h Station; level crossings; March East signalbox; 2nd service ypass March or require significant new infrastructure thereat
h Station; level crossings; March East signalbox; 2nd service
ypass March; 2nd service may have to bypass March or require v infrastructure thereat; Wisbech catchment likely to be heavily th
extending to Garden Town; conservation area affects potential west of Nene; assume high platforms throughout (acceptable in Ely North junction - 2tph unfeasible
extending to Garden Town; conservation area affects potential west of Nene; assume high platforms throughout (acceptable in Ely North junction - 2tph unfeasible
extending to Garden Town; conservation area affects potential west of Nene; assume high platforms throughout (acceptable in Ely North junction - 1tph unfeasible
extending to Garden Town; conservation area affects potential west of Nene; assume high platforms throughout (acceptable in Ely North junction - 1tph unfeasible
extending to Garden Town; conservation area affects potential west of Nene; assume high platforms throughout (acceptable in Ely North junction - 1tph unfeasible; additional risks associated ture and capacity towards Peterborough from joint running
act concept? Quality and cost can vary to a significant extent.; ng?

#### 6.7.3 Short list of options

The results of the Part II sifting and appraisal is the 'long list' shown in Table 13. This provides:

- Two core options DS1 and DS2;
- A Low Cost (LC) alternative in line with TAG (DS3); and
- Proposed sensitivity tests around the service patterns (more sensitivity tests will be included in the FBC, e.g. on costs, development assumptions etc). Those with suffixes "a" or "b" are service-related sensitivity tests, albeit they would have significant infrastructure implications, e.g. with regard to the layout and operation of March Station. DS4 and DS5 are more fundamental infrastructure choices, with the former considering the avoidance of crossing (underneath) the (realigned) A47 via a providing a parkway station only, and the latter introducing an alignment via the Garden Town and taking the opportunity to reach the town centre this has been subject to separate work see '*Tram-Train Feasibility Study*'. It should be noted that the Garden Town development is uncommitted development and DS5 cannot be advanced as the core preferred option as it only becomes a viable alternative with that demand driver.

ID	Mode	Service	Stations	Station Names
Core options				
DS1	Tram-Train	Wisbech-Ely- Cambridge 2tph	1	Wisbech Town
DS2	National Rail	Wisbech-Ely- Cambridge 2tph	1	Wisbech Town
DS3 (LC)	Guided Busway	Wisbech-March 3bph	1	Wisbech Town
Options related to s	ensitivity tests			
DS1a	Tram-Train	Wisbech- Cambridge 2tph and Wisbech- March 1tph	1	Wisbech Town
DS1b	Tram-Train	Wisbech- Cambridge 1tph and Wisbech- March 1tph	1	Wisbech Town
DS2a	National Rail	Wisbech- Cambridge 1tph and Wisbech- Peterborough 1tph	1	Wisbech Town
DS4	National Rail	Wisbech-Ely- Cambridge 2tph	6	Wisbech Parkway
DS5	Tram-Train	Wisbech-Ely- Cambridge 2tph	9 and 10	Wisbech Garden Town & Wisbech Town Centre

#### Table 13: March to Wisbech Corridor Short List of Options

# 7 Assessment of shortlisted options

Having identified a short list of options, further outline design and economic assessment was undertaken to help determine a preferred mode and station location(s). Service patterns remain subject to sensitivity testing as the demand modelling, economic appraisals and required designs are progressed through FBC and GRIP, or GRIP equivalent, design stages.

#### 7.1 Strengths, Weaknesses, Opportunities and Threats Analysis

Prior to the full demand modelling and economic appraisal, a strengths, weaknesses, opportunities, and threats (SWOT) analysis was undertaken of the three shortlisted modes, as documented in Table 14, Table 15 and Table 16. The aim being to help inform mode selection as a primary consideration but being cognisant of the interrelated station location and service pattern considerations.

#### Table 14: DS1 – Tram-Train SWOT Analysis

#### Strengths Weaknesses Dual mode providing for segregated and on-street sections, Emerging technology (in the UK) - cost and e.g. diesel as core and battery in urban areas deliverability uncertainties Multiple station/stop solution – integrating Garden Town with Bespoke fleet required with associated stabling existing settlement and improving local accessibility requirements and potential inefficiencies for TOC · Possibility for creating true 'town centre' stop/station with If delivered outside of Network Rail processes associated accessibility and regeneration benefits, in both and standards, subsequent acceptance for Wisbech and Wisbech Garden Town through running may be more difficult Associated funding package opportunities from serving • High floor platforms in on-street/urban locations Garden Town Highway interactions Standards for infrastructure likely to be less, e.g. in relation to level crossings Potential for through running to Cambridge and Peterborough, removing interchange penalty, and providing additional scheme benefits for intermediary communities Could be more readily delivered outside of Network Rail standards and processes which may expedite delivery and reduce costs on elements such as the level crossings **Opportunities** Threats • Additional services through Ely North could be possible • Land acquisition costs to serve town centre depending on solution at that location Highway impacts • Hybrid propulsion technologies could be available in future Network Rail approvals for through running on to (e.g. by time of anticipated opening in late 2020s), e.g. AC National Rail network power between Ely and Cambridge, diesel between Ely and Network Rail appetite for engagement Wisbech, and battery for on-street running Possible network adaptations to accommodate Further stop and station opportunities, e.g. Milton new fleet Potential for diversion to avoid Ely North and serve Ely itself Capacity at Ely North Junction, Peterborough more directly Station, and potentially, depending on other • Phasing solution, e.g. March-Wisbech standalone, extend to future services, Cambridge Station Cambridge, extend to town centre/Garden Town, and divert Works at March East signalbox / Romford ROC around Ely North Value for money offered by on-street section or New alignment to Garden Town and Town Centre would be segregated alignment to Garden Town integrated with the former development and associated Physical and environmental constraints with infrastructure, ameliorating concerns over land acquisition, preferred on-street and/or segregated alignment disruption, and disturbance to Garden Town. River Nene must be crossed Onward connections to north, e.g. Holbeach or King's Lynn (albeit new highway is also likely to be required Truly Transit Orientated Development (TOD) in Garden in same vicinity) Town with station/stop at heart

# Table 15: DS2 – National Rail SWOT Analysis

sel service would have adverse environmental lications, or additional cost of electrification, uding, possibly, March to Ely (see also new stock ortunity) gle station/stop solution and this could be pheral to main residential locations and imercial activity, with difficult access its associated with addressing level crossings on e – very likely to require costly highway
lications, or additional cost of electrification, uding, possibly, March to Ely (see also new stock ortunity) gle station/stop solution and this could be pheral to main residential locations and imercial activity, with difficult access its associated with addressing level crossings on e – very likely to require costly highway
ersions and bridges, and landscape intrusion frastructure delivery is reliant on Network Rail, of delays, extensions and cost overruns. If very is via third-party, this approach is still tively untested
ats
work Rail appetite for engagement bacity at Ely North Junction, Peterborough tion, and potentially, depending on other future rices, Cambridge Station bech – Cambridge services may be remote from ater Anglia stabling options rks at March East signalbox / Romford ROC litional works required for split destination service

•

#### Table 16: DS3 – Guided Busway SWOT Analysis

#### **Strengths**

- Dual mode providing for segregated and on-street sections
- Multiple station/stop solution potentially integrating Garden Town with existing settlement and improving local accessibility
- Possibility for creating true 'town centre' stop/station with associated accessibility and regeneration benefits
- Potential future integration with wider CAM or guided bus concept for Cambridge
- Associated funding package opportunities from serving Garden Town
- Standards for infrastructure will be less
- Delivered outside of Network Rail standards and processes
- Lower cost than rail and flexibility on specification
- Avoids Ely North interaction
- Would require less adaptation to town centre traffic management and infrastructure
- Delivery could be led by CPCA, and integrated into wider guided bus or CAM programme delivery, realising efficiencies

Limited potential for onward running beyond March without either costly infrastructure works to provide new segregated alignment or using existing highways with associated performance and resilience risks

Weaknesses

- Interchange at March for onward destinations low level of service here likely to make public transport unattractive for such journeys
- Potential issues with through ticketing and physical interchange (if not integrated into March Station)
- Less transformational, as the mode and service pattern are less transformational and links to funding opportunities less tangible and more difficult
- Could be emerging technology cost and deliverability uncertainties
- Bespoke fleet required with associated stabling requirements
- Lower visibility if not prioritised in town centre and stop is a simple 'bus stop'

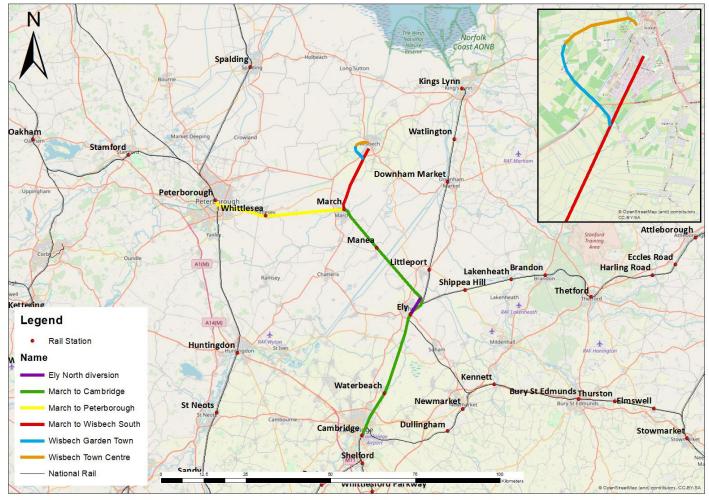
Opportunities	Threats
<ul><li>Clean propulsion technologies</li><li>Flexibility on specification</li></ul>	<ul> <li>Introduction of a new mode – in between current guided bus and CAM proposals</li> </ul>
Phasing solution, e.g. March-Wisbech standalone, extend to town centre/Garden Town	<ul> <li>Works at March Station could be greater if truly integrated with rail</li> </ul>
<ul> <li>Flexibility on routing within Wisbech away from any segregated solutions</li> <li>Onward compositions to parth a g. Helbaceh er</li> </ul>	<ul> <li>Value for money offered by segregated alignment to Garden Town, or difficulties in accessing using existing highway</li> </ul>
<ul> <li>Onward connections to north, e.g. Holbeach or King's Lynn</li> <li>Truly Transit Orientated Development (TOD) in garden Town with station/stop at heart</li> </ul>	<ul> <li>Physical and environmental constraints with preferred on-street and/or segregated alignment to Garden Town</li> </ul>

Source: Mott MacDonald

Lighter alternatives with the potential for multiple station locations offer opportunity for a phased solution within Wisbech. Beyond March, both lighter tram-train and National Rail alternatives offer opportunity for phased service introduction.

As noted in the SWOT analysis, these include potential phased introduction of through services to Cambridge or Peterborough (beyond March), pending further engineering work and/or Network Rail acceptance (this phased option is appraised in section 7.3). In Wisbech, intermediary destinations (e.g. Ely), and at Cambridge, this offers opportunities for on-street running which may help alleviate network capacity issues.

Figure 13: March to Wisbech Phasing Opportunities



Source: Mott MacDonald

#### 7.2 Costs

To support the assessment of the shortlisted options DS1 to DS5, new capital cost estimates have been produced. These are summarised in Tables 20 to 24. Costs are initial point estimates in 2019 Q2 prices, with an initial risk adjustment, but without the subsequent application of Optimism Bias (OB) which is included in Section 7.3. To aid comparison the stop/station location in DS1 to DS3 has been standardised to Station Site #1 (Wisbech Town). The critical differentiators are:

- Lower costs from the tram-train solution for the intermediary level crossing works in DS1 versus DS2;
- Guided Busway costs, in DS3, have been taken from unit costs per km for similar recent schemes coupled with estimates for depot requirements etc.;
- Cost savings from not extending beyond Wisbech Parkway (Site #6; DS4), from both the avoidance of creating an overbridge for the A47 and a reduction in new rail infrastructure; and
- Addition of on-street running and an additional stop in DS5, with the cost saving in DS1 versus DS2 being slightly lower than the estimates to extend the route using tram-train operation in DS5.

#### Table 17: DS1 – Tram-Train to Station Site #1, Capital Cost Estimates

Component	Costs (£m, 2019 Q2 prices)
Wisbech station (2 platforms)	5.2
Re-open line for light rail operation (includes March East signalbox*)	86.2
Level crossing works	10.3
March station (re-open 2 through platforms)	18.1
Extend line to Wisbech Centre	7.2
Risk @ 20%	25.4
TOTAL	152.5
Source: Mott MacDonald	

Source: Mott MacDonald

#### Table 18: DS2 – National Rail to Station Site #1, Capital Cost Estimates

Component	Costs (£m, 2019 Q2 prices)
Wisbech station (2 platforms)	5.2
Re-open line for heavy rail operation (includes March East signalbox*)	85.3
Level crossing works	51.1
March station (re-open 2 through platforms)	18.2
Extend line to Wisbech Centre	7.2
Risk @ 20%	33.4
TOTAL	200.4

# Table 19: DS3 – Guided Busway to Station Site #1, Capital Cost Estimates

Component	Costs (£m, 2019 Q2 prices)
Route construction	45.3
Depot	0.6
Vehicle costs	1.2
Charging infrastructure	1.2
Design, management etc.	14.2
Risk @ 20%	12.5
TOTAL	75.1

Source: Mott MacDonald from unit estimates for comparable segregated Guided Busway schemes

# Table 20: DS4 – National Rail to Station Site #6, Capital Cost Estimates

Component	Costs (£m, 2019 Q2 prices)
Wisbech station (2 platforms)	5.2
Re-open line for light rail operation (includes March East signalbox*)	85.3
Level crossing works	32.2
March station (re-open 2 through platforms)	18.2
Extend line to Wisbech Centre	N/A
Risk @ 20%	28.2
TOTAL	169.1
Source: Mott MacDonald	

# Table 21: DS5 – Tram-Train to Station Sites #9 and 10, Capital Cost Estimates

Component	Costs (£m, 2019 Q2 prices)
Wisbech Town Centre station (2 platforms)	5.2
Re-open line for light rail operation (includes March East signalbox*)	86.2
Level crossing works	2.2
March station (re-open 2 through platforms)	18.1
Extend line to Wisbech Centre and Garden Town, includes stop at latter	66.3
Risk @ 20%	35.5
TOTAL	213.5

Source: Mott MacDonald

Costs for all five options are summarised in Table 22.

#### Table 22: DS1 - DS5 Total Capital Cost Estimate Comparison

Options	Costs (£m, 2019 Q2 prices)
DS1 – Tram-Train to Station Site #1 (Wisbech Town)	152.5
DS2 – National Rail to Station Site #1 (Wisbech Town)	200.4
DS3 – Cambridge Autonomous Metro to Station Site #1 (Wisbech Town)	192.4
DS4 – National Rail to Station Site #6 (Wisbech Parkway)	169.1
DS5 – Tram-Train to Station Sites #9 and10 (Wisbech Garden Town and Wisbech Town Centre)	213.5
Source: Mott MacDonald	

#### 7.3 Economic Assessment

Using the costs in Section 7.2, operating cost estimates, and outputs from initial demand modelling and economic appraisal, initial assessments of DS1 to DS5 have been produced (shown in Table 23). These show broadly comparable initial VfM estimates for DS1, DS2 and DS5, all being in the 'high' category. Further iterations to the modelling approach for DS5, which is a sensitivity test, to better capture the impact of new development at the Garden Town<sup>21</sup>.

Metric <sup>22</sup>	DS1 – Tram- Train to Station Site #1	DS2 – National Rail to Station Site #1	DS3 – Guided Busway to Station Site #1	DS4 – National Rail to Station Site #6	DS5 – Tram- Train to Station Sites #9 and10
PVB	400 to 450	400 to 450	50 to 100	300 to 350	400 to 450
PVC	150 to 200	200 to 250	50 to 100	200 to 250	200 to 250
NPV	250 to 300	200 to 250	-50 to 0	100 to 150	200 to 250
BCR	2.5 to 3.0	2.0 to 2.5	0.5 to 1.0	1.5 to 2.0	2.0 to 2.5
VfM	High	High	Poor	Medium	High

#### Table 23: DS1 - DS5 Economic Assessment Summary

Source: Mott MacDonald

DS4, running to the Parkway Station only, offers medium VfM due to the elongated access/egress times and costs. The impacts of these on demand, revenue, and user impacts do not offset the cost savings in the BCR. A qualitative reflection on the merits of the parkway versus more central alternatives is given in Section 7.4, based on the previous option sifting and appraisal.

DS3, due to the lower benefits (due to interchange requirements, little incremental level of service change at March, and no changes in level of service beyond March), offers the lowest VfM.

### 7.4 Wisbech Parkway

At this stage we also recommend that further detailed design work on DS4, the National Rail option with a station at Site #6 (Wisbech Parkway), is not advanced. This would principally be in relation to station design as it otherwise shares common elements with other options which extend closer to the core urban area. This is because it offers lower VfM than other rail-based options, and it:

- Does not cater well for the existing local catchment it is distant from where people live now, especially for those without access to a car;
- Does little for inwards connectivity within Wisbech;
- Does little to encourage use of more sustainable transport modes, as it will be heavily reliant on Park & Ride (P&R) and Kiss & Ride (K&R) for access/egress, with the additional pressure on the local highway network this would create for those who are attracted to rail;
- Does little to support direct regeneration of town centre, being too distant for any attributable land use impacts;

<sup>&</sup>lt;sup>21</sup> These include the treatment of 'empty zones', with no existing development, and travel patterns for zones with very little development where travel patterns and behaviour are likely to significantly differ between the existing and new development.

<sup>&</sup>lt;sup>22</sup> Present Value of Benefits (PVB); Present Value of Costs (PVC); Net Present Value (NPV); Benefit:Cost Ratio (BCR); and Value for Money (VfM).

- Lies in Flood Zone 3, making it unlikely to be viable to provide any additional development immediately around the Parkway Station; and
- Has potential for phasing to Garden Town but is less feasible/more costly than the tram-train alternative, e.g. DS5, due to larger curve radii, additional bridges, and its full segregation/dedicated corridor precludes transit orientated development (TOD).

# 7.5 Assumptions and Risk

A set of key assumptions, for the remaining DS options (excluding DS3 which will be evolved as the low cost alternative), which each carry associated risks for subsequent quantified consideration, are shown in Table 24.

1 4510		nog / localinplicitie		
ID	Assumption	DS1 – Tram- Train to Station Site #1	DS2 – National Rail to Station Site #1	DS5 – Tram- Train to Station Sites #9 and10
1	Paths available through Ely North Junction to support 2tph to Cambridge	$\checkmark$	$\checkmark$	$\checkmark$
2	Development at Garden Town included	N/A	N/A	$\checkmark$ (sensitivity test)
3	Costs associated with March East control area re-signalling included, i.e. no Romford ROC within implementation timescales	$\checkmark$	$\checkmark$	$\checkmark$
4	All existing level crossings between March and Wisbech are closed – construction of new grade separated crossings required	×	$\checkmark$	×
5	Costs for grade separation of A47 included	$\checkmark$	$\checkmark$	$\checkmark$
6	Possible requirements for enhancement of existing Network Rail infrastructure between March and Cambridge (due to increase in rail traffic to accommodate Wisbech Cambridge services) - costs excluded	$\checkmark$	$\checkmark$	$\checkmark$
7	Risk at 20% + Optimism Bias at 64% applied	$\checkmark$	$\checkmark$	$\checkmark$
8	Single line track between March and Wisbech – sufficient operational robustness with services passing at March Station or between March and Cambridge	$\checkmark$	$\checkmark$	$\checkmark$
9	Vehicle performance assumed	,	N1/A	,

### Table 24: Do Something Options – Key Assumptions

8	Single line track between March and Wisbech – sufficient operational robustness with services passing at March Station or between March and Cambridge	$\checkmark$	$\checkmark$	$\checkmark$
9	Vehicle performance assumed adequate to avoid disruption of existing National Rail services	$\checkmark$	N/A	$\checkmark$
10	No adverse impact to road traffic from on street running/level crossings – likely to be segregated except in Garden Town	$\checkmark$	N/A	$\checkmark$
11	A47 corridor improvement proposals excluded	$\checkmark$	$\checkmark$	$\checkmark$

ID	Assumption	DS1 – Tram- Train to Station Site #1	DS2 – National Rail to Station Site #1	DS5 – Tram- Train to Station Sites #9 and10
12	Operational analysis – assumed level crossing delay for tram/train is 2 min compared to Heavy Rail	$\checkmark$	N/A	$\checkmark$
13	Level crossings reinstated between March to Wisbech for all crossings except A47	$\checkmark$	x	$\checkmark$
Source.	Mott MacDonald			

Source: Mott MacDonald

#### 7.6 **Five Case Assessment**

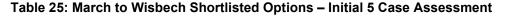
The option sifting and appraisal detailed in preceding sections focuses on Strategic and Economic Case considerations. To help inform the final sifting stage, the client workshop on 8th July 2019 included a wider consideration of the other three cases in the DfT and HM Treasury five case model. The five cases are weighted based on discussions with the clients and stakeholders on 8<sup>th</sup> July 2019. This was necessary to draw in some of the considerations around feasibility, risk, procurement, funding and finance, and scheme/service delivery which sit within the Financial, Commercial, and Management Cases.

