

TRANSPORT & INFRASTRUCTURE COMMITTEE

Date: Wednesday, 14 September 2022 Democratic Services

Robert Parkin Dip. LG. Chief Legal Officer and Monitoring Officer

10:00 AM

72 Market Street Ely Cambridgeshire CB7 4LS

Huntingdonshire District Council Civic Suite Room A, Pathfinder House, St Mary's Street, Huntingdon, PE29 3TN

AGENDA

Open to Public and Press

Part 1: Governance Items

- 1.1 Apologies for Absence
- 1.2 Declarations of Interest
- 1.3 Minutes 13th July 2022

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1.4	Forward Plan - 18 August 2022	15 - 58
1.5	Public Questions Arrangements for asking a public question can be viewed here - Public Questions - Cambridgeshire & Peterborough Combined Authority (cambridgeshirepeterborough-ca.gov.uk) Part 2: Delivery	
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2.10	Bus Strategy	
	To follow	
	Part 3: Items for Information	
3.1	Date of next meeting: 16 November 2022	

COVID-19

The legal provision for virtual meetings no longer exists and meetings of the Combined Authority therefore take place physically and are open to the public. Public access to meetings is managed in accordance with current COVID-19 regulations and therefore if you wish to attend a meeting of the Combined Authority, please contact the Committee Clerk who will be able to advise you further.

The Transport & Infrastructure Committee comprises the following members:

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

Mayor Dr Nik Johnson

Councillor Ian Bovingdon

Councillor Marco Cereste

Councillor Peter McDonald

Councillor Chris Seaton

Councillor Neil Shailer

Councillor Katie Thornburrow

Councillor Sam Wakeford

Clerk Name:	Daniel Snowdon
Clerk Telephone:	01223 699177
Clerk Email:	Daniel.Snowdon@cambridgeshire.gov.uk



Cambridgeshire and Peterborough Combined Authority Transport and Infrastructure Committee: Minutes

Date: 13 July 2022

Time: 10.00am – 12.16pm

Present: Nik Johnson (Mayor and Chairman), Councillors Bovingdon, Cereste,

McDonald, Seaton, Shailer, Thornburrow and Wakeford.

Apologies: Councillor Wakeford, substituted by Councillor Davenport Ray.

34. Apologies and declarations of interest

Apologies were received from Councillor Wakeford, substituted by Councillor Davenport Ray.

Councillor Peter McDonald declared an interest as a member of Cambridgeshire County Council's Highways and Transport Committee.

Councillor Boden declared an interest in minute 38, Local Bus Service Assessment Framework as a trustee of FACT that received funds from the Combined Authority.

35. Minutes – 14 March 2022 and Action Log

The minutes of the meeting on 14 March 2022 were approved as an accurate record and signed by the Mayor, subject to the addition of Councillor Bovingdon who was present at the meeting.

The action log was noted.

36. Combined Authority Forward Plan – 6 June 2022

The Combined Authority Forward Plan was noted.

37. Transforming Cities Fund

The Committee received a report that provided a summary of the Transforming Cities Fund (TCF) programme and set out how the Combined Authority intended to manage it over the course of the financial year.

The Combined Authority had received a £95m share of an overall £1.08bn that had been allocated to six Mayoral Combined Authorities. A report had been previously

submitted to the Combined Authority Board that set out a programme. The Committee was informed that schemes within the programme were looking to be accelerated.

The presenting officer drew Members' attention to an amendment to recommendation c) to recommend to the Combined Authority Board.

During the course of discussion:

- Confirmation was sought by a Member that projects including Wisbech Access Strategy, March Junctions Project be progressed and consideration be given to the inclusion (if appropriate within TCF rules) to the Whittlesey Southern Relief Road Stage 1 report. It was confirmed that the Wisbech Access Strategy and the March Junctions Project were both included in the programme for accelerated delivery. Further work would be undertaken on the Whittlesey scheme to understand whether it qualified under the terms of the funding and whether it could be included in the list of prioritised schemes.
- The importance of connectivity was emphasised by a Member for areas such as Fenland and South Cambridgeshire.
- Attention was drawn by a Member to Cambridgeshire County Council and the interest it had as the Highway Authority. The work of officers was welcomed in developing the schemes and questioned whether if schemes that were unsuccessful could be retained for future consideration. The presenting officer confirmed that the work would not be forgotten, and the unsuccessful schemes would form a pipeline through which additional funding would be sought to take forward.

It was resolved unanimously to:

- a) Note the current position in relation to the delivery of the TCF schemes programmed for 2022/23;
- b) Agree to the revision to the programme and the process for this outlined within the paper; and
- c) Recommend the Combined Authority Board delegate responsibility to the Interim Head of Transport and the Chair of Transport and Infrastructure Committee in consultation with the Chief Finance Officer and the Monitoring Officer to finalise the potential replacement capital schemes (packages) for agreement by Leaders.

38. Local Bus Service Assessment Framework

The Committee received a report detailing the financial pressures on the bus network brought about by the reduction in support from central government and the potential impacts on the region's bus network. There was likely to be a funding request to

maintain services across the region following conversations with operators. The quantum of the potential cuts was being discussed and challenged with operators. Should the funding required exceed that available then it was likely cuts to services would need to be made and transparent criteria were being developed with partners, based on best practice, to facilitate decision making should the need arise.

During discussion, individual Members:

- Expressed disappointment that a bid for funding was unsuccessful due to it not being ambitious enough. It was appropriate that objective assessment criteria were being developed to assist the funding allocation. In the interests of fairness, it was requested that the cost per passenger journey per mile be assessed rather than simply cost per mile as otherwise rural bus services would be penalised significantly. It was also essential that the assessment took a broader view and included some subjectivity. The presenting officer explained that officers had sought clarity from the Government for why the bid for funding was unsuccessful and confirmed that subjective criteria such as mitigating social inclusion would be included in the assessment criteria. If the criteria were just based on numerical values, then the wrong results would be arrived at.
- Shared concerns regarding rural residents and the potential loss of services. The ability of rural residents to participate in active travel was much less than urban areas.
- Commented that removal of subsidy would cause huge disruption. The Greater Cambridge Partnership was continuing to work on supporting services but there would be a gap between when that funding would be available and questioned whether there was an ability to bridge it. The presenting officer confirmed that the GCP was included in discussions as were all constituent Councils on the assessment criteria.
- Questioned when funding would next be made available by government. Officers informed the Committee that meetings were due to take place with the Secretary of State at which financial support would be discussed.
- Highlighted rural isolation, and education transport. Cambridgeshire County Council spent large sums of money on education transport in areas where there was transport poverty in general and suggested that it be included within future work.
- Sought greater clarity regarding timescales. Members noted that an update would be presented to the July Combined Authority Board meeting. Criteria would then be discussed a Leaders' Strategy meeting on 10th August that would be presented to the August meeting of the Board. The timescales would allow for the 70 days' notice required of operators to deregister which marked the start of the process for discussions to take place and potential funding be put into place.
- Commented that the need for effective bus connectivity was now greater than ever given the pressures on the cost of living. A company in South Cambridgeshire was highlighted as an example of a company that was struggling due to delays with the

processing of licenses at the DVLA. Officers responded by agreeing to identify how the Combined Authority could play an active role in that area.

- Attention was drawn to the success of dial-a-ride minibuses within Cambridge City and the forecast increased use of the service. The Combined Authority had provided funding previously for zero-emission minibuses and questioned whether demand responsive transport could be extended into wider areas. Members noted that lessons were being learned from Demand Responsive Transport in west Huntingdonshire for how that could be rolled out more widely through the Bus Strategy.
- Noted that officers confirmed an update would be forthcoming on the trial of Demand Responsive Transport in Huntingdonshire and timescales would be confirmed.
 Regarding assessment criteria, it was essential that qualitative data be considered and developed.
- Commented that school transport being in some way integrated was sensible, however, expressed concern that Cambridgeshire County Council had taken the decision not to permit the payment of fares by individuals that did not qualify for transport when there were seats available forcing more children to travel to school by car.
- Requested that when submitting future bids and in future reports the provision of financial support for buses is separated from the type of fuel used.
- Highlighted the importance of rail transport and alternative fuels.

It was resolved unanimously to:

- a) Provide feedback on the need for and purpose of Local Bus Service Assessment Framework; and
- b) Agree for officers to continue finalise an appropriate assessment framework for subsequent approval by the Combined Authority Board members.

39. East Anglian Alternative Fuels Strategy (EAAFS)

The Committee considered a report which provided an update on the East Anglian Alternative Fuels Strategy (EAAFS).

During discussion of the report, Members:

- Cautioned that it was essential that realism be maintained as rural areas would not be able to transition as easily as urban areas.

- Expressed concern regarding the rush for electrification and the pressures that was placing on the national grid.
- Emphasised the importance of not pursuing electrification at the expense of other alternative technologies such as hydrogen power that was still under development.
- Commented that it was unclear as to whether peak consumption of oil had been reached and that there would be a need to use it in the future for longer than many would want.
- Noted the importance of engaging with the private sector to enable change in rural areas.
- Noted the work Cambridge City Council had undertaken with the private sector to deliver electric vehicle charging points in car parks. There was also a desire to provide community electric vehicles, but it was constrained by the availability of such vehicles.
- Noted that the Steering Group was currently an officer group, however, invites could be extended to Members.
- Drew attention to alternative, sustainable fuels that would be beneficial to people in rural communities.

It was resolved unanimously to:

- a) Note the progress on the EAAFS; and
- b) Recommend that the Combined Authority Board approve a six-week public consultation on the EAAFS.

40. Active Travel - Cambridgeshire

The Committee considered a report that sought approval to recommend the Authority Board to drawdown funding for the completion of a programme of active travel measures in Cambridgeshire.

During the course of discussion, Members:

- Sought an update regarding the timings of tranches 3 and 4. Officers advised that tranche 3 was announced in late May 2022 and the CPCA was awarded £635k for projects in Peterborough and tranche 4 had just been announced.
- Noted that the first project board was due to take place on 14 September 2022 and the importance of the pipeline of projects from Cambridgeshire County Council.