Scores across the five cases reflect:

- Findings from existing Strategic and Economic Case analysis. The former, as extracted from the draft business case, is summarised in Section 2 and the initial assessment for the latter in Section 7.3;
- Financial Case metrics reflect differences in funding options, including revenue generation and the ability of this to cover ongoing operating costs. Revenue generation and operating cost estimates have both been completed as part of the initial Economic Case. DS1 has a lower capital cost than DS2 but this is judged to be offset by the potentially higher potential for ancillary revenue generation associated with a National Rail service of the same configuration (for example, from providing testing services for rolling stock manufacturers or, over the long-term with further investment, offering rail freight services on the corridor). DS5 scores higher than DS1 and DS2 due to its higher passenger demand levels and hence user revenues, linked to the Garden Town development and the ability to serve the catchments in closer proximity, and also ancillary funding possibilities linked to the development (such as from developer contributions or other forms of land value capture, which in other schemes have been substantial), as well as synergies on costs with other infrastructure proposals;
- DS2 and DS3 score highest on the Commercial Case as there are clearer and more • established procurement and delivery strategies and risk mitigation procedures for National Rail and Guided Busway alternatives. By contrast, the tram-train options in DS1 and DS5 has a less well-established set of processes to ensure successful delivery, potentially leading to greater risk of cost-overruns and/or delays. There is also a higher level of interface risk with tram-train options relative to National Rail options (even where the infrastructure for the latter is owned and operated under a third-party structure), relating to operating of a light rail service on National Rail infrastructure between Cambridge and March; and
- DS2 and DS3 score highest on the Management Case section as they are closest to current client experience and skillset, with Guided Busway proposals being considered akin to the CAM scheme being developed by the CPCA and guided bus projects that have been delivered by CCC, and a National Rail solution clearly falling within a Network Rail Governance for Rail Investment Projects (GRIP) set of processes and the accompanying Rail Network Enhancement Pipeline (RNEP), or, if progressed under a third-part structure, via Network Rail's post-Hansford Review third-party investor framework. DS1 and DS5

score lower as there is no existing client knowledge and experience of delivering tram-train schemes, plus the technology and delivery mechanisms are less proven.

It should be noted that, just as for the Part II option sift against scheme objectives, the scoring of alternatives against the five cases is subjective and based on input from the consultant and client team. Scores could be subject to revision as the five cases are advanced through the business case development cycle.



Option	Strategic Case	Economic Case	Financial Case	Commercial Case	Management Case	Weighted Total	Rank
Weight:	<u>3</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>1</u>		
DS1: Hybrid 'Tram-Train'	4	4	3	2	2	27.0	3
DS2: National Rail	3	4	3	4	4	28.0	1
DS3: Guided Busway	2	0	1	3	4	14.0	4
DS5: Hybrid 'Tram-Train' with Garden Town extension	4	4	4	2	2	28.0	1

Source: Mott MacDonald

### 7.7 Synopsis

This section has detailed additional analysis across shortlisted options from Sections 6 and 7. This has identified that:

- A Guided Busway-based option in this corridor performs the worst of all the options due to its lower benefits. These are a result of the interchange requirement at March for passengers to/from Wisbech, coupled with little or no incremental improvements in level of service at March and beyond towards Cambridge;
- The Wisbech Parkway station option for National Rail (DS4) will deliver lower benefits for lower capital costs; however, the reduction in the former is greater than the latter meaning the VfM is lower than the town option (DS2);
- There are significant opportunities and risks/threats associated with the tram-train across aspects of all five cases. Capital costs for the core option (DS1) are estimated to be lower than the National Rail option (DS2), and the sensitivity test with a new alignment to serve the Garden Town (DS5) indicates that the capital cost for that option would be circa 5 to 10% higher than DS2;
- Benefits will be very similar for the National Rail and tram-train options, and the VfM for DS1, DS2 and DS5 is comparable;
- Five case assessment indicates that the National Rail to Wisbech Town (DS2) and the tramtrain solution linked to the Garden Town (DS5) perform best. Tram-train solutions score highest on the Strategic Case due to their flexibility and cost, with DS5 boosted on the Financial Case by the additional revenue which would be expected from serving both the Garden Town and existing settlement more directly. Tram-train solutions score lower on the Commercial and Management Cases due to uncertainties regarding procurement and delivery, and the associated risks which are created; and
- The differentiation between the tram-train and National Rail options as preferred mode is still not clear cut. However, it is recommended that design stages and further modelling and economic appraisal should though focus on DS2 given its stronger commercial and

management case and the fact that much of the benefits of DS5 are linked to the Garden Town, and that this development carries considerable uncertainty.

## 7.8 Phasing Options of National Rail DS2 Option

Two additional sensitivities considering the economic case were undertaken following the completion of the Five Case Assessment at the client's request where:

- i. only shuttle services were able to be provided from Wisbech to March for the duration of the study period. This option (DS6) assumes Wisbech March 2tph.
- Direct services from Wisbech to Cambridge were delayed by 10 years after the scheme opening. This option (DS7) assumes Wisbech – March 2tph until 2038 and then Wisbech – Cambridge 2pth from 2038).

These sensitivities reflect the uncertainty at the time of writing this report over the solution for addressing the existing constraints at Ely North Junction, where enhancements may be required to deliver either 1 or 2 tph between Wisbech and Cambridge.

Each of these sensitivities has been based on the design configuration for DS2 (National Rail to Wisbech Town). The estimated capital costs for DS6 is shown in Table 31. The cost estimate for DS7 is the same as DS2.

Component	Costs (£m, 2019 Q2 prices)
Wisbech station (2 platforms)	2.0
Re-open line for light rail operation (includes March East signalbox*)	85.3
Level crossing works	51.1
March station (re-open 1 bay platform)	5.6
Extend line to Wisbech Centre	7.2
Passing loop	8.7
Risk @ 20%	31.9
TOTAL	191.8

#### Table 26: DS6: National Rail "Shuttle Service" Capital Costs

Source: Mott MacDonald

Using the costs in Table 31, operating cost estimates, and outputs from initial demand modelling and economic appraisal, initial economic assessments of DS6 to DS7 have been produced (shown in Table 32).

These show that DS7, which assumes a national rail shuttle service to March until 2038, and then a direct service to Cambridge thereafter, still presents a reasonable VfM case. This sensitivity represents a phased option for introducing National Rail services on the March to Wisbech corridor.

DS6, where services are run only as a shuttle service for the study period, represents poor value for money. This is consistent with findings for DS3 and reflects the interchange penalty at March and its impacts on demand.

# Table 27: DS6 – DS7 Economic Assessment Summary

March	(from 2038)
100 to 150	350 to 400
150 to 200	200 to 250
0 to -50	150 to 200
0.5 to 1.0	1.5 to 2.0
Poor	Medium
	150 to 200 0 to -50 0.5 to 1.0

<sup>&</sup>lt;sup>23</sup> Present Value of Benefits (PVB); Present Value of Costs (PVC); Net Present Value (NPV); Benefit:Cost Ratio (BCR); and Value for Money (VfM).

### 8 Summary

Sections 7.6, 7.7 and 7.8 detail the final findings from the current option assessment process, with the National Rail solution to Wisbech Town (DS2) performing best, alongside a tram-train solution (DS5) which offered the flexibility to serve the Garden Town. The findings to date can be summarised as:

- 1. Wisbech is considerably more geographically distant than the existing Cambridge commuter belt. This is a factor in both lower earnings and productivity and more adverse socioeconomic outcomes such as deprivation. Connections to Cambridge offer the opportunity to transform Wisbech as a place for inward investment and provide much enhanced accessibility to key services and opportunities. Conversely, Cambridge is under significant labour supply pressure which may throttle potential employment growth. Connecting Wisbech into the Cambridge economy requires a rapid, direct service which will be attractive to commuters and businesses. Based on the indicative journey time assessments, this indicates only rail-based options are consistent with the project objectives.
- 2. The optimal station location for an established market town with growth ambitions such as Wisbech should be as close to its current and planned population centres as possible. This will help ensure the project's objective of supporting sustainable economic growth and maximising regeneration. While a "parkway" option could achieve significant passenger demand, reliance on car journeys to access this location run counter to this objective, would exclude groups without car access, and could cause localised peak hours congestion.
- 3. Costs of National Rail options are increased by the need to address risks associated with the existing level crossings along the route, in line with Network Rail and ORR policy. A tramtrain-based solution would be expected to be able to avoid some of these ancillary safety costs, leading to a lower capital cost than a similarly scoped National Rail option, with similar levels of patronage and economic benefit.
- 4. When the planned development in Wisbech Garden Town is taken into consideration, a tram-train option offers potential strategic benefits relative to a National Rail solution. This option could potentially allow multiple stations, over the longer term, within Wisbech as the combined authority and FDC look to develop the town as a regional growth centre. Higher levels of service accessibility within Wisbech may also better support local funding options via land value capture, improving the project financial case.
- 5. However, these cost savings and potential strategic advantages need to be balanced against critical deliverability considerations. A National Rail solution offers a clearer structure for procurement and delivery, helping to reduce project construction and service delivery risks. Tram-train services are also less established than National Rail options in the UK, and this may lead to significant interface risks for the project.
- 6. Given the limited differences in the expected strategic, economic and financial outcomes, and the early stage of the Wisbech Garden Town proposals, it is prudent to focus scheme development, including both GRIP design work, delivery strategy and business case, around the National Rail option, with a lighter touch focus on the tram-train alternatives to both Wisbech Town (DS1) and Wisbech Garden Town and Town centre (DS5).
- 7. The success of this scheme is closely interdependent with the outcomes of the proposed Ely North Junction works and the ability to operate the desired 2tph between Wisbech and Cambridge. This OAR shows that even in a scenario where direct Wisbech to Cambridge services do not become possible for a decade after the March to Wisbech scheme opening, the project retains a positive benefit-cost ratio.

# Appendices

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# A. Socio-economic context – supporting analysis

Fenland accounts for 12% of CPCA's total population, but just 8% of its employee jobs. Cambridge, in contrast, accounts for 15% of CPCA's resident population and a significant 23% of its total employee population. It's a similar picture when considering the economic contribution of Fenland and Cambridge. As shown in Table 28, Fenland is slightly behind Cambridge, Peterborough and the wider CPCA area in its contribution to the CPCA's overall GVA and in its GVA per capita. When looking at the workplace wages and the resident wages, we can also see there to be key differences between Fenland and neighbouring areas. While Fenland's workplace median annual pay is £21,900, c.£7,000 below the UK average, Cambridge's median workplace pay is £33,199, more than £3,000 higher than the UK average, implying there is a significant opportunity for growth in Fenland<sup>24</sup>. However, it's worth noting that Fenland has a stronger resident wage than Peterborough, by just over £2,500.

<sup>&</sup>lt;sup>24</sup> Annual Survey of Hours and Earnings, ONS, 2018

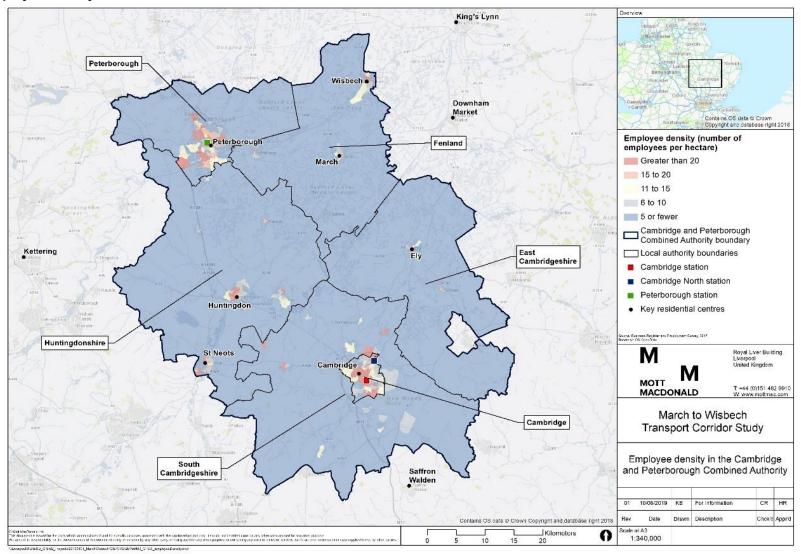
#### Table 28: Key economic indicators

	Fenland	Cambridge	South Cambridgeshire	Peterborough	CPCA	East	UK
Population, 000s, 2017	100.8	124.9	156.7	198.9	847.2	6,168.4	66,040.2
Employees, 000s, 2017	36.0	104.2	84.9	116.5	447.0	2,756.0	27,062.0*
GVA, £m, 2016	£2,288	£5,127	£4,591	£5,439	£23,743	£147,384	£1,729,092
Economic activity rate (16-64 population), %, 2018	80.0%	79.5%	85.5%	79.3%	82.2%	80.8%	78.3%
GVA per capita, £, 2016	£22,837	£38,900	£29,343	£27,595	£27,965	£24,041	£26,339
GVA per filled job, £, 2017	£52,587**	£52,587**	£52,587**	£45,528	£50,775	£50,398	£54,330
Resident median annual pay, £, 2018	£27,755	£33,173	£37,411	£25,301	£30,859	£31,033	£29,574
Workplace median annual pay, £, 2018	£21,900	£33,199	£ 35,349	£27,238	£28,704	£ 29,128	£29,574

Source: Population Estimates 2017, Annual Population Survey (APS) 2018, Business Register and Employment Survey (BRES) 2017, Annual Survey of Hours and Earnings 2018, Regional gross value added (balanced) by local authority in the UK, Regional gross value added (balanced) by combined authority in the UK, Sub regional productivity: labour productivity indices by UK NUTS2 and NUTS3 subregions, all ONS. \*Data for UK. \*\*Data for Cambridgeshire County Council.

Figure 14 demonstrates the uneven spread of employee jobs across the CPCA area. The dominance of Cambridge and Peterborough as the primary employment centres for the area is clear to see, with much smaller pockets of medium-to-high density employment also evident in Huntingdon, St Neots, Cambourne, St Ives, Waterbeach, Ely, March and Wisbech. Whilst Cambridge and Peterborough form the primary urban and employment centres for the CPCA area, the spatial distribution of jobs within these two key cities is by no means uniform. Key employment locations in Cambridge are clustered in and around its compact city centre, along Hills Road toward Addenbrooke's Hospital and the Cambridge Biomedical Campus and to the north of the city at the Cambridge Science Park and close to Cambridge North Station (which opened in 2017).

Figure 14: Employee density – CPCA area



Source: BRES, 2017, ONS

#### **B.1** Rail Services at March

The implications for the service pattern at March Station on access to other locations on the rail network in the CPCA area is shown in Table 29. Where changes are required, then timetabled connection times include this time. In these cases, a typical range is shown – outliers exist around this. The effects of frequency are reported separately. Rail speeds from March are comparable, or faster, than the highway journey times to/from Wisbech. However, network speeds ignore the connection times and include the distance effects of both indirectness in the network and any interchange requirement. As an example, the effective speeds using crow-fly distances for March to Downham Market is less than 20kph, and the speed to/from Cambridge North (for the Science Park) drops from one which is directly comparable to highway from Wisbech to a lower value. However, rail still remains competitive, versus highway, on direct journey time alone for centre-to-centre (station-to-station) movements.

Frequencies will clearly play a role in diminishing this attractiveness though, as they are always less than two per hour due to the underlying timetable at March. These impose significant disbenefits on passengers either through direct wait time at the station and/or constraints in scheduling activities. As an example, the UK rail industry's Passenger Demand Forecasting Handbook (PDFH) provides guidance that an hourly service imposes an additional time disbenefit to passengers which is, on average, equivalent to 30 to 35 minutes of travel time. Current frequencies at March therefore impose significant disbenefits, and deterrents, to use of rail.

Destination	Network Distance (km)	Crow-fly Distance (km)	Time (minutes)	Network Speed (kms per hour)	Direct Frequency (trains per hour)	Changes
Cambridge	48.0	40.9	33	87.3	1	-
Cambridge North (for Science Park)	45.0	37.6	50 to 55	51.4	- (change at Ely)	-
Downham Market	51.3	19.3	45 to 75	51.3	- (change at Ely)	1
Ely	25.0	22.4	18 to 22	75.0	1.5	-
Huntingdon	52.2	32.2	50 to 65	54.5	-	change at Peterborough
Peterborough	24.0	23.2	18	80.0	1.5	-
Waterbeach	39.9	33.9	48 to 54	46.9	- (change at Ely)	1

#### Table 29: March Station Level of Service Analysis

Source: National Rail Enquiries and Mott MacDonald analysis

#### **B.2** Other Local Bus Provision

In addition to the local bus services within the corridor shown in Table 1, there are a number of other services which connect:

- Communities within Wisbech to the town centre;
- Wisbech to other non-rail connected settlements, e.g. Long Sutton; and

From a Wisbech perspective, principal amongst the latter is the XL service operated by First Eastern Counties between Peterborough and Norwich via Wisbech and King's Lynn. The XL service is half hourly on Monday to Saturday daytimes. Journey times are approximately 45 to 50 minutes between Wisbech and both Peterborough and King's Lynn. Wisbech to/from Peterborough is therefore already comparatively well served by public transport, especially when compared to the level of service which a rail-based alternative could offer.

March is also (separately) served by bus routes to Ely, Chatteris and Peterborough. These operate at less than hourly frequencies, in part due to the lack of competitiveness with rail for travel to/from Ely and Peterborough. This indicates that provision of direct rail services between Wisbech and Peterborough may, eventually, directly substitute for the existing bus service.

## C. Policy context

# C.1 Cambridgeshire and Peterborough Combined Authority Devolution Deal (2017)<sup>25</sup>

Cambridgeshire and Peterborough's role as a world-leader in science and technology and its contribution to the UK economy is explicitly documented in the Cambridgeshire and Peterborough Devolution Deal. One of a handful of UK devolution deals awarded to date, the Cambridgeshire and Peterborough Devolution Deal, published in March 2017, awarded Cambridgeshire and Peterborough increased power and accountability over transport, planning and skills development, and funds to support economic and housing growth<sup>26</sup>.

Today the CPCA works together on strategic issues, such as housing, transport and infrastructure, which span council borders and the entire Cambridgeshire and Peterborough area<sup>27</sup>.

The Devolution Deal aims to enable significant economic growth, building on Cambridgeshire and Peterborough economic success to date, increasing economic output by nearly 100% over 25 years with GVA increasing from £22 billion to more than £40 billion. To support this, the CPCA received control of a £600 million investment fund over 30 years. The Deal also aims to accelerate the delivery of 72,000 new homes with £170 million investment.

The Devolution Deal outlines the importance of investing in transport and infrastructure to enable Cambridgeshire and Peterborough to realise its growth ambitions.

"Cambridgeshire and Peterborough recognise that for the Combined Authority to meet and exceed its ambitious targets for growth and wealth creation it needs to connect people and places. Better connecting the whole of Cambridgeshire and Peterborough has the potential to reduce city pressures and give the Cambridge hub access to wider areas of housing growth."

Source: Cambridgeshire and Peterborough Combined Authority Devolution Deal, Ministry of Housing, Communities & Local Government and Department for Business, Energy & Industrial Strategy, March 2017

Within the Devolution Deal, the CPCA commit to working with local areas' ambitions for new housing settlements and unlock economic growth, with specifically reference potential rail connectivity from Wisbech to Cambridge as part of these ambitions. The Devolution Deal also cites a new Fenland settlement based on garden town principles which is aligned to improvements on the A47 for east-west connectivity and the rail connectivity to Cambridge. The Devolution Deal goes on to state its recognition of the importance of development at March and of associated transport and infrastructure investments to unlock commercial and housing growth in that part of Fenland.

<sup>&</sup>lt;sup>25</sup> Cambridgeshire and Peterborough Combined Authority Devolution Deal, Ministry of Housing, Communities & Local Government and Department for Business, Energy & Industrial Strategy, March 2017

<sup>&</sup>lt;sup>26</sup> Cambridgeshire and Peterborough Combined Authority Devolution Deal, Ministry of Housing, Communities & Local Government and Department for Business, Energy & Industrial Strategy, March 2017

<sup>&</sup>lt;sup>27</sup> The CPCA comprises eight founding partners: Cambridge City Council, Cambridgeshire County Council, East Cambridgeshire District Council, Fenland District Council, Huntingdonshire District Council, Peterborough City Council and South Cambridgeshire District Council.

#### C.2 Cambridgeshire and Peterborough Strategic Spatial Framework (2018)

The CPCA has developed a non-statutory Strategic Spatial Framework for Cambridgeshire and Peterborough, which is divided into two phases. Phase 1 of the Framework, adopted in March 2018, defines the Authority's immediate priorities for sustainable growth to support the delivery of 100,000 new homes and over 90,000 jobs as set out in existing Combined Authority plans and Local Plans<sup>28</sup>. Phase 2 of the Framework, which is yet to be published, will take a longer-term view, setting out a growth strategy beyond the current Local Plan periods to 2031/36 and toward 2050.

The non-statutory Strategic Spatial Framework identifies the important contribution of Wisbech and March to the growth targets set out in the Fenland Local Plan (which is discussed below) and identifies both March and Wisbech as two of 22 identified 'strategic growth sites' for the CPCA area.

Furthermore, of particular relevance to this scheme is the Phase 1 document's Strategic Spatial Priority 2, which aims to extend the Market Towns Masterplan for Growth initiative to other towns (this initiative was piloted in St Neots in 2017)<sup>29</sup>. The aim of this initiative is to stimulate economic growth and create employment opportunities in market towns, through providing an integrated investment and regeneration programme for education and skills, commercial and industrial development and supporting infrastructure. Whilst not specifically referenced in the Spatial Framework, feasibility studies for the Wisbech Garden Town Project are due to commence in 2019/2020.

#### C.3 Fenland Local Plan

Fenland District Council's (FDC's) Local Plan was adopted in May 2014. In line with the revised National Planning Policy Framework (NPPF) published in July 2018, as the plan is now over five years old, the Local Plan is currently being reviewed and updated<sup>30</sup>. The FDC's 2019 Five Year Housing Land Supply report offers some insight into the not yet released, revised local plan, though it seems to maintain alignment with the 2014 version. The plan remains based around the broad locations for growth<sup>31</sup>. At the time of writing no updates to the Local Plan are available in the public domain.

The current adopted Local Plan sets out targets for providing 11,000 new homes and 7,200 jobs during the plan period to 2031. The district's four market towns are the main contributors to this planned development, with March and Wisbech allocated 4,200 and 3,550 homes<sup>32</sup>, respectively. This proposed increase in homes for Wisbech is in addition to the current proposed Wisbech Garden Town estimates<sup>33</sup>.

Key policies from the adopted Local Plan which are of relevance to this scheme include:

 Policy LP8 – Wisbech, which earmarks Wisbech (alongside March) as a 'main focus for housing, employment and retail growth' for the district and outlines the broad locations of new urban extensions to Wisbech; and,

<sup>&</sup>lt;sup>28</sup> Cambridgeshire and Peterborough Strategy Spatial Framework (Non-Statutory): Towards a sustainable growth strategy to 2050, Phase 1, 2018

<sup>&</sup>lt;sup>29</sup> Cambridgeshire and Peterborough Strategy Spatial Framework (Non-Statutory): Towards a sustainable growth strategy to 2050, Phase 1, 2018

<sup>&</sup>lt;sup>30</sup> https://www.fenland.gov.uk/article/14143/Emerging-Local-Plan [Accessed 31st May 2019]

<sup>&</sup>lt;sup>31</sup> Five Year Housing Land Supply (2019) Fenland District Council

<sup>&</sup>lt;sup>32</sup> The 3,550 homes allocation for Wisbech comprises 3,000 new homes allocated in the Fenland Local Plan and 550 on the edge of Wisbech in the Kings Lynn and West Norfolk Local Plan.

<sup>&</sup>lt;sup>33</sup> Fenland Local Plan (2014) Fenland District Council

 Policy LP15 - Facilitating the Creation of a More Sustainable Transport Network in Fenland, which includes direct reference to the reopening of the March to Wisbech rail line. Policy LP15 will be implemented through the on-going submission and determination of planning applications. Successful implementation of this policy is also reliant on the coherent partnership working of FDC, the CCC, public and private developers, and local public transport operators. A rigid and up-to-date account of transport impact assessments and travel plans will also be kept.

Further population growth is planned for the market town over the next decade, with the Fenland and Kings Lynn and West Norfolk Local Plans together allocating 3,550 new homes in and around Wisbech for the period up to 2031<sup>34</sup>. More recently, a proposal for the development of Wisbech Garden Town<sup>35</sup> outlines a plan for an even more significant increase in the town's housing levels compared to the Local Plan targets, with a further 8,450 new homes (in addition to those allocated in the Local Plans). If realised, the development of the Local Plan and Wisbech Garden Town proposals would nearly double the population of Wisbech over a 40 year period. Updated forecasts in the emerging Fenland Local Plan have not yet been published. March also has smaller scale, but significant, residential development proposals.

#### C.4 The Cambridge and Peterborough Independent Economic Review (CPIER) <sup>36</sup>

Whilst appreciating that Fenland's Local Plan is currently undergoing review and refresh, there is growing evidence that Local Plan targets across the wider CPCA area are pessimistic and that much higher growth is likely. This has been most clearly demonstrated in the Cambridgeshire and Peterborough Independent Economic Review (CPIER), which was published in Autumn 2018.

Undertaken by an independent economic commission, the purpose of the review was to create a single strategic position to help Cambridgeshire and Peterborough *"consider the case for greater fiscal devolution and powers to unlock the delivery of major infrastructure, including showing how the area delivers benefits to the rest of UK"*<sup>37</sup>. The CPIER developed an evidence base on the economic performance and growth potential of Cambridgeshire and Peterborough, which has included consideration of a range of different growth scenarios beyond those set out in the Local Plans. Significantly, the CPIER<sup>38</sup> is clear that not only has historical growth been underplayed, but future employment growth in the CPCA area could be much higher than the levels set out in Local Plans (see Figure 15).

<sup>&</sup>lt;sup>34</sup> Fenland Local Plan Adopted May 2014, Fenland District Council, 2014; Site Allocations and Development Management Policies Plan, Adopted September 2016, Borough Council of Kings Lynn and West Norfolk, 2016

<sup>&</sup>lt;sup>35</sup> Wisbech Garden Town, Report by URBED and TradeRisks for: Fenland District Council, Cambridgeshire County Council, Foster Property Developments Ltd. and Anglian Water, January 2017

<sup>&</sup>lt;sup>36</sup> Cambridgeshire and Peterborough Independent Economic Review (CPIER) Final Report, Cambridgeshire and Peterborough Independent Economic Commission, September 2018

<sup>&</sup>lt;sup>37</sup> See <u>https://www.cpier.org.uk/about-us/cpier/</u> [Accessed 10 May 2019]

<sup>&</sup>lt;sup>38</sup> Cambridgeshire and Peterborough Independent Economic Review (CPIER) Final Report, Cambridgeshire and Peterborough Independent Economic Commission, September 2018

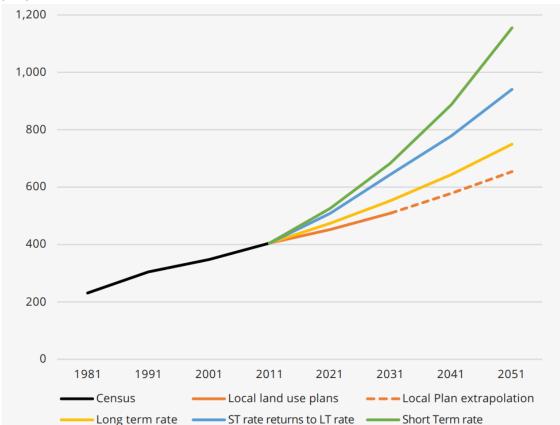


Figure 15: Employment projections for Cambridgeshire and Peterborough – 000's of people

Source: Dr Ying Jin, Department of Architecture, University of Cambridge, extracted from Cambridgeshire and Peterborough Independent Economic Review (CPIER) Final Report, Cambridgeshire and Peterborough Independent Economic Commission, September 2018

That future levels of employment growth may be higher than currently envisaged and planned for may have significant implications for the CPCA area and its housing and infrastructure needs over coming years. Critically, the CPIER identify that already house building and developments in infrastructure have not kept pace with employment growth in Greater Cambridge. As a result, many people have been priced away from the city, and journey times into work have risen significantly, causing many to endure longer commutes. The CPIER found there to be a large number of people in Cambridgeshire and Peterborough that commute over 60 minutes, some 90 minutes, one-way on a daily basis. It warns that this is unsustainable and could even risk future economic growth by making the city less attractive to even high-value businesses. Citing futures work by Dr Ying Jin and his Cities and Transport team of the University of Cambridge. the CPIER report describes a possible future whereby employment growth in Cambridge could even begin to slow by 2021, and actually go into reverse beyond 2031, with the city's high living and business costs, driven by high housing costs, leading to businesses moving away from the area. This is based on an inconsistency between current plans for infrastructure and housing development and the CPIER's hypothetical 'central projection' rate of employment growth (where recent high ONS employment growth rates gradually return to longer-term levels, shown by the blue line in Figure 15).

A central element of the Devolution Deal for the CPCA was the commitment to doubling the area's economic output (GVA) over the following 25 years (from £22bn to over £40bn) in return for new powers. Achieving this level of growth will depend largely on the economy of Greater Cambridge and it having sufficient capacity in its labour market, housing market and infrastructure to accommodate growth.

#### C.5 Business Board of the CPCA Strategic Economic Plan (SEP)<sup>39</sup>

The Business Board was constituted in September 2018, embracing the role that was previously fulfilled by the Greater Cambridge and Peterborough Enterprise Partnership. The Business Board is designed to *"give commerce a strong voice in strategy development and decision making relating to the Combined Authority*<sup>\*40</sup>. The CPCA utilises the Business Board as an advisory group, working towards their commitment to make the area a leading place to work, live and learn.

Building on the analysis provided in Section 2.1, the Greater Cambridge Greater Peterborough (GCGP) Enterprise Partnership SEP, published in 2014, several years prior to the Devolution Deal, provides important context on understanding the area's diverse economy. The 2014 SEP identifies a number of growth industries and hubs for the Cambridge and Peterborough area, and highlights the area's strengths in:

- Biotech and life sciences
- ICT and telecommunications
- Low carbon environmental goods and services
- Manufacturing, engineering and processing
- Agriculture, food and drink
- Logistics
- Water and energy
- Visitor economy

The SEP recognises the important role of the area's two cities, Peterborough and Cambridge, as major employment centres, both of which attract residents from surrounding districts who commute in. The SEP also identifies, however, that 69 per cent of employment is not in the two main urban centres but is more widely dispersed across the area's local economies.

The SEP recognised the important role of transport connectivity for the GCGP economy. Of relevance to this scheme, rail links, frequency and capacity are identified in the SEP as one the area's key transport problems and challenges.

The SEP set out a strategy for local sustainable transport programmes to "*develop a highly connected and efficient transport network which enables easy and reliable access to and between key employment clusters, growth areas and markets*"<sup>41</sup>. This strategy is captured within four main aims:

- An integrated and reliable transport network that enables efficient movement of goods and people.
- A highly connected and efficient rail network linking key destinations.
- Sustainable transport capacity to support and unlock growth along key corridors / hubs.

<sup>&</sup>lt;sup>39</sup> Strategic Economic Plan, Greater Cambridge and Greater Peterborough Enterprise Partnership, 2014

<sup>&</sup>lt;sup>40</sup> <u>https://cambridgeshirepeterborough-ca.gov.uk/business-board</u> [Accessed 16 September 2019]

<sup>&</sup>lt;sup>41</sup> Strategic Economic Plan, Greater Cambridge and Greater Peterborough Enterprise Partnership, 2014

Good and reliable access to and between the key economic clusters.

The SEP stated the LEP's wish to see greater access to the rail network across Cambridge and Peterborough where a rail link or station could help unlock growth or regeneration. The SEP cites Mott MacDonald's previous work investigating the wider economic impacts of reconnecting Wisbech to the rail network through the reopening of the railway between March and Wisbech to passenger services<sup>42</sup>.

#### C.6 Wisbech 2020 Vision

The Wisbech 2020 Vision first emerged in 2012 and was formally launched in 2013 as a partnership between the leaders of Fenland District Council and Cambridgeshire County Council and the MP for North-East Cambridgeshire. The aim of the Wisbech 2020 Vision is to regenerate the market town and surrounding area to make it "*a great place to work, live and visit*"<sup>43</sup>. In 2015, the Wisbech 2020 Vision's original themes of 'live', 'work' and 'visit' were replaced with 'infrastructure and growth', 'town centre', 'skills' and 'education, health and wellbeing' and 'communication', reflecting a greater emphasis on the market town's social issues<sup>44</sup>.

Major initiatives, such as the idea of Wisbech Garden Town, have emerged from the Wisbech 2020 Vision. Work on the Wisbech Garden Town project is now running separately, but in parallel, to wider Wisbech 2020 Vision initiatives.

#### C.7 Wisbech Garden Town

Since the adoption of the Fenland Local Plan in 2014, proposals for extending Wisbech to create 'Wisbech Garden Town' have gained traction. A garden town is one which aims to extend an existing large town, rather than attempting to grow a new one. The idea for the Wisbech Garden Town was first proposed in 2016. Evolving on from the Wisbech 2020 vision<sup>45</sup>, these proposals significantly exceed growth targets for new homes set out in the Fenland Local Plan. The ambition is to reverse the levels of deprivation found in the area, through the housing growth and the development of a stronger economy<sup>46</sup>.

A report by Urbed for FDC, CCC, Foster Property Developments and Anglian Water, published in 2017, sets out a future vision and strategy for Wisbech as a 'Garden Town', with plans to extend the existing footprint of the town and deliver radical improvements in the town's transport infrastructure and connectivity. The purpose of the Urbed report was to support Wisbech's bid to the Ministry for Housing, Communities and Local Government's (MHCLG) Locally Led Garden Villages, Towns and Cities prospectus. Initial proposals for the development of Wisbech Garden Town outlined in the report include 12,000 new homes (including existing allocations from the Local Plan), new primary schools and a second secondary school, a 170ha country park and multiple employment sites including a new Enterprise Zone to the south of the Wisbech. The impact of these proposals would be to nearly double the population of Wisbech over a 40-year period, with the town therefore becoming 'a major growth node for the Cambridgeshire/Peterborough Combined Authority'<sup>47</sup>.

<sup>&</sup>lt;sup>42</sup> Wider Economic Benefits of a Rail Service Between March and Wisbech, Mott MacDonald, March 2014 and refreshed in 2016.

<sup>43</sup> http://www.wisbech2020vision.co.uk/

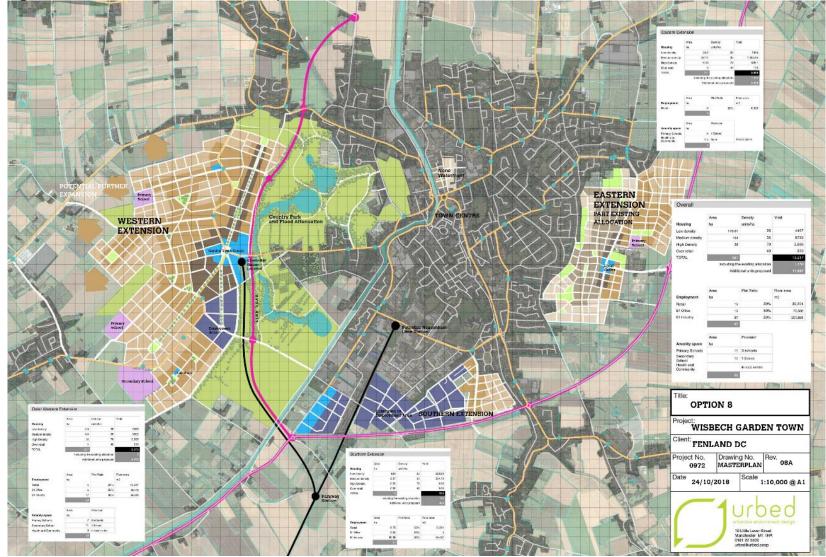
<sup>44</sup> http://www.wisbech2020vision.co.uk/

<sup>&</sup>lt;sup>45</sup> See <u>http://www.wisbech2020vision.co.uk/gardentown</u>

<sup>&</sup>lt;sup>46</sup> <u>http://www.wisbech2020vision.co.uk/gardentown</u> [Accessed 16 September 2019]

<sup>&</sup>lt;sup>47</sup> Wisbech Garden Town, Report by URBED and TradeRisks for: Fenland District Council, Cambridgeshire County Council, Foster Property Developments Ltd. and Anglian Water, January 2017

Figure 16: Wisbech Garden Town – Masterplan



Source: Urbed, September 2018

Throughout the Urbed report, the importance of the March to Wisbech transport link to Wisbech's economy is clearly articulated, both in terms of Wisbech's decline over the last half century and the necessity of its reinstatement if Wisbech is to realise ambitions for future growth and revival:

"The key issue for the people of Wisbech is the loss its railway in 1968. A town that once had three railway stations, started to feel isolated and entered a long period of decline. There is a stark difference between the levels of affluence in the southern and eastern parts of Cambridgeshire and the deprivation of the isolated north. Bridging this divide lies at the heart of the Garden Town vision. Nowhere else is there a town with so little development pressure so close to an area of such high demand where all that is required to connect the two is 11 miles of railway."

Source: Wisbech Garden Town, Report by URBED and TradeRisks for: Fenland District Council, Cambridgeshire County Council, Foster Property Developments Ltd. and Anglian Water, January 2017

Critically, the Garden Town proposals set out by Urbed are, at least in part, dependent on the development of a new segregated public transport link to and from Wisbech.

Proposals for Wisbech Garden Town have since progressed to their next stage of development; the CPCA provided funding in June 2017 for the purpose of testing the viability and feasibility of the garden town proposals with an anticipated duration of two years for these feasibility studies<sup>48</sup>.

#### C.8 Transport strategy

#### C.8.1 The draft Cambridgeshire and Peterborough Local Transport Plan

The CPCA has recently published in draft its first Local Transport Plan for Cambridgeshire and Peterborough. This document replaces the Authority's Interim Local Transport Plan, published in June 2017, which was based on the existing Local Transport Plans for Peterborough and Cambridgeshire. The CPCA draft Local Transport Plan will be subject to public consultation during summer of 2019.

The CPCA draft Local Transport Plan sets out a vision "*To deliver a world-class transport network for Cambridgeshire and Peterborough that supports sustainable growth and opportunity for all*"<sup>49</sup>. The draft Plan sets out three goals, focused on the economy, society and the environment, each of which is underpinned by a series of objectives against which schemes, initiatives and policies will be assessed.

<sup>&</sup>lt;sup>48</sup> <u>http://www.wisbech2020vision.co.uk/gardentown</u>

<sup>&</sup>lt;sup>49</sup> Draft Cambridgeshire and Peterborough Local Transport Plan, prepared by Steer for the Cambridgeshire and Peterborough Combined Authority, 20 May 2019



Source: Draft Cambridgeshire and Peterborough Local Transport Plan, prepared by Steer for the Cambridgeshire and Peterborough Combined Authority, 20 May 2019

The draft Plan outlines the Authority's priority transport schemes, which are shown in Figure 18. The March to Wisbech transport corridor is clearly mapped as one of the priority schemes which will transform accessibility for residents and businesses in the town.

"Construction of a new link to Wisbech will transform accessibility to the town...Residents and businesses in Wisbech would benefit from being able to reach Cambridge directly, connecting them to the opportunities within Greater Cambridge, including well-paid, skilled roles in the knowledge economy, and education and training opportunities at The University of Cambridge, Anglia Ruskin University and Cambridge Regional College. It will also play a key role in supporting the ambition for Wisbech Garden Town, helping to secure the viability and delivery of additional development."

Source: Draft Cambridgeshire and Peterborough Local Transport Plan, prepared by Steer for the Cambridgeshire and Peterborough Combined Authority, 20 May 2019

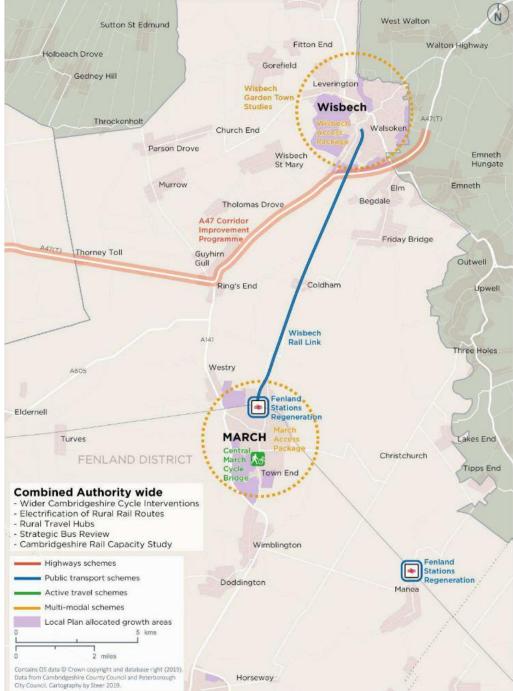


#### Figure 18: Key transport and infrastructure projects - Cambridgeshire and Peterborough

Source: Draft Cambridgeshire and Peterborough Local Transport Plan, prepared by Steer for the Cambridgeshire and Peterborough Combined Authority, 20 May 2019

As shown in Figure 19 below, the March to Wisbech transport corridor is one of several complementary transport and infrastructure schemes proposed in and around Wisbech which will help to realise the proposals and ambitions for Wisbech today and help support ambitions such as Wisbech Garden Town.