- Noted that Cambridgeshire County Council had schemes that were ready for delivery and the ambition to create a centre for excellence in active travel and was recruiting to achieve that.
- Acknowledged and welcomed the work of CamCycle in developing schemes and Cambridge Living Streets. The importance of including active travel within emerging local plans was emphasised for site development and identification.

It was resolved unanimously/majority to:

- a) Recommend to the Combined Authority Board the drawdown of £753,000 of Active Travel Funding from the Medium -Term Financial Plan to complete a programme of active travel improvements in Cambridgeshire; and
- b) Recommend to the Combined Authority Board the delegation of authority to the Interim Head of Transport in consultation with the Chief Finance Officer and Monitoring Officer, to conclude a Grant Funding Agreement with Cambridgeshire County Council to enable work to progress.

41. Transport Modelling for Cambridgeshire and Peterborough

The Committee received a report detailing a variation to the proposed approach to develop a transport model for the Cambridgeshire and Peterborough area. Under the Department for Transport framework for taking forward transport schemes, a compliant transport model was mandatory to test options and demonstrate benefits. The Committee and Combined Authority Board were previously informed that the Combined Authority would take forward the development of a cloud based 'data layer' to store transport movement data. With data collection and transport modelling being commissioned at a later stage, however the timelines of the Combined Authority and other partner's schemes required a swifter approach.

During discussion, Members:

- Thanked the presenting officer for the work being undertaken. Commenting further, it was suggested that delaying slightly may be beneficial and shouldn't be constrained by the end of the financial year. It was explained that previous years' underspend was being utilised due to still emerging from the impact of the COVID-19 pandemic. Discussions were taking place with the Department for Transport and although delaying would be considered, officers had to be mindful of the Transport Team. It was also possible to undertake a lower cost short-term data collection.
- Welcomed the expansion of the map because it was essential to consider the border areas of the county and welcomed taking rail and rail freight into consideration.

Welcomed the funding to develop the baseline data in Cambridge.

It was resolved unanimously to:

- Agree the change in delivery for a new transport model with Cambridgeshire County Council being commissioned to lead the delivery of the model on behalf of all partners;
- b) Recommend the Combined Authority Board agree the changes to the spending objectives for the initial transport model budget. Previously approved budget will now be committed to modelling activities of:
 - i. Collection of data to populate current and future transport models.
 - ii. Preparation of a full business case for the design and build of a new transport model; and
- c) Note the future arrangements for the review of the model, full business case, and sign-off of MTFP funds (subject to approval) at a future date.

42. Kings Dyke Levelling Crossing Closure

The Committee received a report that provided a progress update of the Kings Dyke lever crossing closure and sought approval for funding from the Medium-Term Financial Plan.

During discussion, individual Members:

- Cited former District and County Councillor, Ralph Butcher for his work on the Kings Dyke crossing.
- Sought clarity regarding the report recommendations and why the funding was being requested. Concern was expressed that Cambridgeshire County Council had requested additional funding but had not provided sufficient reason for the request which was unsatisfactory.
- Expressed concern that there had been previously no indication of overspend on the project.

Following discussion, it was proposed by the Chair, with the agreement of Members to defer the item to the next meeting of the Committee at which greater clarity would be provided on the financial details and any disputed matters that may need to be discussed in exempt session.

43. Peterborough Bus Depot Relocation

The Committee received a report detailing the summaries of the position in relation to development of the Peterborough Bus Deport Relocation. The Mayor informed the Committee of a procedural amendment to recommendation c) that should request the funding from the revenue budget.

During discussion Members:

- Expressed disappointment that there was not the capacity to have the work completed internally rather than externally. The presenting officer highlighted the staffing pressures within the team that made it not possible to complete the necessary work internally.
- Confirmed that the Finance Team that the funding had to come from the revenue budget.
- Need to recognise the value and lack of officer time in all they are being tasked to do.

It was resolved unanimously to:

- a) Note the current position in relation to the Peterborough Bus Depot Relocation;
 and
- b) Support the proposal to investigate alternative options for the provision of a bus depot in Peterborough
- c) Recommend the Combined Authority Board agree to release £40,000 of revenue funding drawdown from the Bus Reform budget to progress this project in a timely manner.

44. A141 St Ives Improvements

The Committee considered a report that summarised the work on the A141 and St Ives Improvements scheme and sought approval of the budget to progress the Outline Business Case.

During discussion individual Members:

- Emphasised the importance of the scheme to Huntingdonshire and sought greater clarity regarding the timescales for the project. The Committee was informed that the Outline Business Case would likely take around 2 years before moving to a full business case.

 Expressed concern regarding the environmental implications contained in the report, commenting that they did not appear very robust as the proposals would have a significant carbon impact. Officers explained that policies changed during Strategic Outline Business Case process and revisions would be made based on the new policies, including a 'do nothing' option that would provide more data on the carbon impact.

It was resolved unanimously to:

- a) Note the progress on the A141 St Ives Improvements scheme;
- b) Recommend the Combined Authority Board approve the release of £6m funding for the delivery of the Outline Business Case; and
- c) Recommend the Combined Authority Board delegate authority to the Interim Head of Transport and Chief Finance Officer to enter into Grant Funding Agreements with Cambridgeshire County Council.

45. Performance and Finance Report

The Committee received the September Performance and Finance report which presented the progress to date made against budgets set in January 2021. It included the summary of the year-to-date transport revenue budget; the RAG risk rating; statistics from the Five-Year Gateway Review results; and an expenditure timetable for the 2021-22 budget.

It was resolved to note the contents of the report.

44. Date of next meeting

It was resolved to note the date of the next Transport and Infrastructure Committee would be 14 September 2022.

Mayor

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Cambridgeshire and Peterborough Combined Authority Forward Plan of Executive Decisions

Published 18 August 2022

The Forward Plan is an indication of future decisions. It is subject to continual review and may be changed in line with any revisions to the priorities and plans of the CPCA. It is re-published on a monthly basis to reflect such changes.

Purpose

The Forward Plan sets out all of the decisions to be taken by the Combined Authority Board, Executive Committees or by way of a Mayoral Decision Notice in the coming months. This makes sure that local residents and organisations know what 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 and update reports

For transparency, the Forward Plan also includes all non-key decisions and update reports to be considered 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 Robert Parkin, Chief Legal Officer and Monitoring Officer for the Combined Authority.

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 <u>Edwina Adefehinti</u>, <u>Deputy Monitoring Officer</u>, at least five working days before the decision is due to be made.

Changes from the previous month's Forward Plan are shown in red text. An accessible version of the Forward Plan is available on request from Democratic Services.

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.

Standing items at Executive Committee meetings

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. Affordable Housing Programme Loans Update
- 2. Affordable Housing Programme Update on Implementation

Skills Committee

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

Transport and Infrastructure Committee

1. Performance and Finance Report

Combined Authority Board – 31 August 2022 Governance items

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
1.	Minutes of the Extraordinary meeting of the Combined Authority Board on 20 May 2022* and the minutes of the meeting on 27 July 2022* and the action log *Contains exempt information [see below]	Cambridgeshire and Peterborough Combined Authority Board	31 August 2022	Decision	To approve the minutes of the previous meeting and review the action log.	Relevant internal and external stakeholders	Richenda Greenhill, Democratic Services Officer	Mayor Dr Nik Johnson Councillor Lewis Herbert Statutory Deputy Mayor	It is not anticipated that there will be any documents other than the report and relevant appendices.

Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
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^{*}Minutes of the Extraordinary meeting of the Combined Authority Board on 20 May 2022 and minutes of the Combined Authority Board meeting on 27 July 2022

These minutes contain information which is exempt from publication under Part 1 of Schedule 12A of the Local Government Act 1972, as amended, in that it would not be in the public interest for this information to be disclosed (information relating to an individual; information which is likely to reveal the identity of an individual; information relating to the financial or business affairs of any particular person (including the authority holding that information). The public interest in maintaining the exemption is deemed to outweigh the public interest in publication.

2	. Annotated Forward Plan	Cambridgeshire and Peterborough Combined Authority Board	31 August 2022	Decision	To approve the latest version of the forward plan.	Relevant internal and external stakeholders	Robert Parkin Chief Legal Officer and Monitoring Officer	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
									appendices.

Combined Authority Decisions

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
3.	Green Home Grant LAD2 and Sustainable Warmth Separated into two separate key decision reports	Cambridgeshire and Peterborough Combined Authority Board	31 August 2022	Key Decision 2022/039	To receive an update on the delivery of the programmes and approve repayment of the forecast unspent grant funds to BEIS and to agree to the establishment of a Retrofit Programme Board with delegated powers that is recognised within the CPCA governance structure.	Relevant internal and external stakeholders	Roger Thompson Director of Housing and Development	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
4.	Sustainable Warmth See above. Separated into	Cambridgeshire and Peterborough Combined Authority Board	31 August 2022	Key Decision 2022/049	To agree to the establishment of a Retrofit Programme Board with	Relevant internal and external stakeholders	Roger Thompson Director of Housing and Development	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
	two separate key decision reports				delegated powers that is recognised within the CPCA governance structure.				other than the report and relevant appendices.
5.	Changing Futures New item	Cambridgeshire and Peterborough Combined Authority Board	31 August 2022	Decision	To approve the allocation of funds from the corporate response fund, of £60,000 per annum for three years (2022-2025, total £180,000) in support of the collaborative Changing Futures project to Cambridgeshire County Council - the accountable body.	Relevant internal and external stakeholders	Fliss Miller Interim Associate Skills Director	Mayor Dr Nick Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices to be published

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
6.	*Employment Matters New item *Exempt report [see below]	Cambridgeshire and Peterborough Combined Authority Board	31 August 2022	Decision	To consider recommendations on employment matters.	Relevant internal and external stakeholders	Karen Grave Interim Assistant Director HR	Councillor Lewis Herbert Statutory Deputy Mayor	It is not anticipated that there will be any documents other than the report and relevant appendices

Employment Matters

This report is exempt from publication under Part 1 of Schedule 12A of the Local Government Act 1972, as amended, in that it would not be in the public interest for this information to be disclosed (information relating to an individual; information which is likely to reveal the identity of an individual; information relating to the financial or business affairs of any particular person (including the authority holding that information). The public interest in maintaining the exemption is deemed to outweigh the public interest in publication.