Source: Draft Cambridgeshire and Peterborough Local Transport Plan, prepared by Steer for the Cambridgeshire and Peterborough Combined Authority, 20 May 2019

#### C.8.2 Long Term Transport Strategy 2011-2031

CCC, working in partnership with other agencies, including its constituent district and city councils and the CPCA, aims to provide efficient and reliable travel between key locations for its residents and employees, helping to support a thriving local economy.

This context is currently embodied in the Long Term Transport Strategy (LTTS) for the county, which covers the period 2011 to 2031 and which was last updated in November 2014. The LTTS was produced as part of the 3rd Local Transport Plan (LTP)<sup>50</sup> for the county. The LTTS sets the following strategic objectives for transport proposals:

- To ensure that the transport network supports sustainable growth and continued economic prosperity;
- To improve accessibility to employment and key services;
- To encourage sustainable alternatives to the private car, including rail, bus, guided bus, walking and cycling, car sharing and low emission vehicles;
- To encourage healthy and active travel, supporting improved well-being;
- To make the most efficient use of the transport network;
- To reduce the need to travel;
- To minimise the impact of travel on the environment; and
- To prioritise investment where it has the greatest impact.

Source: Cambridgeshire Local Transport Plan 2011-2031: Long Term Transport Strategy, Cambridgeshire County Council, July 2015

The re-instatement of the March to Wisbech rail line for public transport services is identified in the LTTS as one of four locally promoted major schemes across Cambridgeshire which is necessary to provide capacity for growth and address existing problems in the transport network.

See: Cambridgeshire Local Transport Plan 2011-2031: Policies and Strategy, Cambridgeshire County Council, July 2015

## **D. Freight Market Analysis**

#### D.1 Potential Freight Market

The potential market for freight services has also been considered, with the line having been kept open for these purposes to 2000. Prior to 2000 the route had been regular in use, servicing agricultural / foodstuffs industries; however, despite substantial flows, the services were deemed financially unviable. Wisbech retains a major focus on these industries, with many road transport movements per day, providing a potential opportunity for use of the March – Wisbech line for freight traffic.

Some key considerations with this proposal for a joint passenger and freight offer include the need for:

- Sufficient demand in Wisbech to produce standalone 'train loads' or the scope for splitting and joining with other freight trains;
- Chilled or frozen facilities throughout transit, with an expectation that the maintenance of appropriate temperatures can be demonstrated for the totality of the product, throughout the logistics chain; and
- Additional infrastructure in the form of passing loops and creation of a dedicated handling facility at Wisbech, coupled with the potential need for construction of the line to a higher standard than that required for passenger only operation.

These are considered in turn in the following sub-sections.

#### D.2 UK Rail Freight Market

In the period since the cessation of freight services on the March-Wisbech line in 2000, the UK rail freight industry has become increasingly focussed on:

- Large scale inter-modal shipments, e.g. containers from major sea ports and large rail freight facilities;
- Coal and aggregates (including rail construction and renewal in the latter); and
- Biomass.

Rail freight services for palletised goods, such as those most likely to be generated to/from Wisbech, could be provided on a trainload basis, subject to suitable arrangements. This could be to either a dedicated freight loading terminal or to a distribution terminal which would be capable of transhipping containerised freight. These would be dependent on adequate volumes being provided, on a regular basis, to/from focused destinations elsewhere on the rail network.

Conveyance on a less-than-trainload basis would be dependent on the availability of capacity on existing regular services on suitable routes, and willingness of such operators to interrupt their journeys for the addition of extra vehicles. In practice, services in the vicinity are currently limited to intermodal services passing through on the Felixstowe – Midlands and North axis, aggregates to East Anglia from other areas, and regular infrastructure materials services to Whitemoor from Doncaster (and beyond) and Hoo Junction in Kent (thus transiting London). It is uncertain whether, given constraints on rail network capacity for connectional services to ultimate destinations, any of these would offer realistic potential for reliable services to the standards required to support investment in freight terminal facilities on the Wisbech branch.

Annex Map 2 in '*Strategic rail freight interchange policy guidance*'<sup>51</sup> indicates that, while Wisbech (connected at March) is located alongside the identified 'Key Strategic Rail Freight Route' network (as well as the Whitemoor terminal), any flows towards the south will involve 'interaction with frequent suburban / interurban services' if not also with high-speed passenger services. Daytime route capacity for freight is typically under severe pressure in such locations. While mitigations can often be found, they may, in general, erode the viability of the freight services, particularly where they traverse a number of such routes, e.g. in the London area.

It is therefore most likely that arrangements could be made for overnight services of dedicated trains to and from Wisbech, allowing daytime for loading/offloading at terminals. This would be constrained by the availability of viable traffic volumes to potential origins and destinations elsewhere on the rail network.

Taking a European perspective, it should also be noted that sets of wagons moved as above could be attached to existing cross-Channel rail services currently assembled at Wembley (London) or Daventry. Such services, which have operated for many years, potentially offer connections widely across Europe and particularly to and from Italy and Spain where imports of fruit may be sourced. However, it is of note that a new service direct from Spain to London (Dagenham) serving imports of fruit has recently been established operating in the UK exclusively on the Channel Tunnel 'HS1' route (at night). While this thus offers greater wagon payloads in European-gauge rail wagons it therefore does not obviate the final road haul to destinations in Wisbech or elsewhere.

Alternatively, if an intermodal terminal were to be established, then traffic originating or destinating in containerised form could be handled and could be delivered to a wider range of locations in Wisbech and elsewhere. However, there is no particular likelihood, pending a more detailed analysis of potential freight flows in the region, that such a terminal would be best located either in Wisbech or necessarily on the Wisbech line at all.

#### D.3 Infrastructure Requirements and National Standards

The use of the line for freight trains may impose additional infrastructure costs or standards compared to passenger only operation. Assuming track is reinstated to Track Category 3 then the relevant metric for determining freight path availability is the Equivalent Million Gross Tonnes per Annum (EMGTPA). Based on Network Rail standards, at 60mph track category three can be operated at up to 12 EMGTPA. The heavy rail options all have an estimated EMGTPA of 1.5 to 2.0 million, leaving over 10 million tonnes of "headroom". This equates to four 2,500 tonne trains every day all year.

The loading imposed on bridges by rail vehicles is measured in units of Route Availability (RA) loading; most multiple unit passenger vehicles are RA 4 or lower, whereas diesel locomotives and many freight vehicles are RA 8. The effect of this loading can be managed for high RA vehicles by limiting their speed by imposing a differential speed for freight trains; on the Wisbech branch this could be around 30 or 40 mph (subject to detailed assessment of the underline structures during the GRIP process). This speed differential relative to passenger services may necessitate additional passing infrastructure to ensure efficient, punctual and reliable operation if freight services are not timetabled at night.

Dependent on detailed timetabling, it may be possible to permit a freight service to transit the route during the hours of passenger operation, although this would be subject to provision of appropriate turnouts and signalling arrangements into the Wisbech freight facilities so as to

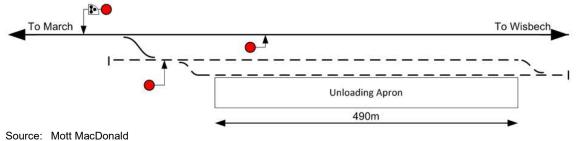
<sup>&</sup>lt;sup>51</sup> Strategic rail freight interchange policy guidance', DfT, Nov 2011, https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/4377/strategic-rail-freight-interchange.pdf

vacate the line for passenger use. Such arrangements will have significant cost. It may be that functionality and line capacity can be more viably provided when (eventually) signalling in the area upgrades, under the European Rail Traffic Management System (ERTMS), from the use of fixed trackside signals to in-cab arrangements, though this is not expected to be until at least 2021<sup>52</sup>. Therefore, any freight services on the line during the period of passenger train operations would need to run to precise timings which, in practice granted constraints on the wider network, might require timetabling of the trains to spend time in March Up or Down Freight Yards so as to be positioned ready to make immediate use of the available slots on the Wisbech line.

The industry in the area suggests that the likely freight flows would be of palletised goods, in which case a siding with an adjacent hard standing for forklift trucks would be required. While there is, nationally, a supportive climate towards the building of such new intermodal freight terminals, their siting is subject to local traffic and environmental planning considerations which have resulted in some significant delays in obtaining consent. If such a terminal were not located within, or close to, Wisbech this would however largely remove any freight benefit from re-opening of the line.

Development of a freight facility at Wisbech would be subject to location and planning constraints, as well as having significant cost.

The default assumption for freight facilities is that they should be designed to accommodate 775m long "Channel Tunnel" trains, though many facilities are arranged to hold these trains in two halves of 400m. However, such trains are likely to be recessed at March, so the longest likely train length (in the near future) is that of the longest siding at March, or 487m. An indicative 'minimum' facility is shown in Figure 20.



#### Figure 20: Wisbech Rail Freight Facility – Minimum Specification

Assuming a single unloading siding and second line to allow the arriving locomotive to run round the train before departing, the only interface with the passenger line would require three additional signals (this could be reduced to two depending where the freight siding is in relation to the new Wisbech station) and one additional crossover (to provide protection from trains rolling away).

The run round line would require two hand-lever operated turnouts to connect it to the unloading line.

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<sup>&</sup>lt;sup>52</sup> http://ertmsonline.com/ertms-in-the-news/ertms-update-by-simon-whitehorn/

# E. Station Location Appraisal Technical Note

## F. Rationale for Option Exclusion

#### F.1 Station and stop locations

Table 30 details the station/stop locations which were excluded at the Part I option sifting stage, and the supporting rationale for doing so.

Table 30: Wisbech Station or Stop Location Options – Rationale for Exclusion

ID	Location	Notes
2	Town (future development)	<ul> <li>This is the most desirable location for a 'town centre' National Rail station, or a lighter alternative which avoids, or phases, on-street running</li> <li>The required footprint for a new station or light rapid transit stop at this site is currently unavailable</li> <li>Options 1 or 8 could be extended to this location if the site was to become available</li> <li>Option 10 supersedes this option if on-street running is pursued due to greater accessibility to the town centre</li> <li>P&amp;R access share should be reduced due to higher walk accessibility</li> <li>Traffic congestion in Wisbech Town Centre in peaks would constrain access</li> </ul>
3	Wisbech Meadowgate (A1101)	<ul> <li>Intrinsically linked to an onward service towards King's Lynn (subsequent stage of network development)</li> <li>Economic and Financial Cases for connection to King's Lynn likely to be poor</li> <li>Poor local accessibility for existing communities. Would require new, likely subsidised, bus services</li> <li>Closer to significant development envisaged in Fenland Local Plan, but further afield from main Garden Town sites</li> <li>Potential highway constraints from A47(T), including peak period congestion</li> </ul>
4	Cromwell Road area	<ul> <li>Peripheral to all residential areas, including proposed development</li> <li>Site close to Cromwell Road raises visibility and Park &amp; Ride (P&amp;R) based access</li> <li>Requires bridging of A47(T)</li> <li>Poor onward connectivity options for future alignment</li> <li>Potential highway access constraints from both town centre and A47(T)</li> <li>Wisbech P&amp;R catchment likely to be to north of town</li> </ul>
5	North of A47	<ul> <li>Requires bridging of A47(T), but fewer additional kms of reinstated rail track (than options 1, 2 and 8)</li> <li>Reduces severance of A47(T)</li> <li>Peripheral to all residential areas</li> <li>Proposed local development (Local Plan) is mainly low density employment and small amount of residential, c100 dwellings</li> <li>Essentially remains a 'parkway' solution but with additional cost</li> <li>Wisbech P&amp;R catchment likely to be to north of town</li> </ul>
7	Site between Enterprise Way and Europa Way (on existing alignment)	<ul> <li>Requires bridging of A47(T), but fewer additional kms of reinstated rail track (than options 1, 2 and 8) and no crossing of Weasenham Lane</li> <li>Reduces severance of A47(T)</li> <li>Peripheral to all residential areas</li> <li>At heart of development area, but this is currently planned for mainly low density employment and small amount of residential, c100 dwellings</li> <li>Essentially remains a 'parkway' solution but with additional cost</li> <li>Potential to integrate with alternative alignment via Weasenham Lane and B198</li> <li>Wisbech P&amp;R catchment likely to be to north of town</li> </ul>
11	I and V	<ul> <li>Multiple station solution with 'lighter' alternative, but little additional benefit over Option 1 (see rationale for Option 5)</li> </ul>

Source: Mott MacDonald

#### F.2 Modes

Table 31 summarises modes which were removed at the initial Part I option sift. Developments across the wider CPCA area may offer opportunities in the future depending on progression of the business case for the preferred mode(s). Within Wisbech, and any possible urban extensions, this may involve opportunities as feeder modes to a main mode.

Table 31: March to Wisbech Corridor Mode Options – Rationale for Exclusion

ID	Mode	Image	Rationale for Exclusion
3	Light Rail		<ul> <li>No discernible cost difference relative to tram-train and standards to be applied should be similar</li> <li>Limits through running opportunities, i.e. March-Wisbech only</li> <li>Greater opportunity for on-street running in Wisbech, and improved local accessibility (e.g. multiple stops), as can be implemented with DC supply (National Rail AC), albeit advances in hybrid technology mean these opportunities are now becoming negated</li> </ul>
5	Bus		<ul> <li>Not considered transformational which would generate significant changes in mode and destination, business perceptions, or the opportunities available to residents</li> <li>Difficult to link funding to development proposals without fixed infrastructure</li> <li>Greater flexibility on stop locations and higher local accessibility</li> <li>Prohibitive journey times to/from Cambridge and March due to convoluted and elongated highway access</li> <li>Already have existing X1 service connecting Wisbech with King's Lynn and Peterborough – Wisbech-March-Peterborough unlikely to offer attractive alternative</li> <li>Difficulties with integration with National Rail at March, both physical interchange and through ticketing opportunities</li> </ul>
6	ULTRA - light rapid transit		<ul> <li>Relatively untried technology in this type of market – additional costs and risk which may be difficult to quantify</li> <li>Vehicles may be ill suited to peak period or require a large Peak vehicle Requirement (PVR)</li> <li>Limited to March-Wisbech only, necessitating interchange to National Rail</li> <li>Potential difficulties with integration with National Rail at March, both physical interchange and through ticketing opportunities</li> <li>Potential on-street running in Wisbech</li> </ul>

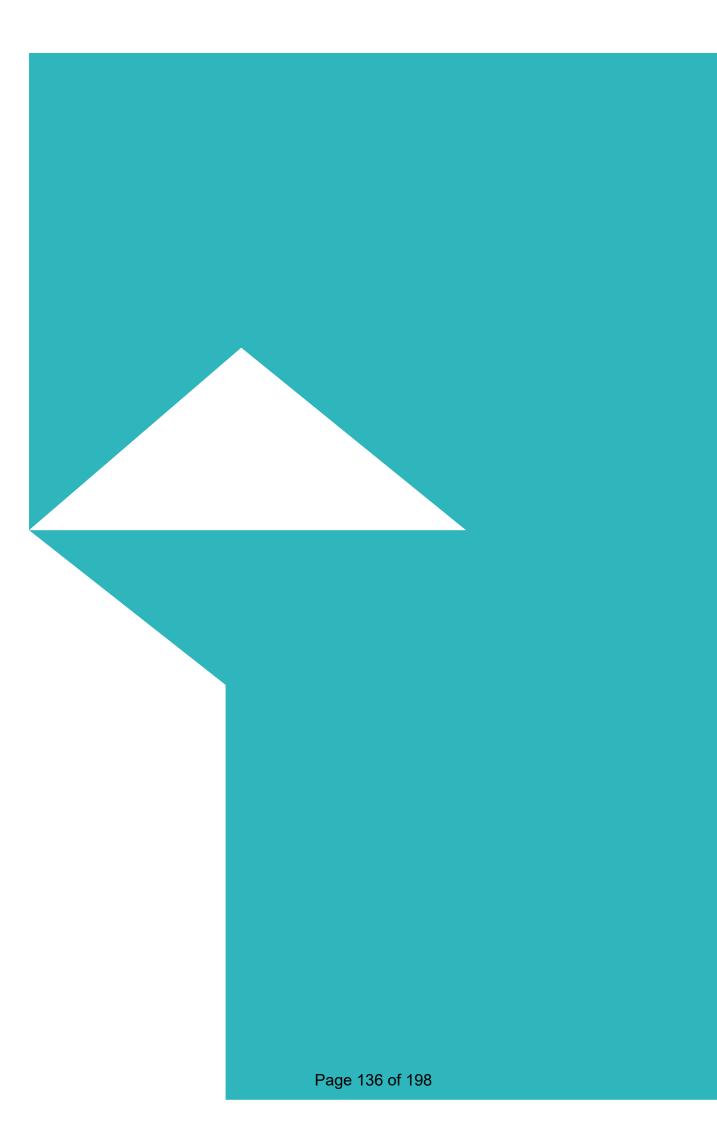
Source: Mott MacDonald

#### F.3 Service Patterns

Table 32 details the service patterns excluded at the initial sift. Some of the retained options are limited to certain modes. This is particularly the case for through running to Cambridge or Peterborough which requires use of the existing rail network.

ID	Service Pattern (selected stops or stations only)	Rationale for Exclusion
1	Wisbech-Ely-Cambridge 3tph	<ul> <li>3 tph through Ely North Junction in each direction considered highly unlikely without major investment over and above that currently envisaged</li> </ul>
3	Wisbech-Ely-Cambridge 1tph	<ul> <li>1 tph unlikely to provide an attractive or viable solution</li> </ul>
4	Wisbech-Peterborough 2tph	<ul> <li>Peterborough is a low density location with few suitable employment and business opportunities located close to station. Only Whittlesea served as intermediary location</li> </ul>
5	Wisbech-Peterborough 1tph	<ul> <li>1 tph unlikely to provide an attractive or commercially viable solution, especially as Peterborough is a low density location with few suitable employment and business opportunities located close to station. Only Whittlesea served as intermediary location</li> </ul>
7	Wisbech-March 2tph	<ul> <li>Not commercially viable or likely to offer value for money. No intermediary locations served</li> </ul>
8	Wisbech-March 1tph	<ul> <li>Not commercially viable or likely to offer value for money. No intermediary locations served</li> </ul>
13	Wisbech-Peterborough 1tph; Wisbech-March 1tph	<ul> <li>1 tph unlikely to provide an attractive or commercially viable solution, especially as Peterborough is a low density location with few suitable employment and business opportunities located close to station. Only Whittlesea served as intermediary location</li> </ul>
14	Wisbech-March-Chatteris 3sph (bus or similar only) Mott MacDonald	<ul> <li>Limited attractions and commercial viability in this corridor</li> <li>Significant costs involved in new segregate alignment between March and Chatteris, or on highway operation required with associated performance issues</li> <li>Limited onward connectivity from Chatteris</li> </ul>

Source: Mott MacDonald



Appendix 2



# March to Wisbech Transport Corridor

Interim Report

6 February 2020

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# March to Wisbech Transport Corridor

Interim Report

6 February 2020

## **Issue and Revision Record**

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# 1 Introduction

This Interim Report presents a summary of the key findings to date with respect to the March to Wisbech Transport Corridor scheme. This section provides an overview of the scheme, including the background and scheme objectives, and a policy context in which the proposals for the delivery of this scheme have been made.

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#### **1.1 Purpose of this Interim Report**

Mott MacDonald was engaged by Cambridgeshire County Council (CCC), acting for the Cambridgeshire and Peterborough Combined Authority (CPCA) (the client), in January 2019 to prepare a GRIP 3<sup>+</sup> design and Full Business Case (FBC) for the March to Wisbech Transport Corridor. The transport corridor is a largely extant, but closed, seven-mile-long rail corridor between these two settlements in Fenland District, Cambridgeshire. This builds on earlier work by Mott MacDonald to prepare an Outline Business Case for the scheme in 2015 for CCC.

The purpose of this Interim Report is to summarise work done to date and key next steps in the project programme. This is intended to be used to inform members of the Transport and Infrastructure Committee at the meeting in March 2020.

Work to date includes the Options Assessment Report, Delivery Strategy, Railway Operations Report, and related GRIP 2 technical studies. All findings are in draft form until the final GRIP 3 design and full business case have been submitted and signed off by the client team.

#### 1.2 Study Area

The study area for the March to Wisbech Transport Corridor is shown in Figure 1.1.

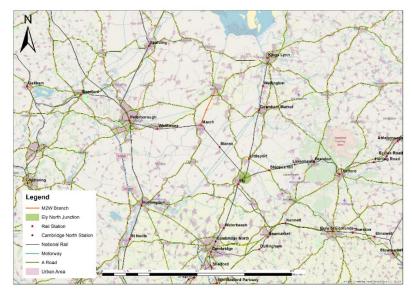


Figure 1.1: March to Wisbech Transport Corridor Study Area

#### Source: Mott MacDonald

<sup>&</sup>lt;sup>1</sup> GRIP = Governance for Railway Investment Projects, a management and control process developed by Network Rail for delivering projects on the National Rail network. GRIP 2 is the project feasibility stage, GRIP 3 is the option selection stage.

#### **1.3** The need for intervention

The CPCA's overarching objective for this project is to achieve sustainable growth by addressing inadequate transport connectivity between Cambridge and north Cambridgeshire. While Cambridge is one of the fastest growing and most highly skilled economies in the UK, Wisbech, and the wider north Cambridgeshire area, is a relatively low skilled and low wage economy, and it experiences high levels of socioeconomic deprivation.

The relative isolation of Wisbech and its surrounding settlements is a factor in both the lower earnings and productivity and the adverse socio-economic outcomes of this area. Improving connectivity to Cambridge offers the opportunity to transform Wisbech as a place for inward investment and provide much enhanced accessibility to key services and employment opportunities for its residents. Conversely, Cambridge is under significant labour supply pressure which may close off potential employment growth, given constraints on local housing development.

Connecting Wisbech into the Cambridge economy could provide a crucial solution to this. The evidence is that such a solution will require a rapid, direct service which will be attractive to commuters and businesses. Based on the indicative journey time assessments, only rail-based options offering direct services between Wisbech and Cambridge are consistent with the project objectives. This is explored further in the remainder of this report.

#### **1.4 Client strategic objectives**

The scheme's 2015 Outline Business Case (OBC) defined a set of scheme objectives. As part of this engagement to develop the FBC for the scheme, these objectives have been refreshed in light of changes in the regional governance context and associated strategy and planning documentation. The objectives are structured around the main impacts that the Department for Transport (DfT) define for transport interventions:

- Economic;
- Environmental;
- Societal; and
- Financial.

These objectives, which have been used in appraising the various options that have been developed for the March to Wisbech Transport Corridor, are summarised in **Table 1.1**.

ID	Impact	Detail
A	Economy	Improve access to key employment and education sites (Alconbury, Peterborough Centre, Ely, Cambridge Science Park, Cambridge Biomedical Campus & Cambridge Centre)
	Economy	Improve connectivity to major centres for inward investment to Wisbech (Cambridge, Peterborough, London and Stansted Airport)
	Economy	Support delivery of housing – Fenland Local Plan and Wisbech Garden Town which allows key employment locations to continue to grow
В	Environmental	Help to support economic growth in a sustainable manner by providing an attractive alternative to car travel, reducing associated externalities
С	Social	Improve local access to key services, e.g. medical facilities, colleges and universities (located in major centres, e.g. Cambridge, Huntingdon, King's Lynn and Peterborough)
	Social	Support the regeneration of the town centre and existing urban area
D	Financial	To minimise long term commitments for public revenue support

#### Table 1.1: March to Wisbech Transport Corridor Distilled Scheme Objectives

Source: Mott MacDonald

# 2 Work to date on preparing the Scheme Full Business Case and GRIP 3 design

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# 2.1 March to Wisbech Transport Corridor Full Business Case programme

The March to Wisbech Transport Corridor Full Business Case (FBC) has been developed over 2019 and is anticipated to be finalised by mid-2020. Specific milestones in this engagement are as follows:

#### Table 2.1: March to Wisbech Transport Corridor: Core Options

Milestone	Programme
Inception and detailed project planning	Jan 2019
Business Case Development, Option Generation and Sifting	Feb 2019 – Nov 2019
Development Planning & Station Location	Mar 2019 – May 2019
Scheme Design & Engineering	Mar 2019 – Jun 2020
Operational Analysis	Jun 19 – Jan 2020
Rail Scheme Delivery & Funding	Sep 2019 – May 2020
Full Business Case	May 2020 – Jul 2020

Source: Mott MacDonald

It is anticipated that the full business case will be submitted to the CPCA Board for approval in July 2020.

#### 2.1.1 Network Rail engagement

Difficulties in engaging with Network Rail delayed progress on the study throughout 2019. In order to develop GRIP 3 design, Mott MacDonald require information on the existing railway infrastructure between March and Wisbech, and in the March Station area. During much of 2019, CPCA, CCC and Mott MacDonald was not able to progress engagement with Network Rail significantly, despite repeated attempts to do so. This has hindered delivery of the project relative to its originally anticipated completion date of April 2020.

In late 2019, following further discussions with Network Rail regarding access to their infrastructure, it has been confirmed that visual surveys and bridge inspections can take place in February and March 2020. The programme set out in **Table 2.1** is based on this revised Network Rail survey and engagement timetable, and represents a three month delay to the original project timetable. The CPCA judges it is preferable to proceed on this revised programme as the surveys and related information provided by Network Rail will provide additional data on which to base GRIP 3 design for the scheme. This should allow design assumptions to be validated, reducing the level of uncertainty and increasing the accuracy of cost estimates.

#### 2.2 Key deliverables to date

The scope and key conclusions of key study deliverables to date are provided in subsequent sections of this report as follows:

• Section 3 presents the key findings from the Options Assessment Report

- Section 4 sets out a summary of the draft GRIP 2 report
- Section 5 reviews the key findings from the draft Railway Operations Report
- Section 6 presents the draft summary of the Delivery Strategy.

Findings from these studies are inputting to development of the preferred scheme option in the FBC and associated GRIP 3 design and engineering studies.

#### 2.3 Related projects

The key study deliverables to date identify a number of related infrastructure projects on which the March to Wisbech scheme is potentially dependent if it is to fulfil its identified client objectives, particularly the Ely North Junction investment programme (Ely Area Capacity Enhancement). Assessment of the feasibility or deliverability of these related projects is beyond the scope of this study. Key assumptions regarding related projects include:

- The Options Assessment Report and Delivery Strategy assume that all related projects will be delivered in time for the March to Wisbech Transport Corridor scheme to be fully operational by 2027/28 financial year;
- The GRIP 2 Heavy Rail feasibility report assumes that Ely Area Capacity Enhancement facilitates two paths per hour for Wisbech to Cambridge heavy rail services.

# 3 Key findings: Options Assessment Report

The CPCA's overarching objective for this project is to achieve sustainable growth by addressing inadequate transport connectivity between Cambridge and north Cambridgeshire. This Options Assessment Report (OAR) forms part of the business case development process for the March to Wisbech Transport Corridor and sets out the process by which a preferred option has been identified for further development during the project's Full Business Case phase.

#### 3.1 Context

The CPCA seeks to double the size of the economy of Cambridgeshire and Peterborough over 25 years while ensuring all communities share in this increased prosperity. By better integrating north Cambridgeshire into the Cambridge labour market, the public transport options assessed in this study will help to support sustainable and inclusive growth while also alleviating stress on Cambridge's overheated housing market.

The economies and the population of Cambridge and north Cambridgeshire are distinctive and have limited interaction. Challenges in travelling between the two areas appears to be a significant factor behind this, with north/south corridors in the area being generally of limited capacity, low quality, and often indirect routing. Wisbech, in particular, suffers from poor connectivity, as one of the largest towns in the country without a dedicated rail link. As a result, travel by private vehicle from Wisbech to Cambridge takes over an hour (despite a distance of under 35 miles) and public transport between the two areas is not possible without interchange.

These transport challenges are a significant factor in preventing residents of Wisbech and north Cambridgeshire commuting to the employment opportunities in and around Cambridge and may also hinder inward investment into north Cambridgeshire.

Improved access to Wisbech also supports the combined authority and Fenland District Council's ambitions to substantially grow the town via a major dedicated urban extension, known as Wisbech Garden Town. This planned development comprises 12,000 new homes in the town, with further growth proposed to double its size over a 40-year period.

The CPCA's plans to provide a dedicated public-transport link between Wisbech and Cambridge are one aspect of its wider strategy for the region. In addition to the north-south public transport link between Wisbech and Cambridge assessed in this report, the CPCA also has plans to improve east-west connectivity to Wisbech via dualling the A47 corridor, along with a package of local measures to address congestion within Wisbech.

#### 3.2 Identifying potential options

In line with the DfT Transport Analysis Guidance (TAG), guidance, the OAR has considered a wide variety of options to identify which ones best address the underlying challenges in the study area and the CPCA's objectives for the project. Options were structured around three main variables:

• **Mode** – conventional National Rail options; a "hybrid" tram-train mode, able to run on both the dedicated extant rail corridor between Wisbech and March and on-street within Wisbech;

and, in line with TAG guidance, a lower cost alternative of a guided busway, akin to the existing busways in Cambridgeshire and using conventional bus services.

- Service Pattern between one and three services per hour from Wisbech, with destinations considered that include a "shuttle" service to March only, and "through" services to Cambridge and Peterborough.
- Station location a variety of locations for a new station or stations in Wisbech, including a parkway option, options of various degrees of proximity to the existing town centre, and options within the planned garden town urban extension.

#### 3.3 Selecting the preferred option

Following identification of this "long list" of potential options, Mott MacDonald undertook an initial sifting process based on a qualitative multicriteria assessment of their fit to the project's objectives. A short-list of three core options, with a number of sensitivities around these core options, was taken forward for more detailed assessment. A description of these options and a summary of findings from this appraisal are set out in the table below.

ID	Mode	Service	Station Location	Capital Cost Estimate (£Q2 2019)	Benefit Cost Ratio
DS1	Tram-Train	Wisbech-Ely- Cambridge 2tph	Wisbech Town	152.5	2.5 – 3.0
DS2	National Rail	Wisbech-Ely- Cambridge 2tph	Wisbech Town	200.4	2.0 – 2.5
DS3 (LC)	Guided busway	Wisbech-March 3bph	Wisbech Town	75.1	0.5 – 1.0

#### Table 3.1: March to Wisbech Transport Corridor: Core Options

Source: Mott MacDonald analysis

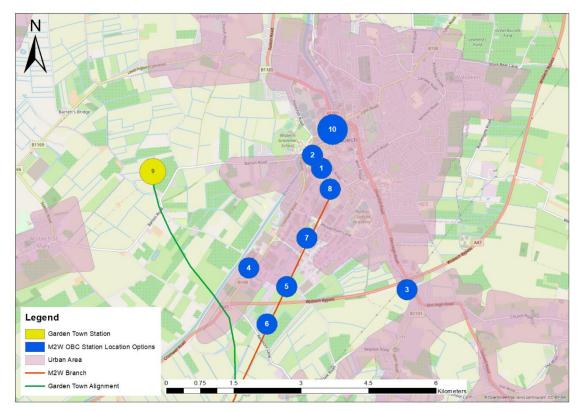
Mott MacDonald prepared a capital cost estimate for each of these options and also undertook an appraisal of their core ('established') monetised impacts based on passenger demand modelling. To be conservative, and consistent with TAG, demand modelling of the shortlisted options excluded growth associated with Wisbech Garden Town.

The key finding from this analysis was the importance of offering direct passenger transport services between Wisbech and Cambridge. A direct service could offer journeys of around 45 minutes between Wisbech and Cambridge. In contrast, the guided busway "shuttle" (DS3) between Wisbech and March represents poor value for money, despite its relatively low cost because the interchange penalty at March station would leave Wisbech beyond viable commuting times to Cambridge. This means that only rail-based services (DS1 - tram-train and DS2 - National Rail) are viable for delivering the desired outcomes for the March to Wisbech corridor.

This key finding also means that scheme is closely interdependent with the outcome of the proposed Ely North Junction works and the ability to operate the desired frequency between Wisbech and Cambridge. If sufficient train paths are unavailable, a rail-based shuttle service would also be poor value for money. Positively, however, the OAR shows that in a scenario where direct Wisbech to Cambridge services do not become possible for a decade after the March to Wisbech scheme opening, the project retains a positive benefit cost ratio of 1.5-2.0.

Related to this, the analysis showed that the location of the new station in Wisbech should be as close to the established town centre as possible to maximise the service's potential catchment area. The range of station locations considered in Wisbech is shown in **Figure 3.1**,

with location 10 ("Wisbech Town") being the indicative preferred location for more detailed design assessment.



#### Figure 3.1: Station Options Considered for in Wisbech

Source: Mott MacDonald analysis

One other finding of the OAR was that a tram-train-based option could potentially be more cost effective than a similar National Rail option as it may be able to be built to a lower design standard, however, the National Rail option has a much more certain and lower risk delivery path as the "tram train" concept is relatively novel in the UK. Based on this analysis, Mott MacDonald recommend in the OAR that National Rail option 'DS2' should be the focus of further scheme development.

#### 3.4 **Progressing the March to Wisbech transport corridor full business case**

The OAR forms the first part of developing the March to Wisbech Transport Corridor Full Business Case. Mott MacDonald is preparing designs and cost estimates of the preferred option to a broadly GRIP 3 level of detail, supported by wider technical work including refined passenger demand analysis (incorporating a sensitivity that includes Wisbech Garden Town levels of population growth in the study area).

# 4 Key findings: GRIP 2 Heavy Rail Feasibility Report

The primary objectives of the GRIP 2 Heavy Rail Feasibility Report are to investigate the feasibility and cost of re-opening the railway line between March Station and Wisbech to heavy rail (National Rail) services. The report focuses on the design and technical feasibility of the scheme development, broadly following a framework prescribed by Network Rail.

#### 4.1 Scope

This report was originally developed by Mott McDonald in 2015 as part of a wider CCC commissioned study and has been updated as part of the 2019/20 FBC commission.

Updates to the GRIP 2 report include:

- A review of assumptions, risks and cost exclusions to address developments since 2015, most notably:
  - A review of level crossing provision and associated closure schemes following a 2016 Network Rail level crossing closure study<sup>2</sup>.
  - Incorporation of costs for re-signalling the March East Control Area.
- A review of the costings associated with this study to reflect the above and also to bring the costing in line with the Rail Method of Measurement (RMM1) process.
- Light Rapid Transit feasibility is considered separately under a stand-alone report. Previous references to a light rail shuttle service have therefore been removed from this report.

A breakdown of the cost estimate for the preferred option (DS2) is shown in the table below. Note that these figures differ from those in the OAR as these exclude risk allowances and optimism bias.

#### Table 4.1: Service option estimates (excluding risk, optimism bias and opportunity)

Optio n Ref.	Service Pattern	Wisbech Station	March Station	Existing rail corridor	Extension to Wisbech Centre	Total
DS2	2tph Wisbech to Cambridge	£5,240,870	£18,154,615	£117,440,013	£26,140,499	£166,975,997

Source: Mott MacDonald

From the perspective of design and technical feasibility, the GRIP 2 Heavy Rail Feasibility Report considers potential service patterns and station locations, supporting the development of the options assessment process set out in the OAR. The report describes the existing conditions, the infrastructure works required to implement the various service options and outlines the likely costs of each of the shortlisted options.

#### 4.2 Conclusions

The GRIP 2 design development work confirmed that there are a number of viable engineering and timetable options for the re-instatement of a passenger service to Wisbech. However, as noted above, Network Rail have previously stated that the timetable alterations for a service

<sup>&</sup>lt;sup>2</sup> March to Wisbech Line Reopening – GRIP 2 Level Crossing Closure Feasibility Report (NR, April 2016)

from Wisbech to Cambridge are not deemed possible at this time as this is not seen as best use of current infrastructure on what is an already-constrained network. The capacity upgrade proposals for the Ely to Ely North Junction area are therefore a key dependency for any proposed Wisbech to Cambridge rail service.

The study also concluded that the 22 existing level crossings between March to Wisbech will need to be closed, consistent with Network Rail's findings. Development of design for the level crossing schemes will be undertaken during the GRIP 3 stage of the project.

Key items identified for further development at the GRIP 3 stage of the project were:

- Coordination of development proposals with the Ely Area Capacity Enhancement scheme;
- Determination of whether any other project is likely to contribute to signalling upgrade costs at March East, reducing or removing the £16m to £20m cost of doing so from the project cost estimate;
- Investigation of opportunities generated by the overlap with proposals for dualling the A47, currently under development by the CPCA;
- The infrastructure layout at March station; and
- The risk to the scheme associated with changes to level crossing risk profiles between March and Cambridge/Peterborough Stations as a result of increased service frequency resulting from the March to Wisbech scheme.

#### **Key findings: Railway Operations Report** 5

The Railway Operations Report describes the railway operational analysis that has been undertaken to examine possible timetable patterns, service constraints and capacity for introducing a two train per hour (2tph) heavy rail (National Rail) service between Wisbech and March, and ideally running through to Cambridge. This analysis was taken into consideration in developing the preferred scheme option in the OAR, and is inputting into the GRIP 3 design and feasibility work and detailed scheme costings being developed in the FBC.

#### 5.1 Context

The principal operational factors analysed under this commission are:

- The current passenger and freight services at March and any pathing opportunities for additional services from Wisbech to operate through to Cambridge;
- The challenge of Ely North Junction prior to the Ely Area Capacity Enhancement programme (EACE) proposals;
- The development of an optimal infrastructure between March and Wisbech to enable robust and reliable operation of services from Cambridge to Wisbech, including consideration of:
  - Track layout and platform configurations at March Station;
  - What track and signalling alterations will be required at Whitemoor Junction. At present the yard layout ignores the existence of the Wisbech Line;
  - The development of an optimal passing loop design and location between March and Wisbech:
  - Wisbech Station track layout and platform configurations.

In assessing the potential operation of a train service from Wisbech to Cambridge, the following factors also need to be considered:

- Network Rail may require evidence that the addition of two trains per hour (2tph) between Wisbech and Cambridge to the existing and future timetable(s) will not have an adverse effect on performance and reliability.
- Post EACE, the aspiration is to significantly increase in the number of services stopping at and passing through March (e.g. additional Ipswich - Peterborough and freight services). It is necessary to consider the infrastructure demands at March imposed by other future services in conjunction with Wisbech to Cambridge services.
- There are 39 level crossings of various types between March and Cambridge. Each one of these will require risk assessments associated with the introduction of additional rail services. Any additional services running through the existing level crossings between March and Cambridge would increase level crossing risk and could trigger a requirement to upgrade these level crossings (e.g. replace with bridges).

#### **Conclusions** 5.2

The current restricted track layout and resultant pathing constraints at Ely North Junction mean that only one Wisbech – March – Cambridge service is currently possible per hour. This would require certain other services in the area are retimed. However, if the EACE project is implemented to provide adequate additional paths through Ely North Junction, in the future it

should be possible to operate 2tph between Wisbech and Cambridge as part of the available additional paths through Ely post EACE.

To deliver an interim solution, based on initial 2tph service between Wisbech and March, with one service operating through to Cambridge and one reversing at March, the following infrastructure is required:

- At March Station a reinstated Platform 3 is needed. A new operational platform at the West End of the old platform 3 should be re-instated, with an available capacity for a 2-Car Class 170 train and passive provision for a four car train over the longer term once demand suffices.
- 2. A revised track layout at March is required to serve a reinstated platform 3. The preferred option from an operational perspective is to re-open a bi-directional platform 3 with the track diverging from the Up Main at the approximate location of the existing March East Level Crossing. The final selection of a preferred track layout will be via a multi-criteria analysis as part of the GRIP 3 design process.
- 3. To accommodate a resilient 2tph operation on the single line between Whitemoor Jn and Wisbech, a passing loop will be required at Coldham.
- 4. A single platform is required at the new Wisbech Station. The new platform should be designed to accommodate a 2-car Class 170 train, with passive provision for future extension to accommodate a 4-car train.

Post EACE, the aspiration is to significantly increase the number of services stopping at and passing through March. This will significantly increase the utilisation of the existing infrastructure at March. Analysis has shown that accommodating these services is theoretically possible but will produce some performance/resilience challenges in the March area. A detailed risk assessment of the operational reliability at March considering the post-EACE train plan is not possible at this time but will be required at later stages of the March to Wisbech Transport Corridor project's development.

The 39 existing level crossings between March and Cambridge require risk assessment and could require upgrades to accommodate a post EACE train plan. Increased levels crossing risk is still an issue (although to a lesser extent) for any pre-EACE service pattern that runs 1tph March-Cambridge and 1 March-Wisbech shuttle. These costs would not necessarily be borne by the March to Wisbech Transport Corridor scheme, but DfT and Network Rail will need to consider how to manage this issue before approvals can be given for the March to Wisbech Transport Corridor scheme.