Skills Committee – 5 September 2022

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
7.	Adult Education Budget Contract Awards for 2022-23 and Multi-year Funding allocations for Grant-holders	Skills Committee	5 September 2022	Decision	To consider proposals to approve Adult Education Budget Contract Awards for 2022-23 and Multiyear Funding allocations for Grantholders and make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders	Fliss Miller Interim Associate Skills Director	Councillor Lucy Nethsingha Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
8.	Employment and Skills Strategy Implementation New item	Skills Committee	5 September 2022	Decision	To approve the Employment and Skills Strategy Implementation Plan.	Relevant internal and external stakeholders	Fliss Miller Interim Associate Skills Director	Councillor Lucy Nethsingha Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
9.	Multiply adult numeracy programme: Grant and Contract Awards New item	Skills Committee	5 September 2022	Decision	To consider recommendations on the Multiply grant funding allocations to Further Education providers and the programme management approach and make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders	Fliss Miller Interim Associate Skills Director	Councillor Lucy Nethsingha Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
10.	Bootcamp Contract Award New item	Skills Committee	5 September 2022	Decision	To notify the Committee of the contracts to be awarded to Training Providers, including the types of Bootcamps to be delivered, following successful bids to the CPCA Wave 3 Skills Bootcamp procurement opportunity.	Relevant internal and external stakeholders	Fliss Miller Interim Associate Skills Director	Councillor Lucy Nethsingha Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
11.	Addressing Further Education 'Cold-Spots' in East Cambridgeshire and St Neots New item	Skills Committee	5 September 2022	Decision	To consider recommendations to create a new budget-line for 'Addressing Further Education Coldspots Projects - East Cambs and St Neots' and the allocation of £4.8m from Gainshare over three years and a request to draw-down £225,000 and procure consultants to develop the Business Cases.	Relevant internal and external stakeholders	Fliss Miller Interim Associate Skills Director	Councillor Lucy Nethsingha Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
12.	Department for Education (DfE) Funding and Accountability System: Second Consultation New item	Skills Committee	5 September 2022	Decision	To report the DfE's second Funding and Accountability Consultation and the impact of the proposed reforms under the Skills and Post 16 Education Act (2022) to the further education system and potential opportunities and risks for	Relevant internal and external stakeholders	Fliss Miller Interim Associate Skills Director	Councillor Lucy Nethsingha Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published

Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
				Cambridgeshire and Peterborough.				

Housing and Communities Committee – 12 September 2022

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
13.	24 High Street, Wisbech New item	Housing and Communities Committee	12 September 2022	Key Decision 2022/048	To consider making a grant for six one-bedroom affordable housing units inside a vacant property on Wisbech High Street, within a conservation area, to regenerate the High Street and increase footfall.	Relevant internal and external stakeholders	Roger Thompson Director of Housing and Development	Councillor Lewis Herbert Lead Member for Housing	It is not anticipated that there will be any documents other than the report and relevant appendices.
14.	Devolved funding to support community	Housing and Communities Committee	12 September 2022	Decision	To consider allocating devolved funding to support	Relevant internal and external stakeholders	Roger Thompson	Councillor Lewis Herbert	It is not anticipated that there will be any

	housing initiatives New item				community housing schemes.		Director of Housing and Development	Lead Member for Housing	documents other than the report and relevant appendices.
15.	Winding Up Angle Holdings and Angle Developments (East) (via H&CC) New item	Housing and Communities Committee	12 September 2022	Decision	To consider proposals for the winding up of Angle Holdings and Angle Developments (East) and make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders	Roger Thompson Director of Housing and Development	Councillor Lewis Herbert Lead Member for Housing	It is not anticipated that there will be any documents other than the report and relevant appendices.

Transport and Infrastructure Committee – 14 September 2022

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
16.	Local Bus Service Assessment Framework [May contain an exempt appendix]	Transport and Infrastructure Committee	14 September 2022	Decision	To consider proposals on the Local Bus Service Assessment Framework and the allocation of bus subsidy following the removal of the	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
	New item				Bus Recovery Grant and make recommendations to the Combined Authority Board.		Head of Transport		relevant appendices.
17.	Transforming Cities Fund New item	Transport and Infrastructure Committee	14 September 2022	Decision	To consider the recommended capital swaps to ensure the Transforming Cities Fund is spent in a timely manner and make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
18.	Kings Dyke: Request to draw down Subject to Approval Funding	Transport and Infrastructure Committee	14 September 2022	Decision	To receive an update on the progress of the Kings Dyke project, consider recommendations to approve the drawdown of subject to approval funding and make	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
					recommendations to the Combined Authority Board.				
19.	Snailwell Loop (Newmarket Curve)	Transport and Infrastructure Committee	14 September 2022	Decision	To consider proposals for the release of funds to develop a business case for options to re-open Snailwell Loop (Newmarket Curve) and make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
20.	Wisbech Rail Next Steps	Transport and Infrastructure Committee	14 September July 2022	Decision	To consider an update on the progress on Wisbech Rail and a funding request for next steps and make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
21.	Active Travel Grant Funding	Transport and Infrastructure Committee	14 September July 2022	Decision	To note the Active Travel Grant Funding award by government and the recommendation to approve the drawdown of the funding and make recommendations to the Combined Authority Board	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
22.	E-Scooter Trial Next Steps New item	Transport and Infrastructure Committee	14 September July 2022	Decision	To consider an update on the escooter trial in Cambridge and make recommendations to the Combined Authority Board on next steps.	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
23.	Peterborough Junction 3 New item	Transport and Infrastructure Committee	14 September July 2022	Decision	To consider recommendations to approve advance funding on active travel aspects through the	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
					drawdown of funds and make recommendations to the Combined Authority Board.		Interim Head of Transport		the report and relevant appendices.
24.	Fengate Phase 1 New item	Transport and Infrastructure Committee	14 September July 2022	Decision	To consider recommendations to approve advance funding on active travel aspects through the drawdown on funds and make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
25.	March Area Transport Scheme: Drawdown on funds for Active Travel	Transport and Infrastructure Committee	14 September July 2022	Decision	To receive an update on the Full Business Case, consider recommendations to approve drawdown on funds for active travel (walking and cycling) and make recommendations to	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.

Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
				the Combined Authority Board.				

Combined Authority Board – 21 September 2022

Governance items

	Title of report	Decision maker	Date of	Decision	Purpose of report	Consultation	Lead officer	Lead	Documents
			decision	required				Member	relevant to
									the decision
									submitted to
									the decision
									maker
26.	Minutes of the meeting on 27 July 2022 and Action Log	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To approve the minutes of the previous meeting and review the action log.	Relevant internal and external stakeholders	Richenda Greenhill, Democratic Services Officer	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
27.	Annotated Forward Plan	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To approve the latest version of the forward plan.	Relevant internal and external stakeholders	Robert Parkin Chief Legal Officer and Monitoring Officer	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
28.	Budget Monitor Update	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	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	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
	Cambridgeshire and Peterborough Combined Authority Constitution Removed – to be reviewed as part of the Improvement Framework	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To review and approve a series of proposed changes to the Constitution.	Relevant internal and external stakeholders including the Audit and Governance Committee	Robert Parkin Chief Legal Officer and Monitoring Officer	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
29.	Independent Remuneration Panel Report	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To consider the recommendations of the Independent Remuneration Panel in relation to the Mayor's allowance.	Relevant internal and external stakeholders	Robert Parkin Chief Legal Officer and Monitoring Officer	Councillor Edna Murphy Lead Member for Governance	It is not anticipated that there will be any documents other than the report and relevant appendices.

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
30.	Outcome of Improvement Framework Self-Assessment Exercise [May contain exempt appendices] New item	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To consider the outcome of the Improvement Framework Self-Assessment Exercise and agree next steps.	Relevant internal and external stakeholders	Gordon Mitchell Interim Chief Executive	Councillor Edna Murphy Lead Member for Governance	It is not anticipated that there will be any documents other than the report and relevant appendices.
31.	Local Improvement Agenda	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To agree the terms of reference and membership of the Local Improvement Board.	Relevant internal and external stakeholders	Gordon Mitchell Interim Chief Executive	Councillor Edna Murphy Lead Member for Governance	It is not anticipated that there will be any documents other than the report and relevant appendices.

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
32.	Progress Against Devolution Deal Commitments	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To provide a six- monthly update on progress with the Devolution Deal.	Relevant internal and external stakeholders	Paul Raynes Director of Delivery and Strategy	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.

Combined Authority Board Decisions

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
33.	Climate Commission	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/033	To approve the Business Case for revenue support to the Independent	Relevant internal and external stakeholders	Paul Raynes Director of Delivery and Strategy	Councillor Bridget Smith Lead Member for	It is not anticipated that there will be any documents

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
					Commission on Climate and approve £50k per annum from the Climate Commission subject to approval line in the medium-term financial plan (MTFP).			the Environment and Climate Change	other than the report and relevant appendices to be published.
34.	Climate and Strategy Business Cases September 2022	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/038	To approve climate and strategy business cases and funding from the subject to approval line in the medium-term financial plan.	Relevant internal and external stakeholders	Paul Raynes Director of Delivery and Strategy	Councillor Bridget Smith Lead Member for the Environment and Climate Change	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
	Chalk Streams Business Case Incorporated into the report above	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/034	Approve the Business Case for the Chalk Streams Programme and approve £420k per annum from Chalk Streams subject to approval line in the Medium- Term Financial Plan.	Relevant internal and external stakeholders	Paul Raynes Director of Delivery and Strategy	Councillor Bridget Smith Lead Member for the Environment and Climate Change	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.
35.	Market Towns Programme Financial Update September 2022 New item	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/043	To approve updated expenditure profiles for projects under the existing CPCA Market Towns Programme.	Relevant internal and external stakeholders	Roger Thompson Director of Housing and Development	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
36.	Growth Co Business Plan 2022/23	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To approve the Cambridgeshire Peterborough Business Growth Company Limited (Growth Co) Business Plan 2022/23.	Relevant internal and external stakeholders	Steve Clarke Senior Responsible Officer Local Growth Fund and Market Insight and Evaluation	Alex Plant Chair of the Business Board	It is not anticipated that there will be any documents other than the report and relevant appendices to be published

Recommendations from the Transport and Infrastructure Committee

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
37.	Local Bus Service Assessment Framework	Cambridgeshire and Peterborough	21 September 2022	Key Decision 2022/036	To consider and approve the Local Bus Service	Relevant internal and external stakeholders	Steve Cox Associate Director and	Mayor Dr Nik Johnson	It is not anticipated that there will be any

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
	[May contain an exempt appendix] Deferred from August	Combined Authority Board			Assessment Framework for the allocation of bus subsidy following the removal of the Bus Recovery Grant.		Tim Bellamy Interim Head of Transport		documents other than the report and relevant appendices.
38.	Transforming Cities Fund Deferred from August	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/035	To consider and approve the recommended capital swaps to ensure the Transforming Cities Fund is spent in a timely manner.	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
39.	Kings Dyke: Request to draw down Subject to Approval Funding	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To receive an update on the progress of the Kings Dyke project and consider recommendations	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
					to approve the drawdown of subject to approval funding.		Head of Transport		and relevant appendices.
40.	Wisbech Rail Next Steps	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/014	To provide an update on the progress of Wisbech Rail and seek funding approval for next steps.	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
41.	Snailwell Loop (Newmarket Curve)	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To approve the release of funds to develop a business case for options to reopen Snailwell Loop (Newmarket Curve).	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
42.	Active Travel Grant Funding	Combined Authority Board	21 September July 2022	Key Decision 2022/040	To note the Active Travel Grant Funding award by government and consider a recommendation to approve the drawdown of the funding.	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
43.	E-Scooter Trial Next Steps New item	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To provide an update on the escooter trial in Cambridge and approve next steps.	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
44.	Peterborough Junction 3 New item	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/044	To consider recommendations to approve advance funding on active travel	Relevant internal and external stakeholders	Steve Cox Associate Director and	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
					aspects through the drawdown of funds.		Tim Bellamy Interim Head of Transport		other than the report and relevant appendices.
45.	Fengate Phase 1 New item	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/045	To consider recommendations to approve advance funding on active travel aspects through the drawdown on funds.	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.
46.	March Area Transport Scheme: Drawdown on funds for Active Travel New item	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/046	To receive an update on the Full Business Case and consider recommendations to approve drawdown on funds for active travel (walking and cycling).	Relevant internal and external stakeholders	Steve Cox Associate Director and Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.

Recommendations from Skills Committee

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
47.	Adult Education Budget Contract Awards for 2022-23 and Multi-year Funding allocations for Grant-holders	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/013	To approve Adult Education Budget Contract Awards for 2022-23 and Multi-year Funding allocations for Grant-holders.	Relevant internal and external stakeholders	Fliss Miller Interim Associate Skills Director	Councillor Lucy Nethsingha Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
48.	Multiply adult numeracy programme: Grant and Contract Awards New item	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/042	To approve the Multiply grant funding allocations to Further Education providers and the programme management approach.	Relevant internal and external stakeholders	Fliss Miller Interim Associate Skills Director	Councillor Lucy Nethsingha Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
49.	Addressing Further Education 'Cold-Spots' in East Cambridgeshire and St Neots New item	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/047	To approve a new budget-line for 'Addressing Further Education Coldspots Projects - East Cambs and St Neots' and the allocation of £4.8m from Gainshare over three years and approve drawdown of £225,000 to procure consultants to develop the Business Cases.	Relevant internal and external stakeholders	Fliss Miller Interim Associate Skills Director	Councillor Lucy Nethsingha Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published

Recommendations from the Housing and Communities Committee

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
50.	Winding Up Angle Holdings and Angle Developments (East) (via H&CC) New item	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To consider proposals for the winding up of Angle Holdings and Angle Developments (East).	Relevant internal and external stakeholders	Roger Thompson Director of Housing and Development	Councillor Lewis Herbert Lead Member for Housing	It is not anticipated that there will be any documents other than the report and relevant appendices.

Recommendations from the Business Board

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
51.	Recycled Local Growth Fund (LGF) Project Proposals – Category 2 Call: Produce Hub	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Key Decision 2022/022	To approve LGF Recycled Funding Proposals received under the Category 2 funding call: Produce Hub	Relevant internal and external stakeholders including Skills Committee	Steve Clarke Senior Responsible Officer Local Growth Fund and Market Insight and Evaluation	Alex Plant Chair of the Business Board	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
52.	Enterprise Zones - Cambourne Business Park Boundary Change & Programme Update	Cambridgeshire and Peterborough Combined Authority Board	21 September 2022	Decision	To approve proposed changes to the boundary of Cambourne Business Park Enterprise Zone site, and to update members on the Enterprise Zones Programme evaluation review.	Relevant internal and external stakeholders including Skills Committee	Steve Clarke Senior Responsible Officer Local Growth Fund and Market Insight and Evaluation	Alex Plant Chair of the Business Board	It is not anticipated that there will be any documents other than the report and relevant appendices to be published

Skills Committee 7 November 2022

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
53.	University of Peterborough, Delivery Update and Future CPCA Role	Skills Committee	7 November 2022	Decision	To note the progress of the development of the University of Peterborough, its initial and potential performance against the original business plan objectives and to consider the future role of the CPCA in the further evolution and development of the University and make recommendations to the Combined Authority Board.	Relevant internal and external stakeholders, including the Business Board	Fliss Miller Interim Associate Skills Director	Councillor Lucy Nethsingha Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.
54.	University of Peterborough Programme Business Case	Skills Committee	7 November 2022	Decision	To consider the Programme Business Case for	Relevant internal and external stakeholders	Fliss Miller Interim Associate	Councillor Lucy Nethsingha	It is not anticipated that there will be any

Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
				the University of Peterborough and make recommendations to the Combined Authority Board.		Skills Director	Lead Member for Skills	documents other than the report and relevant appendices to be published

Combined Authority Board 30 November 2022

Governance items

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
55.	Minutes of the meeting on 28 September 2022 and Action Log	Cambridgeshire and Peterborough Combined Authority Board	30 November 2022	Decision	To approve the minutes of the previous meeting and review the action log.	Relevant internal and external stakeholders	Richenda Greenhill, Democratic Services Officer	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
56.	Annotated	Cambridgeshire	30	Decision	To approve the	Relevant	Robert	Mayor Dr	the report and relevant appendices. It is not
	Forward Plan	and Peterborough Combined Authority Board	November 2022		latest version of the forward plan.	internal and external stakeholders	Parkin Chief Legal Officer and Monitoring Officer	Nik Johnson	anticipated that there will be any documents other than the report and relevant appendices.
57.	Budget Monitor Update	Cambridgeshire and Peterborough Combined Authority Board	30 November 2022	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	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
58.	Approval of Procurement Policy	Cambridgeshire and Peterborough Combined Authority Board	30 November 2022	Decision	To approve the Combined Authority's procurement policy	Relevant internal and external stakeholders including the Audit and Governance Committee	Robert Parkin Chief Legal Officer and Monitoring Officer	Councillor Edna Murphy Lead Member for Governance	It is not anticipated that there will be any documents other than the report and relevant appendices.

Combined Authority Decisions

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
59.	Combined Authority Gainshare - Equity Fund Deferred from August	Cambridgeshire and Peterborough Combined Authority Board	30 November 2022	Decision	To approve the Strategic Outline Business Case for the Growth Works Equity Fund project and outline next steps.	Relevant internal and external stakeholders	Steve Clarke Senior Responsible Officer Local Growth Fund and Market Insight and Evaluation	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.

Recommendations of the Transport and Infrastructure Committee

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
60.	A16 Norwood Improvements Outline Business Case	Cambridgeshire and Peterborough Combined Authority Board	30 November 2022	Key Decision 2022/042	To receive an update on the outcome of the Outline Business Case and approve next steps.	Relevant internal and external stakeholders including the Audit and Governance Committee	Steve Cox Associate Director Tim Bellamy Interim Head of Transport	Mayor Dr Nik Johnson	It is not anticipated that there will be any documents other than the report and relevant appendices.

Recommendations from the Skills Committee

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
61.	University of Peterborough, Delivery Update and	Cambridgeshire and Peterborough	30 November 2022	Key Decision 2022/029	To note the progress of the development of the University of	Relevant internal and external stakeholders,	Roger Thompson	Councillor Lucy Nethsingha	It is not anticipated that there will be any

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
	Future CPCA Role	Combined Authority Board			Peterborough, its initial and potential performance against the original business plan objectives and to consider the future role of the CPCA in the further evolution and development of the University.	including the Business Board	Director of Housing and Development	Lead Member for Skills	documents other than the report and relevant appendices to be published.
62.	University of Peterborough – Programme Business Case	Cambridgeshire and Peterborough Combined Authority Board	30 November 2022	Decision	To approve the Programme Business Case for the University for Peterborough.	Relevant internal and external stakeholders	Fliss Miller Interim Associate Skills Director	Councillor Lucy Nethsingha Lead Member for Skills	It is not anticipated that there will be any documents other than the report and relevant appendices to be published.