# 6 Key findings: Delivery Strategy

The purpose of the Delivery Strategy is to identify and assess potential approaches to deliver the preferred March to Wisbech Transport Corridor scheme option (DS2) that was identified in the OAR.

#### 6.1 Introduction

The draft Delivery Strategy sets out potential options for funding the scheme, the contractual and commercial arrangements that will need to be put in place, and the roles and responsibilities of the organisations that will deliver the March to Wisbech Transport Corridor scheme. Outputs from the Delivery Strategy are expected to be excerpted into the Financial Case and the Commercial Case of the scheme FBC.

Mott MacDonald was briefed by CPCA and CCC to consider so-called "third-party" (i.e. non-Network Rail) options for funding, delivering and operating the scheme. This reflects the combined authority's desire to progress the scheme rapidly and cost effectively, and also takes account of moves over recent years by the UK Government to encourage greater investment and contestability in the National Rail network.

#### 6.2 Funding and financing<sup>3</sup>

Mott MacDonald has developed a cash flow financial model to assess the affordability of the March to Wisbech Transport Corridor scheme. Two scenarios have been modelled:

- 1. Core Scenario: only committed development is included in the modelling of the scale of potential funding options. This is consistent with the assessment undertaken of the preferred option DS2 in the OAR and reflects the fact that other development proposals (such as Wisbech Garden Town) are not at a sufficient level of commitment.
- 2. Wisbech Garden Town Scenario: development associated with the proposed major Wisbech Garden Town (WGT) urban extension was included in the modelling of the scale of potential funding options.

The following potential funding streams were identified and modelled: passenger farebox (surplus from operating services); commercial income, station rental income and parking; business rates retention; and developer contributions.

Analysis of the identified funding streams showed that these sources could make a substantial contribution to funding the proposed scheme. However, on balance, it does not appear to be possible for the March to Wisbech Transport Corridor to be progressed solely as a third-party funded scheme. No credible proposition has been identified for a private investor in the scheme. In addition, the likely residual funding requirement for the CPCA is likely to be too high to be met by the combined authority from its existing funds.

The funding structure for the scheme is likely to include a combination of grant funding from one or more national government bodies and co-funding grants from local bodies, potentially with the latter contingent on future development and passenger revenues resulting from the project. This is similar to the funding structure used on other schemes being progressed by sub-national

<sup>&</sup>lt;sup>3</sup> For the purposes of this study, **funding** is defined as the source(s) of income or revenue needed to meet both capital and lifecycle costs of delivering the infrastructure elements of the scheme. **Financing** is how the upfront (primarily capital) costs of a project are met as they are incurred.

authorities around the UK, such as the Metrowest scheme under development by the West of England Combined Authority and North Somerset council.

For this transport corridor, a key next step will be starting to progress it through the Rail Network Enhancements Pipeline process. This is the process that rail projects need to follow to get access to DfT grant funding. Initial meetings with DfT officials have been arranged by CPCA officers to begin this dialogue, given the positive findings of the OAR and related studies.

A critical decision for Cambridgeshire authorities will be how far they wish to make a contribution to the scheme on the expectation that future rail-user and local taxation (from development in WGT) revenues will occur. These revenues only arise meaningfully in the WGT Scenario and are as yet uncertain. They may require borrowing to be undertaken by one or more local authority and agreement would also be needed with HM Treasury to ensure Cambridgeshire authorities were fully able to access the identified funding sources.

#### 6.3 Structuring and delivering the scheme

Options for delivering passenger services on the new rail line and on existing infrastructure between March and Cambridge have been considered.

#### Current status

The existing assets within the scope of the scheme have a variety of owners:

- March Station is in freehold possession of NR. The current holder of the Station Lease is Greater Anglia train operating company.
- The operational rail line between Whitemoor Junction and March Station is in freehold possession of NR.
- The disused rail line between Whitemoor Junction and Weasenham Lane in Wisbech is in freehold possession of NR.
- Lands to the north of Weasenham Lane in Wisbech identified for the scheme, including the site of the proposed station, are in a variety of private sector ownerships.

#### Infrastructure delivery structures

The most viable delivery structure appears to be a one that is more at arms-length from Network Rail than under traditional rail project delivery. This will help allow the scheme to get the focus required by CPCA for rapid, efficient delivery. This approach is consistent with work undertaken by CPCA and CCC to date in developing the scheme (such as through this study), as well as comparator schemes to open rail lines being led by other sub-national authorities.

Under this approach, CPCA will continue to lead the development of the scheme through the GRIP process, and help to identify and coordinate the funding package required for the scheme. How far CPCA leads detailed development, procurement and contract management of the infrastructure, using a third-party supply chain for delivery, as opposed to Network Rail using its established processes, is a decision that can be taken once the funding solution for the scheme has been confirmed.

Under either approach, it is likely that Network Rail would be best placed to operate the infrastructure once built in order to minimise interface risk.

#### Passenger service delivery

As well as building the required rail and related infrastructure, a decision will also be needed on how best to operate the new passenger services enabled by the line.

As a result of lower barriers to entry, operation as part of a rail franchise (or successor approach, following the ongoing Williams Rail Review) is recommended as the preferred option for passenger service delivery for the March Wisbech Transport Corridor scheme. The alternative approach (an "open access" service) would likely be time consuming and expensive to set up, and the market appetite for this is unclear in this area.

#### 6.4 **Programme and next steps**

As with any infrastructure project, detailed consideration is needed of the approach that will be taken to:

- Obtaining the required statutory and regulatory consents;
- How the scheme will be packaged and procured;
- Securing acceptance and commissioning of the project once built; and
- Post-construction, how the scheme will be operated and maintained.

The Delivery Strategy considers these issues in context of the recommended delivery structure for the project.

An indicative programme for delivering the scheme has been developed by Mott MacDonald, set out in **Table 6.1**. This implies the earliest time for completing the scheme, assuming funding can be secured, would be around 4.5 years from completion of the current study. In practice, given interfaces with other transport projects and uncertainty around funding options, sponsor approvals and the timetable for receipt of the required statutory consents, the project is likely to take longer to deliver than this.

#### Table 6.1: Indicate Programme for March to Wisbech Transport Corridor Scheme

Stage	Design and construction - Indicative duration	Statutory Process – Indicative duration
GRIP 3 - Option Selection & Full Business Case	12-15 months	
GRIP 4 – Single Option Development	6 months + 4 weeks NR approval	Prepare order documents and submit at end of Grip 4
GRIP 5 study – Detailed Design	9 months + 4 weeks NR approval	6-9 months Objection management and prep for Public Inquiry
Land Acquisition		9-12 months Public Inquiry and decision
GRIP 6 – Construction, Test	15 months construction	
and Commissioning	3 months route learning, rolling stock introduction, test & commission	

Source: Mott MacDonald

# 7 Summary of conclusions and next steps

#### 7.1 Initial conclusions

The OAR identified a number of options for the scheme. Consistent with DfT's TAG framework, these options were assessed against their ability to support the achievement of the scheme's objectives, an appraisal of the scheme's economic impacts and a high-level assessment of the deliverability of each option.

The OAR concluded that the preferred option (DS2) should be a National Rail-based option, with a new station in Wisbech in a central location which offers regular, direct services (2 trains per hour) between Wisbech and Cambridge. This option offers high value for money under DfT's TAG framework, with a benefit cost ratio of 2.5 - 3.0.

Following the GRIP 2 design development work, there appear to be viable engineering and timetable options for the re-instatement of a passenger service to Wisbech, consistent with the OAR's findings, however the Ely Area Capacity Enhancements are a key dependency for any proposed Wisbech to Cambridge rail service.

The current restricted track layout and resultant pathing constraints at Ely North Junction mean that only one Wisbech – March – Cambridge service is possible per hour, if certain other services in the area are retimed. However, if the EACE project is implemented to provide adequate additional paths through Ely North Junction, in the future it should be possible to operate 2 trains per hour between Wisbech and Cambridge.

The most efficient way to progress the scheme appears to be for CPCA to continue to progress it through its development phase, acting as the project's sponsor and delivery client. In addition to overseeing this critical feasibility work, CPCA will need to develop a funding solution for the scheme, which is likely, based on precedent schemes, to incorporate a variety of national grant sources combined with local contributions.

#### 7.2 Next steps

The key next step in the project development includes drawing together the findings and conclusions to date, including cost estimates and technical analysis, into a Full Business Case. This report, supported by more detailed feasibility analysis, is due to be submitted for review at the July CPCA Board meeting once line surveys and further Network Rail engagement have been completed.

CPCA have also indicated a desire to further engage DfT, ORR, DfT and TOC representatives in relation to the business case, particularly with a view to the project gaining programme entry for potential DfT funding via the RNEP process. These meetings are anticipated to take place during March and April 2020.



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TRANSPORT AND	AGENDA ITEM No: 2.3
INFRASTRUCTURE COMMITTEE	
6 MARCH 2020	PUBLIC REPORT

#### ST NEOTS RIVER GREAT OUSE NORTHERN CROSSING CYCLE BRIDGE

#### 1.0 PURPOSE

1.1. The report summarises work on the St Neots Foot and Cycle Bridge, and Regatta Meadows to date, confirms that the projected construction costs for the project now exceed the allocated budget and seeks a recommendation from the Transport and Infrastructure Committee to the Combined Authority Board that the scheme should not proceed as it no longer meets the requirements for Value for Money set out in the Combined Authority's Assurance Framework.

	DECISION REQUIRED			
Lea	d Member: James Pal	ner, Mayor		
Lea	d Officer: Paul Rayne Director	es, Strategy and Delivery		
Forv	ward Plan Ref: Insert ref no Key Decisi -P	on: No		
		Voting arrangements		
	Transport and Infrastructure Committee is mmended to:	Simple majority of all Members		
(a)	Note the report.			
(b)	Recommend to the Combined Authority Board that work on the St Neots Foot and Cycle Bridge should cease and the project be removed from the Combined Authority's Business Plan for 2020-21.			
(c)	<ul> <li>(c) Recommend to the Combined Authority Board that the remaining funding allocated to the project be re-allocated to projects within the St Neots Masterplan.</li> </ul>			

# 2.0 BACKGROUND

- 2.1. The Combined Authority is committed to the future prosperity and success of every market town in the county and is investing in making this a reality through the masterplan programme. This programme was piloted in St Neots as part of the Mayor's 100 Day Plan and the St Neots Masterplan for Growth was subsequently approved by the Combined Authority Board in October 2017. The St Neots Town Centre Cycle Bridge is not identified as a key project in the Combined Authority's Business Plan 2020-21.
- 2.2. At its meeting on 27 June 2018 the Combined Authority Board approved the £4.1m package of funding to deliver the first phase of the St Neots Masterplan. This first phase included a £3.1m contribution from the Combined Authority to the £4.6m scheme to provide a new foot and cycle bridge in St Neots town centre together with improvements to the riverside area.
- 2.3. At that time the Project demonstrated that it was affordable, and represented good value for money, whereby the benefits were greater than the cost of investment.

# **3.0 CURRENT POSITION**

- 3.1. Cambridgeshire County Council (CCC) received a feasibility report from the appointed contractor which indicated that the overall construction cost for the bridge would now be in the region of £7.4m, exceeding the allocated budget, by £3.7m.
- 3.2. A review of the project was undertaken by CCC which determined that the scheme had limited scope for value engineering or bringing the construction costs back in line to the approved budget.
- 3.3. This review also demonstrated that the increase in costs had resulted in a Benefit Cost Ratio (BCR) of less than one. Consequently, the project no longer meets the requirements of the Combined Authority's value for money assessment criteria.
- 3.4. Moreover, the low BCR makes further bids for monies being unviable for the Combined Authority and its partners. Therefore, funding is not available from other sources to close the funding gap.

# 4.0 RECOMMENDATION

4.1. The Combined Authority's assurance framework requires projects to have a BCR value of 2 and above unless there are exceptional circumstances which have not been identified in this case.

- 4.2. The challenge provided to the construction cost by Cambridgeshire County Council has not revealed any scope to reduce cost and therefore, the BCR remains less than one, making any bids to close the funding gap from the County Council or other partners not viable
- 4.3. The Committee is requested to approve the following recommendation,
  - (a) Note the report.
  - (b) Recommend to the Combined Authority Board that work on the St Neots Foot and Cycle Bridge should cease and the project be removed from the Combined Authority's Business Plan for 2020-21. The funding should be reallocated for projects within the St Neots Masterplan.

#### 5.0 FINANCIAL IMPLICATIONS

- 5.1. The footpath improvements were anticipated to take place this financial year (2019/2020) at a CPCA contribution of £600,000. The construction of the footbridge was expected take place next financial year (2020/21) with a £2.5m investment from the Combined Authority. Totalling £3.1m contribution.
- 5.2. The existing budget for the project consists of £1.2m from s106 developer contributions and £2.5m (excluding cost for the footway improvements on the waterfront) from Cambridgeshire and Peterborough Combined Authority. Compared to a total budget forecast of £7.4m leaving a shortfall of £3.7m.
- 5.3. The forecast of £7.4m comprises construction costs of £6.4m, the associated costs of £1m including completion of detailed design, planning and CCC project costs.
- 5.4. The project spend to date is £800k funded from the £1.2m s106 funding allocation.

# 6.0 LEGAL IMPLICATIONS

6.1. The Combined Authority's Assurance Framework imposes requirements as to Value for Money for Transport Schemes. Section 5 of the Framework includes the following as part of paragraph 5.8.2:

The Combined Authority will make proportionate and appropriate assessments of all business cases to ensure that any scheme below High VfM (BCR below 2, and accounting for significant non-monetised and key uncertainties), has evidenced strategic value, either to the benefit of achieving advancement of the devolution ambition, economically or housing, or national or wider regional importance for unlocking strategic passenger or freight movement through the combined authority region.

# 7.0 OTHER SIGNIFICANT IMPLICATIONS

7.1. The area where the bridge is to be located is a Conservation Area and therefore, Environmental Impact Assessments are required.

#### 8.0 APPENDICES

8.1. There are no appendices

Background Papers	Location
None	
	None



TRANSPORT AND INFRASTRUCTURE COMMITTEE	AGENDA ITEM No: 2.4
6 MARCH 2020	PUBLIC REPORT

#### A47 Dualling

#### 1.0 PURPOSE

1.1. To summarise progress on the A47 Dualling project to date and outline next steps.

	DECISION REQUIRED			
Lead	d Member:	James Palm	er, Mayor	
Lead	d Officer:	Paul Raynes Director	s, Strategy and Delivery	
Forv on F	ward Plan Ref: Insert ref no P	Key Decisio	n: No	
			Voting arrangements	
The Transport and Infrastructure Committee is recommended to:		A simple majority of members		
(a) Note the content of this report and proposed next steps.				

#### 2.0 BACKGROUND

- 2.1. The Mayor, Combined Authority and partner organisations have long recognised the strategic importance of the A47 to the regional and national economy. The Mayor has committed to a number of ambitious and strategic transport improvements including the dualling of the A47.
- 2.2. This scheme will provide:
  - (a) vital connectivity to the north of the Combined Authority area and will complement other Combined Authority transport and infrastructure priorities such as Wisbech Rail and the development of a new Garden Town at Wisbech.
  - (b) Enhancing the route is anticipated to stimulate economic growth in the north of Cambridgeshire and Peterborough Region. Notably in housing, education, employment and the agri-tech economy.

- (c) Provide a safer strategic route offering improved journey times and journey time reliability as incidents can be better handled by reducing diversion route lengths.
- 2.3. The commissioning of study work was a key commitment as part of the 100 day programme which led to £500,000 of Combined Authority funding being approved by the Combined Authority Board in June 2017 for the development of a Strategic Outline Business Case (SOBC) and Options Appraisal Report (OAR).
- 2.4. In June 2018 the initial SOBC was produced utilising local plan growth assumptions of approximately 20,000 homes for this corridor and demonstrated a strong strategic case for dualling the A47 between Thorney and Walton Highways.
- 2.5. As the study has progressed the full growth potential of the corridor has emerged. This could lead to significant new employment opportunities and a further 30,000 new homes. This has been sensitivity tested and further strengthens the case for dualling.
- 2.6. The Options Appraisal Report (OAR) which assessed the shortlisted 12 route options, recommends three identified route options to be considered for further development and future consultation.
- 2.7. In the paper presented to the Combined Authority Board in June 2018, Board approval was given to commence the procurement of the next stage of the project and engage with the Department of Transport.
- 2.8. In July 2018, the Mayor met Jim O'Sullivan (CEO Highways England) who welcomed the proposals and approved engagement with his wider team, to seek to establish these proposals within the Highways England Roads Investment Strategy 2 (RIS 2) period for development and design with a view to construction commencing in early RIS 3 (post-2025).
- 2.9. Engagement with Highways England and DfT established that for the scheme to be considered for inclusion in the RIS 2 period for development and design, the project would need to comply with the Highways England Project Control Framework (PCF) Stage 0. Moreover, the project would then be required to be independently reviewed via the Highways England Stage Gate Assessment Review (SGAR).

# 3.0 Progress to Date

3.1. The Combined Authority with the technical support of its partners including Cambridgeshire County Council and in collaboration with Highways England developed the PCF 0 documentation.

- 3.2. The PCF 0 documents underwent the SGAR and successfully achieved a Green status in December 2019. This therefore means that the project is in a position to progress to the next stage of development, PCF 1, Options Identification.
- 3.3. During the process of developing the PCF 0 documentation broad estimates were produced that are significantly higher than those proposed by the Combined Authority. For example, the proposed Route 1 option cost estimates are detailed in the table below:

	Best Case	Most Likely	Worst Case
CPCA	£350m	£600m	£800m
Highways England	£925m	£1,756m	£2,414m

- 3.4. Highways England's rationale for estimating significantly higher costs is the area's current designation as a flood zone, with a mitigation approach to managing the risk of flooding in their estimating is to assume that each option will require construction of a 5.83m high bank for the entirety of the route resulting in considerable amount of aggregate material, civil engineering and time.
- 3.5. CPCA, however, propose that a flood barrier or barrage north of Wisbech, currently being explored by Anglian Water as part of both the Wisbech 2020 vision and their own water management plans, will change the flood risk designation of the area removing the need for creating embankments, reducing material, civil engineering and time costs bringing the estimate in line with those suggested by the Combined Authority.
- 3.6. The current cost estimate for the flood defence is in the region of £150m £200m with a potential saving to the road scheme of circa £1.6bn on the worst-case cost estimate.
- 3.7. The Mayor and Combined Authority have continued to engage with both Highways England and DfT in December 2019 and January 2020 emphasising the need for the project to be included in RIS 2, for development and RIS 3 for Construction.

#### 4.0 Next Steps

- 4.1. It is proposed that the road scheme alongside the flood defence project should be progressed further. This in turn supports the Wisbech Garden Town development and generate economic growth in the north of the region.
- 4.2. The Mayor and Combined Authority will continue to engage with DfT prior to any announcements in relation to the RIS programme.
- 4.3. The current technical suppliers have been tasked with costing the PCF stages 1 & 2, this will support any future funding decisions should DfT defer the RIS 2 & 3 inclusion decision.

### 5.0 FINANCIAL IMPLICATIONS

- 5.1. The current 2019/20 financial year approval to spend is £410,000 with a forecast of £197,431, this variance is due to the delays in a decision from DfT and uncertainty as to whether additional work may be requested.
- 5.2. There is funding allocated in the Mid Term Financial Plan (MTFP) of £218,500 for next financial year subject to approval, if Highways England include this scheme into RIS 2, this budget will not be required going forward as it will most likely be funded by Highways England directly.
- 5.3. Should Highways England not include this scheme into RIS 2 we should consider maintaining momentum and continue to develop the PCF stage 1 Options Identification as a considerable amount of this work has already been completed in the original SOBC stage, we have commissioned the current supplier to estimate the costs to complete a PCF stage 1 suite of products in line with Highways England's requirements and this will be available in April. The current MTFP figure of £218,500, which is still within the original approved budget, would enable us to maintain momentum into the next phase whilst funding requirement is established and a supplier procured. Match funding would most likely be sought from DfT.

#### 6.0 LEGAL IMPLICATIONS

6.1. No direct legal implications at this stage.

# 7.0 OTHER SIGNIFICANT IMPLICATIONS

7.1. None at Present

#### 8.0 APPENDICES

8.1. Cambridgeshire and Peterborough Combined Authority Board Paper of 31 October 2018

Background Papers	Location
List background papers:	https://tinyurl.com/CPCAagenda31102018



TRANSPORT AND	AGENDA ITEM No: 2.5
INFRASTRUCTURE COMMITTEE	
6 MARCH 2020	PUBLIC REPORT

#### MARCH AREA TRANSPORT STRATEGY PROGRESS REPORT

#### 1.0 PURPOSE

- 1.1. This report summarises work on the March Area Transport Strategy (MATS) project to date and outlines next steps for consultation and early delivery of options for 'Quick Wins'.
- 1.2. The report recommends use of existing approved funds of £220,000 for early delivery of a number of 'Quick Win' schemes as a commitment to 'break ground' in the first half of the 2020/21 budget period. It also recommends developing up to six further schemes for short-term delivery.