Recommendations from the Business Board

	Title of report	Decision maker	Date of decision	Decision required	Purpose of report	Consultation	Lead officer	Lead Member	Documents relevant to the decision submitted to the decision maker
63.	Local Enterprise Partnership (LEP) Review and LEP Integration Plan Deferred from July	Cambridgeshire and Peterborough Combined Authority Board	30 November 2022	Decision	To consider the outcomes of the LEP Review and the Combined Authority's LEP Integration Plan as required for submission to Government.	Relevant internal and external stakeholders including Skills Committee	Steve Clarke Senior Responsible Officer Local Growth Fund and Market Insight and Evaluation	Alex Plant Chair of the Business Board	It is not anticipated that there will be any documents other than the report and relevant appendices to be published
64.	Profile of Investments Deferred from July	Cambridgeshire and Peterborough Combined Authority Board	30 November 2022	Decision	To note the profile of investments made by the Business Board.	Relevant internal and external stakeholders including Skills Committee	Steve Clarke Senior Responsible Officer Local Growth Fund and Market Insight and Evaluation	Alex Plant Chair of the Business Board	It is not anticipated that there will be any documents other than the report and relevant appendices

										to be published
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FP/08/22

Comments or queries about the Cambridgeshire and Peterborough Combined Authority Forward Plan

Please send any comments or queries about the Forward Plan to Robert Parkin, Chief Legal Officer and Monitoring Officer. We need to know:

- 1. Your comment or query.
- 2. How we can contact you with a response (please include your name, a telephone number and your email address).
- 3. Who you would like to respond to your query. If you aren't sure just leave this blank and we will find the person best able to reply.

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Agenda Item No: 2.1

Active Travel Grant

To: Transport and Infrastructure Committee

Meeting Date: 14 September 2022

Public report: Yes

Lead Member: Mayor Dr Nik Johnson

From: Anna Graham, Transport Programme Manager

Key decision: No

Forward Plan ref: N/A

Recommendations: The Transport and Infrastructure Committee is recommended to:

- a) Recommend that the Combined Authority Board approve the drawdown of £635,000 of Active Travel Capital Funding Grant allocated by the Department for Transport for two active travel measures in Peterborough. £625,000 for Thorpe Wood Cycle Way and £10,000 for School Streets.
- b) Recommend to the Combined Authority Board the delegation of authority to the Interim Head of Transport in consultation with the Chief Finance Officer and Monitoring Officer, to conclude a Grant Funding Agreement with Peterborough City Council to enable work to progress.

Voting arrangements:

For Item a) vote in favour by at least two thirds of all Members (or their Substitute Members) appointed by the Constituent Councils, to include the Members appointed by Cambridgeshire County Council or Peterborough City Council, or their Substitute Members

For Item b) a simple majority of all Members present and voting. To be carried, the vote must include the vote of the Mayor, or the Deputy Mayor when acting in place of the Mayor

1. Purpose

- 1.1 To seek approval from the Combined Authority Board to drawdown the £635,000 granted by the Department for Transport (DfT) from their Active Travel Fund for Thorpe Wood Cycleway and School Streets both in Peterborough.
- 1.2 Additionally, approval is sought from the Combined Authority Board to delegate authority to the Interim Head of Transport to conclude a Grant Funding Agreement in consultation with the Chief Finance Officer and Monitoring Officer. Enabling, the funding to be granted to Peterborough City Council.

2. Background

- 2.1 In May 2020 central government announced funding supporting Local Authorities to install emergency active travel measures as part of the government's response to the COVID–19 pandemic. Tranche 2 followed and funding for 2021 to 2022, announced in May 2022, supports the creation of longer-term active travel projects.
- 2.2 A new executive agency of the DfT, Active Travel England (ATE), has been established and expected to be fully rolled out in 2022-23. Active Travel England reviewed all Tranche 3 scheme proposals put forward for their compliance with LTN 1/20, for their usefulness to cyclists and pedestrians and for their ability to contribute to the wider active travel network.
- 2.3 Those projects which received funding were considered by Active Travel England to be of good quality, ambition and capable of meeting LTN 1/20 requirements. For the Combined Authority area, funding has been granted for two active travel measures in Peterborough.
 - Thorpe Wood Cycleway and.
 - School Streets
- 2.4 For those projects which did not receive funding, the DfT and ATE provided high level feedback which identified the issues that would need to be resolved if they are to be successful in future funding rounds. Common themes were identified such as, shared use paths, narrow cycle/footways, and lack of protection at junctions.
- 2.5 The Active Travel Management Combined Authority Paper of 28 July 2021 outlined the approach to developing the active travel fund bid, drawing on the draft Local Cycling and Walking Infrastructure Plan (LCWIP) for both Highway Authorities. The Peterborough draft LCWIP identified Thorpe Wood, Peterborough as a priority with a Benefit Cost Ratio of 2.5 high value for money. The economic appraisal, within the LCWIP, follows the principles set out by the Treasury in its 'Green Book' and developed in accordance with the approach set out by the DfT in its web-based Transport Analysis Guidance (WebTAG, updated 1 May 2019). Additionally, this scheme was processed through the Active Mode Appraisal Toolkit (AMAT).
- 2.6 The Thorpe Wood Cycleway looks to connect the replacement footbridge currently being progressed by the A1260 Junction 15 project with existing cycleways off Thorpe Wood Road, and into the Anglian Water Offices. The cycleway has potential for extension beyond this point should funding become available in the future. The plan attached in Appendix 1 shows the full potential length of the cycleway subject to future funding.

- 2.7 Thorpe Wood Cycleway received funding from Tranche 2 Active Travel Funding and preliminary design is underway. Peterborough City Council are working with Active Travel England who are currently reviewing the preliminary design. The addition of the Tranche 3 Active Travel Funding will support the project's progress into detailed design and construction.
- 2.8 School Streets sees temporary road closures outside the entrance of a school, enabling it to become a foot, or cycle or scoot zone during the schools opening and closing times. Encouraging active travel and reducing congestion and pollution outside the school entrances.
- 2.9 Funding from Tranche 2 enabled 11 schools to become 'School Streets' and the Tranche 3 funding enables these to transition from temporary to permanent arrangements by Traffic Regulation Order and permanent signage. In addition, Peterborough City Council would like to establish further school streets, where viable, with interested schools. These schemes are key fundamental components of the emerging strategy for the city as outlined in the Local Transport and Connectivity Plan.

3. Financial Implications

- 3.1 The Tranche 3 Active Travel Grant has been awarded by the Department for Transport for Thorpe Wood Cycleway at a value of £625,000 and to the School Streets to a value of £10,000.
- 3.2 Approximately £220,000 is expected to be spent in 2022/23 financial year and the remaining funding spent in 2023/24 financial year.

4. Legal Implications

4.1 The Combined Authority will enter into a Grant Funding Agreement after confirmation as fit for purpose by the Combined Authority's Legal Services. The recommendations accord with CPCA's powers under Part 3 and 4 of the Cambridgeshire and Peterborough Combined Authority Order 2017 (SI 2017/251)

5. Public Health Implications

5.1 Thorpe Wood Cycleway and School Streets seek to encourage active travel by providing improved and safe routes. Increasing those walking and cycling as the subsequent health and wellbeing benefits of exercise.

6. Environmental and Climate Change Implications

6.1 Encouraging active travel by providing cycle routes or safe zones seeks to influence travel choice and potentially lead to mode shift.

7. Other Significant Implications

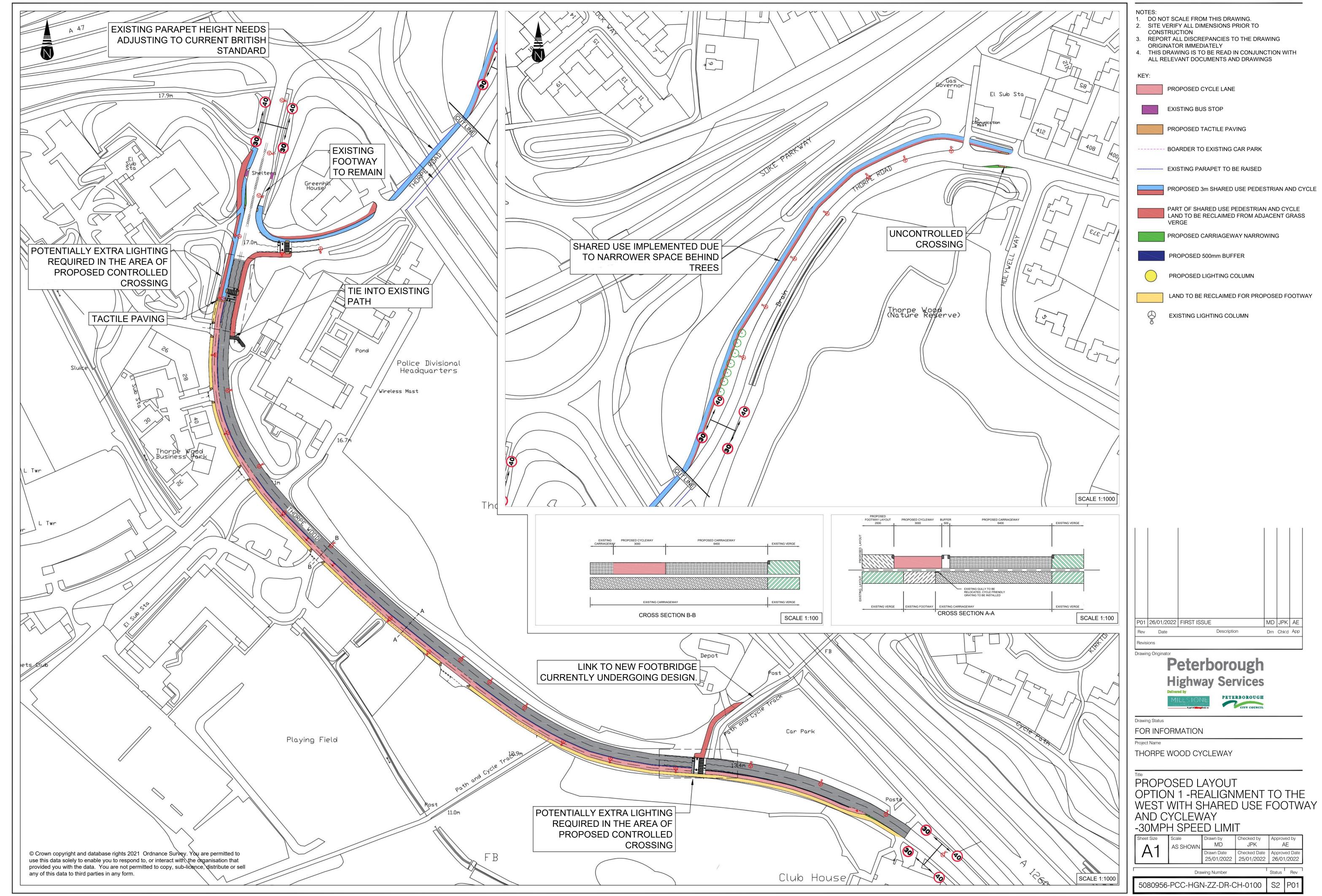
7.1 None at this time

8. Appendices

- 8.1 Appendix 1 Thorpe Wood Cycleway Plan
- 8.2 Appendix 2 Grant Funding Letter

9. Background Papers

- 9.1 Peterborough LCWIP <u>LCWIP (Aug 21) (peterborough.gov.uk)</u>
- 9.2 Active Travel Management 28 July 2021 Combined Authority Board Paper



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Department for Transport Great Minster House 33 Horseferry Road London SW1P 4DR

Tel: 0300 330 3000



Web Site: www.gov.uk/dft

18th March 2022

To: Local Authority Officers

Active Travel Capital Funding Grant award letter (2021-22): No 31/6014

Thank you for your bid for funding from the Active Travel Fund for a scheme/ schemes (see Annex A). I am writing with details of your authority's capital funding allocation for 2021/22. Your funding will be paid as a capital grant under Section 31 of the Local Government Act 2003. Section 31 terms and conditions are set out in Annex B. You are also required to accept the funding principles set out in the attached memorandum of understanding at Annex E.

As you will be aware the new executive agency of the Department for Transport, Active Travel England (ATE), has now been established in shadow form before its full rollout in 2022-23. The shadow body conducted an exercise to scrutinise all scheme proposals for their compliance with the new standards in Local Transport Note 1/20 (LTN 1/20), for their usefulness to cyclists and pedestrians and for their ability to contribute to a coherent wider network which can transform conditions for active travel in a place.

Where your scheme has received funding, the ATE considered that these schemes demonstrated good quality and ambition and are capable of meeting LTN1/20 requirements. ATE will continue to work with you to ensure high quality designs are delivered.

Where schemes within your bid have not been funded, the Department and ATE identified one or more issues and would require further evidence to be successful in a future funding round. Common issues identified were;

- Shared use paths
- Narrow cycleways/footways
- Lack of protection at junctions
- Peripheral locations low potential usage
- Poor value for money
- Schemes not forming part of a coherent wider network

Feedback will be provided on bids on request in due course. ATE will work with you to help you develop the schemes in your pipeline for the next three-year funding settlement.

Your grant is awarded on the understanding that your authority will deliver the funded schemes in conjunction with ATE and that your officers will work with ATE to resolve to ATE's satisfaction any scheme design shortcomings that they identify.

As we have made clear before, and as set out in Gear Change, any schemes delivered using DfT funding will have to comply with the Department's Cycle Infrastructure Design Guidance, LTN 1/20. Sustrans have been delivering bespoke training on LTN 1/20 and its tools which have helped empower and enable local authorities to deliver safe, inclusive and good quality cycle infrastructure. Training comprises a one-day interactive course. Courses are available for single authorities or combined authorities and will be for 8 to 12 places for each authority per course. Sustrans will be in touch with your named officer directly to provide information on how to join this course.

We appreciate that, during implementation, opportunities or challenges may arise that require a change to your project in order for outcomes to be realised to their full potential. Any material changes should be reported to the DfT/ATE by email to walking.cycling@dft.gov.uk. Should your ability to deliver the objectives for which funding was awarded be significantly compromised, the Department reserves the right to amend future funding provision as appropriate.

Funding must wherever possible be committed by the end of the 2022/23 financial year, and schemes delivered as soon as reasonably possible thereafter, but where this is not possible authorities should discuss options with the Department's/ATE officials.

All authorities will be expected to participate in monitoring and evaluation activities for the ATF. Monitoring data will likely be collected every 6 months (to track progress and spend). Data on the deliverables that have resulted from this fund (or to which this fund has contributed) in the form of output monitoring data. This will need to be submitted to Department at the point that the majority of schemes are complete and at 6 and 12 months after completion.

In addition, all authorities should formally evaluate schemes funded via this grant, and some projects will be identified for inclusion in the national programme-level evaluation. The level of evaluation required will be proportionate to the size, value and nature of individual schemes and programmes. Specific data will need to be provided to DfT to feed into a meta-analysis of the ATF. A summary of this is presented below.

Authorities delivering schemes and programmes costing more than £2m are required to design and implement their own M&E processes to measure the outputs, outcomes and impacts of the intervention and submit these to DfT for review prior to the start of construction. Authorities are also strongly encouraged to carry out a formal evaluation of schemes and programmes valued at £1-2m. Where feasible they should design and implement a proportionate M&E programme to understand the impact of the intervention.

DfT are commissioning a National Evaluator (NE) who will have responsibility for programme-level evaluation of the ATF. This will include conducting the meta-analysis of higher value interventions as well as evaluation of a sub-set of lower-value schemes and those considered to be novel or contentious. The NE will select a sample of schemes to include in the national evaluation. All authorities should be prepared to participate in the national evaluation, and work with the NE to develop appropriate monitoring and evaluation plans if selected. The national evaluation will be funded by

DFT. To avoid duplication of effort and ensure value for money to the taxpayer, the NE will draw on evaluation data collected as part of evaluations undertaken by authorities where available. The Department will be in contact with authorities delivering higher value schemes and programmes and to those selected to be part of the national evaluation about their plans.

Our grants may be audited by the Department or external auditors, and if this is the case, the Department will notify your authority in writing. Authorities are expected to comply with any such arrangements. You should familiarise yourselves with the Fraud Act 2006 and the Bribery Act 2010 when making claims, and in provision of funding to partner organisations. Personal information collected for grant purposes will be used by the Department for Transport for administering the fund. We may share information for the purposes of countering fraud or otherwise as required or permitted by law.

The Department will observe its obligations under the Data Protection Act 1998 in responding to requests made under the Freedom of Information Act 2000. Where a request includes personal information that you have provided, we will consult you before deciding whether such information should be disclosed.

Please sign and date the grant acceptance slip at Annex D and return it to the walking.cycling@dft.gov.uk along with notification of publication of consultation plans (a weblink would suffice) and any further evidence required by Wednesday 23rd March. The grant will be paid in a one-off payment in full on receipt of your signed acceptance slip and other documentation.

Yours sincerely.

Rupert Furness

Deputy Director, Active Travel, DfT

Annex A – List of funded schemes

Cambridgeshire and Peterborough CA

Thorpe Wood Cycleway Phase 2 School Streets

Value £ 635,000

Annex B: Terms and conditions

We expect each local authority to use this funding as proposed in their completed proforma and as agreed with Active Travel England.

This funding will be paid via a grant under Section 31 of the Local Government Act 2003. Available online here: http://www.legislation.gov.uk/ukpga/2003/26/section/31

For any grant, Government is required to monitor the effectiveness of any public investment. We therefore expect you to have robust monitoring and evaluation plans in place. Funding for the second tranche of money will be conditional on demonstrating that bids represent value for money and evidence of suitable evaluation plans.

Complying with the UK's international obligations on subsidy control.

You should ensure that you are familiar with the latest guidance on subsidies for public authorities. Further guidance is available at:

https://www.gov.uk/government/publications/complying-with-the-uks-international-obligations-on-subsidy-control-guidance-for-public-authorities

ACTIVE TRAVEL FUND (CAPITAL) GRANT DETERMINATION (2021-22): No 31/6014.

The Minister of State for Transport ("the Minister of State"), in exercise of the powers conferred by section 31 of the Local Government Act 2003, makes the following determination:

Citation

1) This determination may be cited as the Active Travel Fund Determination (2021-22) [No31/6014].

Purpose of the grant

2) The purpose of the grant is to provide support to local authorities in England towards expenditure lawfully incurred or to be incurred by them.

Determination

3) The Secretary of State determines as the authorities to which grant is to be paid and the amount of grant to be paid, the authorities and the amounts set out in this letter.

Grant conditions

4) Pursuant to section 31(3) and 31(4) of the Local Government Act 2003, the Secretary of State determines that the grant will be paid subject to the conditions set out above.

Treasury consent

5) Before making this determination in relation to local authorities in England, the Secretary of State obtained the consent of the Treasury.

Signed by authority of the Minister of State for Transport

Rupert Furness

Deputy Director, Active and Accessible Travel, Department for Transport

18 March 2022

Annex C

Active Travel Capital Funding 2021-22:

Consultation Requirements for Local and Combined Authorities

All grant recipients are required to undertake the following actions:

1. Undertake appropriate surveys (or similar methods to gain insight on public opinion) with local residents

- Surveys should be undertaken both before schemes are finalised and postimplementation.
- Surveys could either be undertaken on a programme of schemes as a whole, or on individual elements, as appropriate.
- The Department will provide example survey questions and guidance for effective public opinion surveys.
- Surveys can be funded through authorities' capital funding allocations

2. Before starting construction of schemes – confirm appropriate consultation has been undertaken with local stakeholders

- LA transport teams to email DfT, confirming they have:
 - o consulted all key local stakeholders (including with protected groups)
 - obtained broad support for their schemes and made any changes to take account of local feedback
 - implemented a clear communications plan to deal with any backlash which draws on the results of local opinion surveys
 - discussed plans with local MPs, and provide a summary of MPs' responses (e.g. via a RAG rating)
- Consultations do not need to show unilateral support, but instead that reasonable levels of consultation have been carried out and reasonable adjustments to schemes made in response to concerns.
- In cases where there are a number of schemes which are part of a wider programme (e.g. in combined authority areas), authorities may wish to notify the Department in batches, when appropriate schemes are ready for construction.
- Please email confirmation to: walking.cycling@dft.gov.uk

3. During and post-implementation of schemes: undertake monitoring of schemes and submit reports to DfT

- DfT will undertake short "pulse" surveys, to gauge authorities' progress in delivery of 2021-22 schemes.
- At completion and at 6 and 12 months after the opening of the majority of schemes, authorities are required to submit a monitoring report on outputs delivered and the effects of schemes (via combined authorities for city regions).
- Reports will highlight any modifications made to schemes in response to local feedback.
- Reports will include the results of local resident surveys that test the effectiveness of schemes post implementation.
- DfT will circulate updated monitoring and evaluation guidance to support these requirements, with suggested templates for reports.