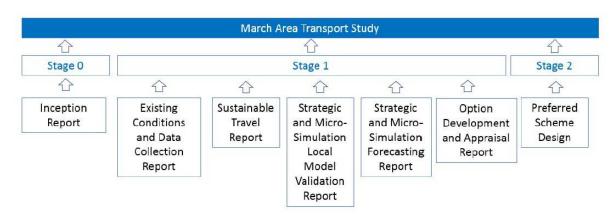
DECISION REQUIRED					
Lead	Lead Member: James Palm		er, Mayor		
Lead			nes, Director of Delivery &		
		Strategy			
Forv	vard Plan Ref: 2020/xxx	Key Decisio	n: No		
			Voting arrangements		
The	Transport and Infrastructure Cor	nmittee is			
reco	mmended to:				
(a)	Note this progress report		Simple majority of all Members		
(b)	Approve the study outcomes for consultation with the public	or			
(c)	Comment on the emerging opt for early delivery of "Quick Win first half of 2020/21 budget per				
(d)	Approve use of £220,000 from approved budget agreed previo Combined Authority Board tow Wins delivery.	ously by the			

# 2.0 BACKGROUND

- 2.1. The March Area Transport Strategy was first approved for inclusion in the Transport Programme at the March 2018 Combined Authority Board meeting. Cambridgeshire County Council took forward the study.
- 2.2. The vision of Fenland District Council is set out within their Local Plan (2014), which aims 'to maximise the potential of the area and deliver jobs, skills, improved housing and new infrastructure', making Fenland 'a better place to live, work and visit'.
- 2.3. The Local Plan includes the delivery of 4,200 new homes in March as well 30 hectares of employment land to provide new jobs.
- 2.4. The 2011 March Area Transport Study [MATS] provided the transport evidence base for the Local Plan and assessed the impact of traffic growth resulting from the Local Plan and proposed measures to improve the towns transport network under current and future traffic demand. The March Area Transport Study (MATS) builds upon this work and assesses potential improvement options to deliver this growth.
- 2.5. The March Options Assessment Report (OAR) sets out the development and assessment of improvements identified within the March Area Transport Study (MATS). The report details the technical work undertaken in relation to traffic modelling and economic assessment and makes recommendations for several packages of schemes to be taken forward for development. The Executive Summary of the Options Assessment Report has been provided as Appendix 1 to this report.

# 3.0 PROGRESS TO DATE

3.1. Cambridgeshire County Council has been funded by the Combined Authority to progress an Option Assessment Report and develop a range of potential options following the general process set out in Figure 1 below.



# Figure 1: MATS Stages of reporting

3.2. The team have developed eight packages of measures with the Member Steering Group (MSG) and other stakeholders that can both be delivered in the short and medium term.

- 3.3. The packages are inclusive of the following:
  - (a) Packages 1 and 1a do not include any changes to Broad St and both offer High value for money (VfM), with Package 1a (incl Northern Industrial Link Road) offering slightly better VfM
  - (b) Packages 2 and 2a include the proposed gyratory on Broad St and for reasons outlined in the Option Assessment Report are not considered viable
  - (c) Packages 3 and 3a are aligned with the Future High Street Funds proposal for providing public realm on Broad St and both offer high VfM
  - (d) Packages 4 and 4a include provision of public realm on Broad St with a new river crossing.
- 3.4. In addition to the above a variety of smaller scale Quick Win schemes were identified after discussions between officers and Members, and these have progressed separately from the main study. These quick win schemes comprise various small-scale measures such as signal improvements at junctions, better lighting and improvements for pedestrians and cyclists through new and upgraded crossings and pavements. A full list of these Quick Win schemes is included at Appendix 2 to the report.

# 4.0 EARLY DELIVERABLES: QUICK WINS

- 4.1. There is a commitment to deliver a proportion of the Quick Win schemes early during the first half of the 2020/21 budget period as identified as part of the March Area Transport study. Local members and officers have requested two schemes to be expedited to delivery within the next couple of months. In addition to these we have also identified for six further schemes to come forward from the Quick Wins list. These are denoted by the Amber rating in Appendix 2.
- 4.2. Members have already sought funding from the Local Highway Improvement (LHI) Fund and also Cambridgeshire County Council (CCC) are also making a contribution. The first two out of the ten are:
  - Norwood Ave installation of a new footway with associated street lighting. Estimated total cost £37.4k. CCC LHI contribution = £15k, remainder = £17.4k
  - Hundred Rd installation of new footway in combination with a traffic build out and street lighting. Estimated total cost £30.8k. CCC LHI contribution = £10k, remainder = £20.8k
- 4.3. The remainder of £38,200 is being sought from the CPCA MATS project.

# 5.0 NEXT STEPS

5.1. Cambridgeshire County Council will go to public consultation on the package of schemes in early 2020.

- 5.2. In addition, the two Quick Win schemes, Norwood Avenue and Hundred Road are an early deliverable, with a commitment to breaking ground in the first half of the 2020/21 budget period.
- 5.3. Cambridgeshire County Council will also continue engagement with key stakeholders and internal partners such as Road Safety, Traffic Signals, Bus Operator and Fenland District Council Officers any other partners (Future High Street Fund Team) whilst the design options are progressed.
- 5.4. Following consultation:
  - (a) further analysis of the potential options will be carried out;
  - (b) resulting in a final preferred design option which will establish a cost benefit ratio, construction programme and delivery costs;
  - (c) The business case for delivery of a final preferred option will then be submitted to the committee at the earliest opportunity, for approval for the detailed design and construction phase funding.
- 5.5. Public Consultation detailing options assessed in the study and seeking public opinion on the individual schemes is planned for a 6 week period commencing 28 March 2020. Public comments will not be sought on the packaging of schemes. Four public drop-in events are planned, after 20 April to avoid the school Easter holidays. These dates have been guided by the Member Steering Group.
- 5.6. Next steps for MATS are:
  - March 2020 report study outcomes to Transport and Infrastructure Committee, Fenland District Council Cabinet and March Town Council (MTC)
  - (b) March to April 2020 public consultation
  - (c) Summer 2020 report consultation outcome to Cambridgeshire CC Economy & Environment Committee, Transport & Infrastructure Committee, Fenland District Council Cabinet and March Town Council, and seek support for the recommended next phase of work
  - (d) Apply for funding for the next phase of work and develop further list of Quick Win schemes beyond the two that are to be delivered.

#### 6.0 FINANCIAL IMPLICATIONS

6.1. The total budget for this part of the study, as allocated by the Combined Authority, was £1.08m. The study is currently running under budget, with actual spend to date at approximately £660,000. The project is forecasted only to spend approximately £860,000 out of the £1,080,000 total budget. This includes the elements related to the consultation exercise and OAR update following consultation. Table 1 below represents actuals, forecast spend against the approved MFTP budget.

Budget Period	Spend (£)		
Actuals			
Year 2:18/19	£308,000		
Total Forecast Expected Spend (incl forecast)	£860,000		
Proposed Spend on Quick Wins	£220,000		
MFTP Approved Budget	£1,080,000		

# Table 1: Current Spend to Date and Forecast

- 6.2. The remaining existing budget of approximately £220,000 to be used towards delivery of the two Quick Wins and to also accelerate the designs of the remaining Quick Win scheme list for early delivery during the first half of the 2020/21 budget period. Additional scoping of the next stage of the business case and gap analysis to inform the next phase of works.
- 6.3. A value for money assessment has been produced with the following benefit cost ratio data suggesting that one of the proposed schemes offers very high value for money, two of the proposed schemes represent high value for money and one represents medium value for money as detailed below in **Table 2**.

Package	BCR	DfT Value for Money Statement		
1	2.3	High		
1a	2.5	High		
3	4.4	Very High		
3a	3.6	High		
4	1.1	Low		
4a	1.2	Low		

# Table 2: Value for Money Assessment of packages

# 7.0 LEGAL IMPLICATIONS

7.1. There are no direct legal implications at this stage.

# 8.0 SIGNIFICANT IMPLICATIONS

8.1. None

# 9.0 APPENDICES

- 9.1. Appendix 1 Executive Summary March Area Transport Options Assessment Report
- 9.2. Appendix 2 Quick Win Schemes

Source Documents	Location
1: March 2018 Combined Authority Board Paper	1: <u>CA Board Report March 2018</u>

# $\underline{1-}$ EXECUTIVE SUMMARY - MARCH AREA TRANSPORT OPTIONS ASSESSMENT REPORT

#### Introduction

The March Options Assessment Report (OAR) sets out the development and assessment of improvement options identified within the March Area Transport Study (MATS). The report details the technical work undertaken in relation to traffic modelling and economic assessment, and identifies several packages of schemes that should be taken forward for development.

#### **Assessment Process**

The assessment process used has been broken down into three distinct phases, with each informing the next. The three phases are:

- Strategic Assessment
- Operational Assessment
- Packaging Assessment.

#### Strategic Assessment

The Strategic Assessment, using a bespoke SATURN model developed for MATS has considered larger infrastructure improvements and has been used for two purposes. Firstly to undertake an economic assessment of the larger options to determine at an early stage if they offer value for money. Secondly, to generate different sets of traffic flows, which account for the rerouting created by larger options, for use in the Operational Assessment. Specifically, the Strategic Assessment has considered options for a:

- New River Crossing, both within March Town, and as part of an Eastern Bypass
- Northern Industrial Link Road
- A141 Re-alignment Options.

#### **Operational Assessment**

The Operational Assessment was undertaken using a bespoke VISSIM microsimulation model developed for MATS, and provides a detailed assessment of how each of the options assessed perform. The options that performed well within the Operational Assessment were then taken forward for use within the Packaging Assessment.

#### **Packaging Assessment**

The Packaging Assessment has taken the best performing options from the Strategic and Operational Assessments and combined these into packages of schemes that could be implemented in March. This Packaging Assessment was done using the MATS SATURN model. Multiple different packages have been assessed, representing different levels of impact within March. The Packaging Assessment again used economic assessments to determine whether each package offered value for money, and would stand a reasonable chance to secure funding.

# **Future High Streets Fund**

In parallel to the MATS project, Fenland District Council has developed a proposal for the Future High Street Fund (FHSF) to fundamentally change the way in which March functions as a Town Centre. This includes improvements in Broad Street which will improve pedestrian flow and footfall, changes to densification in use which will support a 24-hour economy and support resilience, and public realm improvements which will open up underused and derelict areas for commercial development.

The purpose of this investment is to arrest the decline in March Town Centre and enable the area to make the most of its untapped potential. This opportunity for funding has presented itself at an opportune time for March as it builds on the recently adopted Growing Fenland Strategy for the development of Fenlands towns and has linked closely with the development of the MATS.

There has been regular dialogue between the two projects to ensure that any proposals considered within this study for the Town Centre, and particularly Broad Street, are consistent with the FHSF aspirations.

# **Option Development**

A series of Option Development workshops were held to devise improvement options to be considered as part of the MATS. The workshops were attended by approximately twenty five stakeholders from various transport, planning and engineering disciplines, with delegates representing:

- Cambridgeshire County Council
- Fenland District Council
- Highways England
- King's Lynn and West Norfolk Borough Council
- Skanska / Capita.

During each workshop, attendees were divided into smaller groups, and each group was tasked with identifying and developing a range of improvement options. These options were then presented to the remaining groups, and were challenged by the rest of the delegates on technical or delivery grounds.

#### **Option Review**

Following the workshop, the options were reviewed by the project team and presented to the Member Steering Group for further discussion and approval to assess. Several options were discounted during this stage, with the remaining options taken forward for assessment in either the MATS SATURN model or the VISSIM model.

# **Further Option Evolution**

Many of the options also evolved during the assessment process, with amendments made based on the results of traffic modelling or highway design review. The options that emerged from the Strategic Assessment and the Operational Assessment are taken forward to the Packaging Assessment.

# Strategic Assessment Summary

Strategic Assessments have been undertaken on numerous options for a New River Crossing, Northern Industrial Link Road (NILR) and A141 Re-alignment. The assessments have used the MATS SATURN model to measure the impact of each of the options on a localised scheme level and on the wider network as a whole. Network wide model results have then been extracted for the options and these have been entered into the transport user benefit appraisal (TUBA) model, along with high level scheme cost estimates, to allow a value for money assessment to be undertaken, and from this a benefit to cost ratio (BCR) to be calculated. The secondary purpose of the Strategic Assessment is also to determine a set of traffic flows to be used in the Operational Assessment.

The Strategic Assessment of the New River Crossing options identified Option 10 (a new river crossing to the west of the existing Town Bridge) as the best performing option. Further sensitivity testing was undertaken on Option 10 to determine whether the option could support public realm improvements around the existing Town Centre Bridge, and specifically along Broad Street. The sensitivity testing indicated that there is the potential for public realm improvements to be made along Broad Street, at the expense of highway capacity, and possibly without the new river crossing. This is tested further within the Operational Assessment. All Eastern bypass options were identified in the Strategic Assessment as offering poor value for money and were not progressed further.

The Strategic Assessment of the NILR options identified Option 1 (the alignment running north-south along Hundred Road and east-west along Longhill Road) as the best performing option, which is consistent with the assessment undertaken in the 2011 March Area Transport Study.

The Strategic Assessment of the A141 Re-alignment options has shown that no options performed well within the economic assessment, largely due to the associated infrastructure costs, and therefore none of these options are being progressed further as part of this study. However, online improvements to the A141 have been considered, and these are discussed further within the Operational Assessment chapter.

The next stage of assessment was a detailed Operational assessment of the remaining options to identify a preferred set of options to be considered within the Packaging Assessment.

# **Operational Assessment Summary**

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The Operational Assessment has used the March VISSIM model to test the operational performance of options along the A141 corridor and within March Town Centre.

The Operational Assessment has identified that the following options offer operational benefits, serve to mitigate against future year growth, and are compatible with the FHSF aspirations for the Town Centre:

• Peas Hill Roundabout Option 5.2 (60m ICD), in conjunction with the A141 / Hostmoor Avenue roundabout (developer funded scheme)

Town Centre Package 2 (TC2), consisting of:

- Broad Street / Dartford Road / Station Road mini roundabout, with Broad Street made one lane in each direction (and the provision of public realm improvements)
- St Peter's Road Traffic Signal Improvements
- Town Centre Package 3 (TC3), consisting of:
  - o Station Road / Creek Road Mini Roundabout
  - Broad Street / Dartford Road / Station Road mini roundabout, with Broad Street made one lane in each direction (and the provision of public realm improvements)
  - A New River Crossing, joining Dartford Road to the north and City Road to the south, with a new roundabout at Burrowmoor Road / City Road and High Street
  - St Peter's Road Traffic Signal Improvements.

These options have been progressed to the Packaging Assessment along with the NILR Option 1 from the Strategic Assessment and the signalisation of the A141 / Twenty Foot Road from the Quick Wins work stream.

# Packaging Assessment Summary

The Packaging Assessment has taken the best performing options from the Strategic and Operational Assessments and combined these into packages of schemes that could be implemented in March. Multiple different packages have been assessed, representing different levels of extremity in terms of impact within March.

Each of the options within the packages has been costed using a high level costing tool, the costs provided for each option include:

- Design and Supervision Fees
- Stats, Landscaping and Preliminaries Allowance
- Land and Property Acquisition Allowance
- 20% Risk Allowance
- 44% Optimism Bias Allowance (66% for structures)
- Future year inflation (5% per annum) and Maintenance Costs (1.7% per annum) for use

in the Economic Assessment.

The Project Team developed a series packages which included a mix of short term and long term schemes. The packages have been built into the MATS SATURN model and traffic assignments have been run for the future year scenarios 2026 and 2031.

The Transport User Benefits Appraisal (TUBA) program was used to quantify the transport user benefits resulting from all packages, and to calculate a Benefit to Cost Ratio (BCR).

The TUBA assessment uses the output files from the March Area Transport Study (MATS) SATURN model to quantify the change in journey time and distance for each package compared to a Do Minimum Scenario, and hence quantify the journey time and vehicle operating cost benefits (if any). This information is then used to calculate a 60-year whole life Present Value of Benefits (PVB) which when compared to a Present Value of Costs (PVC) is then used to calculate a Benefit Cost Ratio (BCR).

The packages assessed are described beneath:

- Package 1 Signalisation of the A141 / Twenty Foot Road, Peas Hill Roundabout improvements (in conjunction with the developer funded roundabout at A141 / Hostmoor Avenue) and the High Street / St Peter's Road Signal improvements.
- **Package 1a** Package 1 plus the Northern Industrial Link Road.
- Package 3 Package 1 plus reducing Broad Street to one lane in each direction and replacing the signalised junction at Dartford Road / Station Road with a mini roundabout (FHSF Option).
- **Package 3a** Package 3 plus the Northern Industrial Link Road.
- Package 4 Package 3 plus the creation of a New River Crossing between Dartford Road and City Road.
- **Package 4a** Package 4 plus the Northern Industrial Link Road.

The resultant BCRs for these packages are shown below in Table 1.

Net Benefit/BCR Impact						
	Package 1	Package 1a	Package 3	Package 3a	Package 4	Package 4a
PresentValue of Benefits (PVB)	10225	23019	22711	35091	37163	47094
PresentValue of Costs (PVC)	4501	9428	5122	9679	33699	38682
NetPresent Value (NPV)	5724	13713	17589	25412	3464	8412
Benefit/Cost Ratio (BCR)	23	25	4 4	3.6	11	12
VFM Statement	High	High	High	High	Low	Low

#### Table 1: Package BCR Results

The assessment of the packages has shown that all serve to mitigate the impact of the Local Plan growth to varying degrees, and all are expected to perform well. Packages 1 and 1a do not include any changes to Broad Street, whereas the remaining packages facilitate the creation of a significant public realm along Broad Street which is in line with Fenland District Council's FHSF aspirations for the regeneration of March Town Centre.

Packages 3 and 3a are closely aligned to the FHSF proposals and have the highest BCRs relative to their counterpart Packages (Package 3 is higher than Package 1 and 4, Package 3a is higher than 1a and 4a). Packages 3, 3a, 4 and 4a all require the repositioning of March Town Fountain, which would be incorporated into wider public realm and landscape design. This study has not considered the detail of that

design, and this would need to be undertaken in consultation with environment, conservation and heritage specialists, as well public engagement in some form.

As a result of the Packaging Assessment, it is recommended that Packages 1, 1a, 3 and 3a are considered for further development.

Packages 4 and 4a provide the best network wide statistics, but involve significant disruption (and cost) within the Town Centre. It is recommended that these packages are not considered any further at this stage, but can be revisited in future should further capacity enhancements be needed in March Town Centre.

Of the packages recommended for further development, Packages 3 and 3a are closest to the FHSF aspirations for March Town Centre, and are considered the preferred Packages at this stage of the study. Package 3a builds upon Package 3 with the addition of the NILR, the cost of which suppresses the BCR in comparison to Package 3, however the addition of the NILR will generate far greater benefit than shown in the Package omitting it. The NILR will attract additional trips away from the residential areas (particularly Norwood Road) and the Town Centre to the south, and so should be investigated further.

### 2 – QUICK WIN SCHEMES: PROGRAMME OF DELIVERY

RED	FURTHER INVESTIGATION AND DESIGNS REQUIRED
AMBER	PRELIM, DETAILED DESIGN AND COSTS REQUIRED
GREEN	PRELIM DESIGN AND COSTS COMPLETED
GREY	COMPLETED

Quick Win Scheme	Description	Assessment Completion Date; Design and Target Cost
QW1A – Station	Improve safety for pedestrians.	Feb 20
Rd	Provide a zebra crossing	
QW2 – Upwell	Introduce gateway feature at edge of	Apr 20
Rd/Cavalry Drive	town, introduce 40mph speed limit	
	buffer and revise deflections on	
	Cavalry Dr roundabout	
QW11-13 March-	March-wide walking and cycling	Feb 20
wide	facility audit and produce	
Walking/Cycling	improvement delivery plan –	
Strategy	Potential small scale schemes for	
	delivery following report review	
QW15 – St Peter's	Improve safety for school children.	Apr 20
Rd	Provide a zebra crossing	
QW16 – March-	Improve signage for HGV drivers to	May 20
wide HGV Signage	reduce poor route choice	
QW19 – A141 /	Introduce street lighting at two	Aug 20
Burrowmoor Rd	junctions	
and A141/Knights		
End Rd junctions		
QW20 – Traffic	Re-validate signal timings on B1101	Completed May 19
signals on B1101	between St Peters Rd and Station	
	Rd	
QW21 – Norwood	Complete footway on southern side	Jan 20
Ave	of Norwood Ave	
QW22 – Norwood	Introduce traffic calming on three	Nov 19
Rd	sections of Norwood Rd	
QW23 – Hundred	Complete footway on eastern side of	Jan 20
Rd	Hundred Rd including build out	
	feature	



TRANSPORT AND INFRASTRUCTURE COMMITTEE	AGENDA ITEM No: 2.6
6 MARCH 2020	PUBLIC REPORT

#### LANCASTER WAY A10/A142 IMPROVEMENTS

### 1.0 PURPOSE

1.1. This report presents a summary of the position on the A10/A142 roundabout scheme to date. This scheme is being managed by Cambridgeshire County Council and funded through developer contributions supported by Business Board funding. It recommends that the Committee consider a further Combined Authority financial contribution to enable the scheme to proceed and agree to flexibility about project scope in order to manage remaining budget risks.