 Authorities may also be invited to participate in the Department's national evaluation of Active Travel schemes.

4. In the event that schemes cannot be progressed or appropriate consultation is not completed:

- The ATE/the Department will work with authorities to identify appropriate alternative schemes that remain consistent with the objectives of the original bid and DfT's strategic objectives for the Fund.
- If no alternative solution can be found, the Department reserves the option to recover funding for schemes by reducing a future grant payment to the authority.

Annex D

Grant Acceptance Slip

I acknowledge receipt of the Active Travel Fund Award letter under Grant Determination No. 31/6014. I accept the grant offer on behalf of the authority subject to the conditions set out in this letter. I confirm that I am lawfully authorised to do so.

Signed
Please print name of officer
Position
Please return to John Sweetman by email to: walking.cycling@dft.gov.uk

Annex E

MEMORANDUM OF UNDERSTANDING

Between

Department for Transport

-and-

Local authorities in receipt of active travel capital funding 2021/2022

1. Purpose

1.1. This Memorandum of Understanding ('MOU') sets out the terms, principles and practices that will apply to the working relationship between the Department for Transport ('DfT') and the funded local authority ('the Council')(collectively 'the Parties') regarding the administration and delivery of Active Travel Capital Funding.

2. Background

2.1. This MOU covers the funding commitments from DfT and the delivery, financial expenditure, agreed milestones, reporting and evaluation, communication and branding expectations between the Parties.

3. Purpose of Funding

- 3.1. DfT considered the application submitted by the Council for the Active Travel Capital Funding 2021/2022. The allocation for 2021/2022 is set out in attached grant acceptance letter.
- 3.2. The funding is provided to form part of the necessary capital investment required for delivery of your approved schemes as set out in the grant acceptance letter. DfT expects the Council to use the funding provided for the purposes outlined in the application approved by DfT, and that evidence will be provided to demonstrate this. Grant funding will be paid in full in March 2022. Assurance on project progress shall be borne out through the formal monitoring and assurance process set out in Clause 8 and 9 of this MOU.

4. Financial Arrangements

- 4.1. The Council agrees to use Active Travel grant payments issued by DfT for capital expenditure only.
- 4.2. Payments to the Council will be made in March 2022. Release of the payment will be dependent on submission of the signed Grant Acceptance Slip which is at Annex D of the accompanying Grant Acceptance Letter.
- 4.3. Requests by the Council to amend schemes and expenditure will be considered by DfT, but approval will be subject to the availability of resources. There are no guarantees that such requests will be accommodated.

- 4.4. In accordance with the declaration signed by the Council's Section 151 Officer as part of the Bid Application, the Council accepts responsibility for meeting any costs over and above DfT's contribution set out in Clause 3.1, including potential cost overruns and the underwriting of any funding contributions expected from third parties.
- 4.5. The Council must commit to spend all grant funding by the end of the funding period, 31 March 2023.
- 4.6. If the Council fails to comply with any of the expectations set out in this MOU, the Secretary of State may:
 - 4.6.1. reduce, suspend or withhold future DfT grant payment
 - 4.6.2. by notification in writing to the Council, require the repayment of the whole or any part of the grant
 - 4.7. The council will ensure that its use of the funding complies with all relevant laws and the UK's international obligations. The DfT will not be liable for the council's failure to comply with relevant laws and obligations including, but not limited to, procurement and subsidy control legislation.

5. Duration and Review Point

5.1. This MOU will come into effect upon acceptance of the grant terms and conditions via DfT receipt of a signed Grant Acceptance Slip which is at Annex D of the accompanying Grant Acceptance Letter. It will remain in effect until it is terminated by either Party in accordance with the terms in Clause 10 of this MOU. It may be extended by the written agreement of the Parties.

6. Active Travel

- 6.1. The authority must ensure that proper and thorough public engagement has taken place on the design of the scheme, consistent with the advice in the Department's statutory Network Management Duty guidance. No funding will be released to the authority until satisfactory assurances have been provided to the Department on these matters. In addition, in the event the scheme is not constructed to LTN 1/20 standards, the Department reserves the right to pause any future payments to your authority made in respect of this grant award.
- 6.2. Authorities which have prematurely removed or weakened other active travel schemes in their areas should expect to receive less funding.

7. Monitoring and Evaluation

7.1. DfT has provided the Council with the Active Travel Fund Monitoring and Evaluation Guidance (insert link). M&E requirements are set out in the accompanying Grant Acceptance Letter.

8. Assurance

8.1. The Council is expected to have the necessary governance and assurance arrangements in place and that all legal and other statutory obligations and consents

- will be adhered to, which may include, but not solely, state aid / subsidy control, equalities duties, procurement, health and safety and fraud. Annex B of the Grant Acceptance Letter refers.
- 8.2. The Council will ensure data can be shared for the prevention and detection of fraud by including the following clause in all agreements with companies or external entities:
 - "Data may be shared with other enforcement agencies for the prevention and detection of crime."
- 8.3. The Council will fully comply with all obligations set out in the Fraud Risk Assessment guidance which will be sent to you in the Spring. This guidance will ensure the safe administration of grants and that appropriate measures are put in place to mitigate against the risk of both fraud and payment error.

9. Changes to approved Application

- 9.1. The Council will notify DfT of any proposed changes to the approved project(s) by submitting a change control request. These notifications should be provided and agreed in advance of changes.
- 9.2. The Council will require approval by DfT for any alterations to the project.
- 9.3. A wide range of project changes, including but not limited to changes to scheme designs, spending profiles, delivery timelines, funded activities, outputs and outcomes may be requested through the change control process.

10. Compliance with the MOU

10.1. The Parties to this MOU are responsible for ensuring that they have the necessary systems and appropriate resources in place within their respective organisations to comply fully with the requirements of this MOU.

11. Changes to the MOU

11.1. The arrangements under this MOU will be kept under review. Amendments to this MOU may only be made upon written agreement between the Parties.

12. Resolution of Disputes

12.1. Any dispute that may arise as to the interpretation or application of this MOU will be settled by consultation between the Parties.

13. Legal Enforcement

13.1. This MOU is <u>not</u> legally enforceable. It describes the understanding between both parties for the use of funding specified in Clause 3 of this agreement.



Agenda Item No:2.2

E-Scooter Update and Next Steps

To: Transport and Infrastructure Committee

Meeting Date: 14 September 2022

Public report: Yes

Lead Member: Mayor Dr Nik Johnson

Anna Graham, Transport Programme Manager From:

Key decision: No

N/A Forward Plan ref:

Recommendations: The Transport and Infrastructure Committee is recommended to:

a) Note the outcome of the e-scooter report and,

b) Recommend Combined Authority Board approval to extend the escooter trial in Cambridge to 31 May 2024

Voting arrangements: A simple majority of all Members present and voting

To be carried, the vote must include the vote of the Mayor, or the

Deputy Mayor when acting in place of the Mayor.

1. Purpose

1.1 To seek approval from the Combined Authority Board for the extension of the e-scooter trial in Cambridge to 31st May 2024

2. Background

- 2.1 In the summer of 2020 the Department for Transport (DfT) fast tracked the introduction of trials for e-scooters to support a green restart of local transport. The Combined Authority with its partners and operator VOI, launched in October 2020 the e-scooter trial in Cambridge with e-bikes in circulation since February 2021.
- 2.2 The Cambridge e-scooter trial has been extended twice, with approval from the Combined Authority Board (29th September 2021 and 30th March 2022) and is due to expire on 30th November 2022.
- 2.3 In late June the Department for Transport (DfT) wrote to e-scooter trial areas asking for the trials to be extended to enable DfT to gather further evidence where gaps are identified, building on the findings of the DfT current evaluation.
- 2.4 The correspondence from DfT also included an overview of the intention to introduce a new vehicle category. The Queen's Speech in May this year the government announced its intention to introduce legislation on the future of transport in the new parliamentary session as part of a Transport Bill.
- 2.5 A new independent low-speed, zero emission vehicle (LZEV) category is expected to be created and subsequently make regulations that will legalise e-scooters under new rules, as well as proposing new powers for local transport authorities to manage rental operations for pedal cycles, e-cycles, and e-scooters through a rental permit scheme. Timescales for the new legislation is not yet known, however, DfT will continue to engage with trial areas while legislation is being developed and will also consult publicly before any secondary regulations for e-scooters and the rental schemes are made.
- 2.6 Whilst local authorities can withdraw from the e-scooter trials, the move towards new legislation means that the trials continue to have significant value, as well as providing a practical example of how better regulation can encourage responsible use. DfT continues to gather trip data and monthly incident reports to inform policy development. As part of the improvement plan for the service, the Combined Authority will continue to review the contract with VOI and understand where lessons can be learned, and enhancements made. As part of this process, the Combined Authority will be challenging the current provider to demonstrate continued value for money and ability to implement the necessary improvements in a timely and effective manner.

3. E-Scooter Extension

3.1 The Combined Authority's Analysis and Evaluation Team, commissioned by the Transport Team, undertook a review of data for the e-scooter trial in Cambridge. The review focused on who rides the e-scooters, where are users of e-scooters going, safety of e-scooters in Cambridge and modal shift.