DECISION	REQUIRED		
Lead Mem	per:	Mayor James	B Palmer
Lead Office	ər:	Director of D	elivery & Strategy Paul Raynes
Forward Pl	an Ref:	Key Decision	: No
The Trans	port and Infrastructure Con	nmittee is	Voting arrangements
(a)	Note the report.		Simple majority of all Members
(b)	Recommend to the Comb Authority Board a new ad- budget of £ 1,168,243.20 single pot allocation to ref cost estimate, including a allowance.	ditional from the lect current	
(c)	Recommend flexibility to r scheme scope to a single if cost estimates increase	roundabout	

## 2.0 BACKGROUND

- 2.1. In 2014 Grovemere properties were allocated a s106 agreement to enable the Lancaster Way Enterprise Business Park to expand beyond 30,000ft2. This s106 agreement has a time constraint upon it which is at risk of expiring which is why this paper is being brought before the committee now. The risk of this project not receiving additional support is that the enterprise zone will be unable to expand and the potential job opportunities will be lost to the area.
- 2.2. Following the planning application and subsequent s106 in 2014, with funding approved by the Greater Cambridge Partnership (GCGP) with a funding agreement issued in September 2016.
- 2.3. An independent feasibility study was undertaken by Grovemere Properties in 2017/18 and subsequent funding approval at the Business Board and Combined Authority Board in January 2019, plus the Cambridgeshire County Council Economy and Environment Committee of May 2019. To incorporate the design of the Lancaster Way (circle 2 below) roundabout in addition to the BP roundabout (Circle 1 below) The study's scope was extended to include the Lancaster Way roundabout (circle 2) to improve PM peak access.



- 2.4. The proposed improvements will enable the delivery of the enterprise zone at Lancaster Way business park second phase extension:
  - (a) generating between 2,518 Full Time Equivalent (FTE ) jobs and 3.194 FTE jobs during the operational phase, once the full extent of the development is built out.
  - (b) Of the 2,518 to 3,194 FTE jobs 1,888 and 2,395 FTE jobs would be created within East Cambridgeshire.

2.5. The cost breakdown for the project is currently:

Scheme Elements		Original budget	Current Cost estimate
BP Roundabout		£900,000.00	£1,500,000.00
Lancaster roundabout	Way	£500,000.00	£500,000.00
Total			£2,000,000.00

#### 2.6. Current funding contributions

Scheme Elements	Contributor	Amount
BP Roundabout	Grovemere (LGF Approved funds)	£863,464.00
	East Cambridgeshire District Council	£130,000.00
BP roundabout total		£966,464.00
Lancaster Way	Cambridgeshire County Council Scheme development Fund	£60,000.00
Lancaster Way Total		£60,000.00
Combined Total		£1,026,464.00

- 2.7. The current cost estimate does not however allow for the following unknown risks:
  - (a) Cadent Gas main at the BP roundabout, current load calculations being undertaken to establish if this gas main needs concrete cover protection.
  - (b) Final design cost estimate following Tier 2 supplier procurement not available till mid May 2020
- 2.8. The current cost estimate shortfall is estimated at £973,536. But it would be reasonable to assume that this could increase due to the outstanding gas main risk and higher supplier costs post procurement.
- 2.9. It is requested therefore that the increased budget requested be the current cost estimate shortfall plus a 20% risk value, therefore amounting to a total sum of £1,168,243.20.
- 2.10. It is then requested that should the costs increase further the project scope is reduced to focus on the development of the the BP Roundabout alone to enable the fulfilment of the s106 agreement and the continued development of the Lancaster Way Enterprise Zone business park.

# 3.0 NEXT STEPS

- 3.1. Recommendations for approvals are being sought by this committee now to avoid any delays in programme delivery as there is no opportunity for CA Board Decision between the end of March 2020 and early June, when this scheme needs to be commencing construction.
- 3.2. A value for money statement will be produced and any funding approval recommended by this committee will be subject to a BCR of greater than 1 confirmed to the Chief Finance Officer before any funds are released.
- 3.3. The funding contribution will be paid to CCC. The County Council will continue to be responsible for managing and delivering the project.
- 3.4. The loading calculations for HGV turning over the existing gas main need to be undertaken by Cambridgeshire County Councils contractor and submitted to Cadent (Gas Utility Company) for their approval to proceed with or without cover protection, this will be reported on within March 2020.
- 3.5. Detailed design will be finalised by the Tier 1 contractor by 18 May 2020, to enable the procurement of the Tier 2 contractor to deliver the schemes. Construction is due to commence in June 2020. The project board chaired by Andrew Preston (CCC) who will ensure mitigations are considered and enforced to ensure no slippage to programme.

### 4.0 RECOMMENDATIONS TO THE COMMITTEE

- 4.1. The Transport Committee is invited to note the progress made to date.
- 4.2. The Transport Committee is requested to recommend the Combined Authority Board to approve a new budget of £1,168,243.20, from the single pot allocation, to be paid to CCC as a contribution to the total project cost.
- 4.3. The Transport Committee is recommended to approve flexibility to decrease scope to the BP roundabout alone, should costs increase above the approved budgets.

### 5.0 FINANCIAL IMPLICATIONS

- 5.1. The new budget request of £1,168,243.20 from the single pot allocation is to support the funding from the other sources to enable this scheme to proceed.
- 5.2. The budget will be spent in its entirety in the 2020/21 year
- 5.3. The original GCGP funding did not requirea business case , however a value for money statement will be produced and the Chief Finance Officer will need to be satisfied that the BCR is in excess of 1 prior to the release of funds. This is a requirement under the Combined authority Assurance framework :

 (a) allowing greater through flow of strategic passenger or freight traffic, or where there is evidenced strategic value associated with achieving the Devolution Deal ambitions of GVA or housing growth (for example providing main line rail access to support the growth of left behind areas)

### 6.0 LEGAL IMPLICATIONS

6.1. There will be a funding agreement associated with the new budget with commitments to ensure delivery to programme.

#### 7.0 SIGNIFICANT IMPLICATIONS

7.1. None

#### 8.0 APPENDICES

8.1. None

Source Documents	Location
None	



TRANSPORT AND INFRASTRUCTURE COMMITTEE	AGENDA ITEM No: 2.7
6 MARCH 2020	PUBLIC REPORT

### ELY AREA CAPACITY ENHANCEMENT PROGRESS REPORT

#### 1.0 PURPOSE

1.1 This report presents a summary of the work undertaken on the Ely Area Capacity Enhancement project to date, potential outcomes, and next steps.

DECISION	I REQUIRED		
Lead Member:		Mayor James Palmer	
Lead Offic	cer:	Director of I Raynes	Delivery & Strategy Paul
Forward F	Plan Ref:	Key Decisio	n: No
			Voting arrangements
recommen (a) (b)	<ul> <li>The Transport and Infrastructure Committee is ecommended to:</li> <li>(a) Note this progress report;</li> <li>(b) Give officers any necessary guidance on further engagement with Network Rail and other partners about this scheme;</li> <li>(c) Express a view on the objectives for any further funding for this project from the Combined Authority's budget in 2020-21.</li> </ul>		Simple majority of all Members

### 2.0 BACKGROUND

- 2.1. Governance of the delivery of this project is undertaken in the form of:
  - (a) A Task Force comprising funding members including Cambridgeshire and Peterborough Combined Authority, New Anglia Local Enterprise Partnership and Strategic Freight Management (DfT representing the freight industry) plus non funding partners to include Norfolk and Cambridgeshire County Councils, West Suffolk Council, and representatives from the passenger and freight rail companies;
  - (b) A Programme Board comprising the funding partners, the programme Board instructs the DfT as Sponsor on the funders wishes in relation to the production of the business case.
- 2.2. The rail network within the Cambridgeshire and Peterborough Combined Authority region is considerably constrained due to the complex issues at Ely north and Ely Station, which include the need for:
  - (a) Improvement to structures to allow the removal of speed restrictions through Ely;
  - (b) Layout changes at Ely station;
  - (c) Signalling headway reductions, particularly for freight;
  - (d) Traction power upgrades;
  - (e) Interventions at the level crossings at Queen Adelaide and Kiln Lane;
  - (f) Improvements to other level crossings around Ely.
  - (g) Improvement to a significant number of rail crossings (specifically at Queen Adelaide and Kiln Road), some of which have safety concerns and so speed limits as low as 20mph are set.
- 2.3. There have been numerous historical studies in relation to the corridors that include Ely Junction, but to date none have developed into physical improvement delivery.
- 2.4. The Combined Authority's objectives are:
  - (a) To ensure access is maintained for residents at Queen Adelaide in any resulting solutions.
  - (b) To support solutions that enable increased track speed
  - (c) To support the upgrading of structures, track and signalling to modern standard.
  - (d) To enable additional freight and passenger services between Peterborough and Cambridge
  - (e) to enable additional stopping services at Whittlesea, March and Manea
  - (f) To increase the number of passenger services at all stations throughout the 24 hour period

## 3.0 PROGRESS TO DATE

- 3.1. The governance of work on Ely Junction is complex. While Network Rail are being funded by the Combined Authority and other partners to undertake work on the scheme, they are by the Department for Transport. The Combined Authority commissioned additional work which Network Rail have now integrated into Network Rail's programme.
- 3.2. Network Rail under instruction from a programme board composed of the funding partners including Combined Authority, Greater Anglia LEP, SFM (DfT representing Freight), have been undertaking a Strategic Outline Business Case (SOBC) to:
  - (a) Identify and understand the challenges
  - (b) To identify opportunities and consider options to resolve
  - (c) Economic review to establish the potential benefits
  - (d) Understand the technical challenges and establish cost estimates
  - (e) Produce an SOBC with options for improvement and economic case to support this.

The Combined Authority's financial contribution to this work is set at £3.3m. The programme has been put back by Network Rail at DfT's request, so that the original reporting date of September 2019 has been moved to March 2020.

- 3.3. In addition, the Combined Authority produced an SOBC for the Queen Adelaide area to consider the current road and rail crossings to the Peterborough, Kings Lynn and Norwich Lines.
- 3.4. In July 2019, the Department for Transport approved £200 million as additional investment to improvements to the Ely Area to be delivered within the Control Period 6 (CP6) ending in 2024, Network Rail are considering the best use of this funding as advanced activity to any outcome proposals from the SOBC. This is additional funding to that which is proposed in the business case to unlock the additional train paths.
- 3.5. In October 2019, a commitment was made within Rail Network Enhancement Project (RNEP) report to progress the scheme from SOBC and into detailed design and Outline Business Case stage to improve both passenger and freight capacity through Ely. No corresponding commitment to fund delivery of the improvements identified in the SOBC has been made.

### 4.0 POTENTIAL OUTCOMES

- 4.1. There is current capacity through the Ely Area for:
  - (a) 8.5 Train Paths Per Hour peak period
  - (b) 6.5 Train Paths Per Hour off peak period.

This is currently being fully utilised, with 127 train movements per day. This is therefore a constraint on the Combined Authority's aim of increasing the

frequency of trains in the area, and of providing an adequate service on a restored Wisbech to Cambridge route.

- 4.2. The current study is likely to propose enhancements that will:
  - (a) increase to 11 Train Paths Per Hour (all day) of which 8 are passenger and 3 are freight
  - (b) with further potential for 14 Train Paths Per Hour (all day) 11 are passenger and 3 freight
- 4.3. Within the 14 train paths per hour (all day), the Peterborough to Cambridge route is likely to benefit from:
  - (a) An additional 0.5 train paths per hour Peterborough to Ipswich service, serving Peterborough, March.
  - (b) An additional 1 train path per hour on the Peterborough to Cambridge service serving Peterborough, March, Ely, Cambridge.
  - (c) An additional 1tph Norwich to Nottingham service, serving Ely, March, Peterborough
  - (d) An additional 1 tph Norwich to Cambridge service, serving Ely, Cambridge.
  - (e) An additional 1 tph Kings Cross to Kings Lynn service, serving Ely, Cambridge.
  - (f) Potential for 1 to 2 train paths per hour on the March (Wisbech) to Cambridge service.
  - 4.4 These improvements are likely to be expensive. If it could be assumed that the £200 million already committed by DfT to early delivery of the SOBC outcomes were all spent on increasing capacity we are advised that additional funding of up to £251million would be required to deliver the 11 trains per hour and up to an additional £351million to deliver the 14 tph.
  - 4.5 The SOBC on road/rail crossings at Queen Adelaide commissioned by the Combined Authority, which has already been completed, identifies solutions that would ensure residents continued to be able to travel by road between Queen Adelaide and Ely. These solutions are likely to cost in the region of £96.5m million.

#### 5.0 NEXT STEPS

- 5.1. We await the publication of the current business case and DfT decision over the coming few months.
- 5.2. It is estimated that the next stage of business case development will require an additional £13.1m, it is not clear at this stage if the Combined Authority is being requested to support this with a further contribution.
- 5.3. The task force is developing a letter for local MPs to lobby government to ensure the programme is maintained and where possible accelerated.

5.4. As previously stated in this report, any enhancements within this project are likely to be enablers to further growth, but significant investment is required on improving the line between Peterborough and Cambridge to truly unlock the benefits, to maximise the 11 to 14 tph.

## 6.0 RECOMMENDATIONS TO THE COMMITTEE

- 6.1. The Committee is invited to note the content of this report and to advise on any further matters that it wishes officers to raise with Network Rail and other partners.
- 6.2. It is critical for Rail to be considered as any part of the Combined Authority's future integrated transport solution particularly in the north of the region and Ely is a key to unlocking this.
- 6.3. The Combined Authority as a major funder of this project, led by with the Mayor, continues to lobby for rail improvements along this corridor and especially at Ely.
- 6.4. The combined authority continues to stress the need to maintain access for the residents at Queen Adelaide.

### 7.0 FINANCIAL IMPLICATIONS

- 7.1. The current funding of £3.3 million was originally approved by the LEP, now the Business Board. Actual costs as at end of November 2019 were £1.16 million, because of the delay to Network Rail's work identified at paragraph 3.2 above.
- 7.2. The MTFP includes a further £4.1 million, which is still subject to Board approval. The Committee may wish to consider how to ensure that further CA funding of this scheme can most effectively ensure that it focusses on benefits for the Cambridgeshire and Peterborough Combined Authority region.

### 8.0 LEGAL IMPLICATIONS

8.1 There are no direct legal implications at this stage

### 9.0 SIGNIFICANT IMPLICATIONS

9.1. None

#### 10.0 APPENDICES

10.1. None

Source Documents	Location
1. RNEP Autumn update	https://www.gov.uk/government/publications/rail- network-enhancements-pipeline-autumn-2019- update



TRANSPORT AND INFRASTRUCTURE COMMITTEE	AGENDA ITEM No: 2.8
6 MARCH 2020	PUBLIC REPORT

# LOCAL TRANSPORT PLAN AND THE CAMBRIDGESHIRE AUTONOMOUS METRO

#### 1. PURPOSE

1.1. To seek agreement that existing GCP CAM schemes be considered in the context of a Local Transport Plan sub-strategy setting out the vision for the CAM metro as a whole; and to propose short term public transport improvements between Cambourne and Cambridge.

DECISION REQUIRED	
Lead Member:	Mayor James Palmer
Lead Officer:	Paul Raynes
Forward Plan Ref:	Key Decision: Yes
The Transport and Infrastructure Com	
recommended to:	Simple majority of all Members
(a) Commission the preparation of a L strategy setting out the vision for th metro as a whole, against which se contributing to the CAM can be con and	ne CAM chemes
(b) Authorise officers to propose short transport improvements between ( and key employment sites in Cam	Cambourne

# 2. BACKGROUND

- 2.1. The Mayor has written to the Greater Cambridge Partnership in his capacity as Chairman of the Local Transport Authority making it clear that he does not support the GCP's proposals for public transport between Cambourne and Cambridge in their current form.
- 2.2. Following the recent announcement of a choice of the alignment for East-West Rail, the Mayor said that "CAM will deliver a world-class mass transit system that will complement the new rail link, serving the smaller communities that the heavy rail line will pass without stopping. With so many new transport projects underway in this area, it is critical that we who are responsible for delivery think strategically about how plans relate to and connect with each other, to ensure the minimal disruption and the best possible service for the people and communities we serve". It clear that the interaction between the proposed Cambourne to Cambridge scheme and East West Rail needs to be fully understood to ensure that the two schemes will genuinely complement each other. It is also necessary that individual components of the CAM network should be fully integrated into the overall vision for the metro.
- 2.3. The Authority's first Local Transport Plan (LTP) for Cambridgeshire and Peterborough was approved by the Board in January 2020. It is envisaged that the LTP will be supported by specific sub-strategies and policies. In order to ensure that individual components of the CAM metro network, such as the proposed Cambourne to Cambridge scheme, and driven by and fully compliant with the overall vision for the network, and to ensure that the recently announced East West Rail alignment complements the CAM network, it is desirable that a LTP sub-strategy for the CAM as a whole be developed urgently. Individual schemes which are intended to contribute to the CAM, other public transport proposals within the CA area, and CA positions on partners' schemes such as East West Rail, can then be evaluated against that strategy.
- 2.4. As proposed, the Cambourne to Cambridge scheme would not be delivering transport improvements until around 2025. In the short term, there is a need to improve public transport between Cambourne and key employment sites in Cambridge. This has been evidenced by the Combined Authority's recent bus survey. The Committee is therefore invited to agree that officers should develop proposals in liaison with bus operators and other partners for short term public transport improvements between Cambourne and key employment sites in Cambridge and bring those forward for agreement as soon as possible.

### SIGNIFICANT IMPLICATIONS

### 3. FINANCIAL IMPLICATIONS

3.1. None at this stage, although there could be a cost attached to short term public transport improvements. This would be accommodated within available budgets.

## 4. LEGAL IMPLICATIONS

- 4.1. The Peterborough and Cambridgeshire Combined Authority Order 2017 confirmed the Cambridgeshire and Peterborough Combined Authority as the Local Transport Authority for its area. The Combined Authority assumed powers and duties contained within Parts 4 (Local passenger transport services) and 5 [Financial provisions] of the Transport Act 1985, and Part 2 [Local transport] of the Transport Act 2000 (as amended), which included the duty to produce a Local Transport Plan.
- 4.2. Since the making of the 2017 Order the Combined Authority has delegated some of its transport functions to Cambridgeshire County Council and Peterborough City Council, which previously had responsibility for transport functions in the Combined Authority's area. At its meeting on 29 January 2020 the Combined Authority Board made further delegation of some of its transport functions to those authorities for the 2020/21 municipal year. The power to exercise the transport functions currently being exercised by the County Council and Peterborough City Council derive solely from the statutory transport powers of the Combined Authority. The Greater Cambridge Partnership, as a joint committee of the County Council, Cambridge City Council and South Cambridgeshire District Council, derives its authority to exercise transport functions from the transport delegation granted to the County Council by the Combined Authority. The Combined Authority would have to authorise any sub-delegation from the 2020/21 municipal year.
- 4.3. The Local Transport Plan adopted by the Combined Authority Board at its meeting on 29 January 2020 met the statutory requirement to set out its policies for the promotion and encouragement of safe, integrated, efficient and economic transport and its proposals for the implementation of those policies.
- 4.4. The Transport Act 2000 requires the Combined Authority to keep its Local Transport Plan under review and to alter it if it considers it appropriate to do so. As the policies in the Plan are developed it will become necessary to review the Plan and to consider whether the Plan should be expanded to provide more detailed proposals for the implementation of the policies. Any proposed alteration to the Plan would be subject to statutory consultation.
- 4.5. The Act also requires the Combined Authority's functions to be carried out so as to implement the policies set out in its Local Transport Plan.

### 5. OTHER SIGNIFICANT IMPLICATIONS

- 5.1. None
- 6. APPENDICES
- 6.1. None