- 3.2 Three types of data were used, provided by the e-scooter operator VOI. The first type was 'ride' data, information recorded every time a scooter is used. The second was 'survey' data, in depth questions answered by a sample of riders in Cambridge during July 2021 and February 2022. The third is Incident data, which details all safety incidents that have occurred during the trial. The review also used secondary research to bring greater depth to the analysis.
- 3.3 The review of the data showed that since the beginning of the trial the number of rides taken has dramatically increased from the monthly count of 461 in October 2020, to a count in May 2022 of 95,410. Indeed, the introduction of this form of micro-mobility has been so successful that in just over two years the trial has surpassed its one millionth ride. The data in the review is up until May 2022. The data shows that a total of 82,365 people have taken an e-scooter trip. With 65% of these riders taking more than one trip in the city, e-scooters have become an important component of travel for residents and visitors.
- 3.4 The majority of the riders using the e-scooters are under the age of 34 and are male. The difference is male and female usage of e-scooters is consistent with national analysis of micro-mobility, including cycling. However, research local to Cambridge suggests cycling is closer to being gender neutral with 46% of cyclists being female.
- 3.5 Analysis of the time-of-day usage data showed that only 3.9% rides took place in the morning peak while 19.3% were in the afternoon peak period. This could indicate that individuals are taking one way commuter trips, or it could indicate leisure rides after work finishes. However, 22% of respondents to the July 2021 survey stated their purpose was commuting which has increased in the February 2022 survey to 30% which may support the view that one way commuting is taking place.

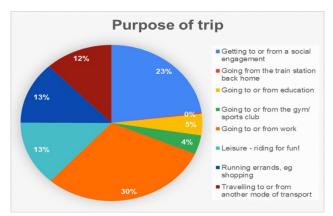


Figure 1 shows February 2022 Survey responses trip purpose.

3.6 Employment status was also considered to understand further the potential usage for commuting. The majority of users of the e-scooters are in full time employment followed by students. Figure 2 shows the February 2022 survey results of respondents employment status.

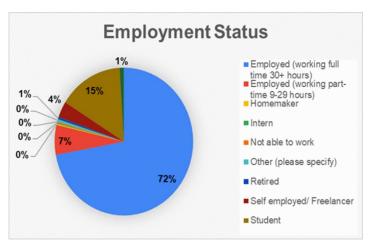
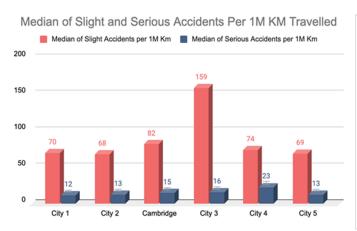


Figure 2 February 2022 Survey results showing employment status

- 3.7 The data review suggests that e-scooters are being used by those with disposable income and the trial could look to increase usage by those on lower incomes. It is important to note that VOI offer three discounts, one of which is 'VOI for All' that offers a 50% discount for lowincome groups. Further promotion of the available discounts could increase usage among low-income groups.
- 3.8 Safety analysis was also a key section of the data review. In the July 2021 VOI user survey it asked, to what extent do you agree with the statement 'I Feel Safe riding a Voi E-Scooter' (on a graded scale) 29.7% of respondents chose the strongly agree end of the scale (with a minimal percentage choosing to disagree). This suggests that those that use e-scooters generally feel comfortable about their safety but there is further room for improvement. The DfT commissioned a report into the perceptions of current and future e-scooter use. The report shows that safety was seen as the overriding disadvantage among respondents, cited by 53%. Within this, 41% were concerned about the safety of pedestrians, while 35% mentioned rider safety.
- 3.9 The Safety data used categorises the severity of the incidents, Level 0 equates to damaged material items/ property (cars, bikes, property, phones). Level 1 is minor physical damages such as scrape, scratches and bruises. Level 2 are major injuries, including broken bones, sprains, lacerations, concussions. Level 3 are severe injuries, injuries requiring surgery or serious medical treatment and Level 4 are critical or fatal injuries.
- 3.10 In Cambridge, no incidents have occurred at Level 3 or 4 severity. The common most injury has been bruising. Analysis shows that Cambridge is around the UK average for slight and serious incidents.



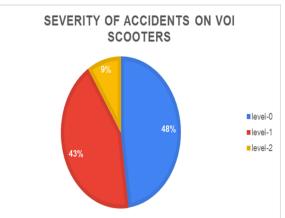


Figure 3 and 4 shows Cambridge City incidents compared to other cities. Figure 4 shows severity of incidents in Cambridge.

- 3.11 Reduction of all incident types is important and going forward thought for how future networks are designed to better cater for e-modes will need to be considered. However, in the meantime a number of safety measures are in operation including,
 - Online safety test;
 - · Online safety school;
 - New e-scooter fleet with turning indicators, a reinforced fender and improved suspension to aid shock absorption and impact of cobblestones;
 - In person safety events that include giving away free helmets;
 - The app has a reaction test to mitigate intoxicated use;
 - Helmet selfie which awards loyalty points for wearing a helmet; and
 - Users can opt to reduce the speed from 12.5mph to 9mph.
- 3.12 Analysis has shown that 51% of users are currently taking the opportunity to complete the safety school and the trial should look to build on this figure.
- 3.13 The average distanced travelled by e-scooter is 1.5 miles fitting into the first last mile transport area. Analysis of modal shift showed that 32% of users would have used a car to make their journey if they had not used an e-scooter. A larger proportion would have either cycle or walked. Whilst e-scooters do not have the same health benefits as active travel, some activity in using an e-scooter is involved and appears to attract those who would not have considered micro-mobility previously to switch their use away from cars.
- 3.14 The data review concludes that e-scooters are a valuable addition to the urban transport scene that not only encourages a move away from polluting alternatives but expands convenience and encourages economic activity.
- 3.15 The Combined Authority continues to work closely with VOI, Cambridgeshire County Council and Cambridge City Council about the operation of the e-scooters, including identifying suitable locations for e-scooter parking racks.
- 3.16 Cambridgeshire Police have also been engaged, particularly about the extension of the existing trial and are supportive. The Police and the Combined Authority are exploring ways for the trial to share data with the police and to develop a communications strategy to target illegal use of privately owned scooters.

4. Financial Implications

4.1 None.

5. Legal Implications

- 5.1 Upon approval of the trial extension the Concession Contract between the Combined Authority and VOI shall be extended to 31st May 2024.
- 5.2 Upon approval of the trial extension the Department for Transport will issue an updated Vehicle Special Order (VSO) enabling the use of e-scooters as part of the trial.
- 5.3 Whilst the existing Experimental Traffic Regulation Order (ETRO) will continue to be valid enabling e-scooters to use cycle and busways it will expire before the end of the extension period of 31st May 2024. It is unlikely that another ETRO will be used and therefore, the Combined Authority and Cambridgeshire County Council will consider alternatives. Other trial areas have used Traffic Regulation Orders with a view that if the trial is not continued the order would be rescinded.

6. Public Health Implications

- 6.1 Whilst the data shows that a large proportion of e-scooter users would have walked or cycled as an alternative way to make their journey, a total of 32% would have used a car demonstrating that there is modal shift away from car use contributing to improvements to air quality.
- 6.2 Analysis of incident data has shown that Cambridge is around the UK average for slight and serious incidents. There are a number of safety measures in operation, including in person events.

7. Environmental and Climate Change Implications

- 7.1 Analysis has shown a modal shift of 32% of respondents to surveys using e-scooters as alternative to the car.
- 7.2 In addition, within Cambridge city VOI uses electric vans and e-cargo bikes to carry out its operations.

8. Other Significant Implications

8.1 None.

9. Appendices

9.1 Appendix 1 – EScooter Data Review.

10. Background Papers

10.1 None.

Introduction

Cambridge has always been known as Britain's Cycling City, but recently it has adopted a new form of micro-mobility, the E-Scooter. With the approval of the Cambridgeshire and Peterborough Combined Authority (CPCA) and against a background of rapid population growth, VOI, a Stockholm based E-Scooter company has been conducting an extended trial.

The 2021 Census confirmed that Cambridge is one of the fastest growing places in the UK. The population has increased by 17.6%, from around 123,900 in 2011 to 145,700 in 2021. This is higher than the overall increase for England (6.6%). As of 2021, Cambridge is the fifth most densely populated of the East of England's 45 local authority areas, with around 26 people living on each football pitch-sized area of land¹. With this increase in density comes the need to provide a range of cost-effective mobility choices for city residents. Choices that support the wider sustainability goals for the city, cutting CO2 emissions and improving air quality. In this group of data stories, we explore how the adoption of E-Scooters could help.

We use three sources of data across our data stories that has been made available from Voi to look at usage in more detail. The First is 'ride' data, information recorded every time a scooter is used. The second is 'survey' data, in depth questions answered by a sample of riders in Cambridge during July 2021 and February 2022. The third is 'incident' data, which details all safety incidents that have occurred during the trial. We have complemented this with the use of secondary research (reviewing other literature and studies) to bring greater depth to the analysis.

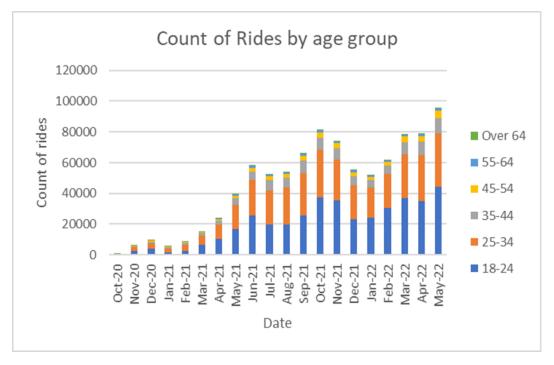
Part One - Who Rides the Scooters

Since the beginning of the trial, the number of rides taken has dramatically increased from the monthly count of 461 in October 2020, to a count in May 2022 of 95,410. Indeed, the introduction of this form of micro-mobility has been so successful that in just over two years Voi have recently confirmed that the number of rides has surpassed 1,000,000! As of May 2022, a total of 82,365 people have taken an E-Scooter trip. With 65% of these riders taking more than one trip in the city, E-Scooters have become an important component of travel for residents and visitors.

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¹ How the population changed in Cambridge, Census 2021 - ONS

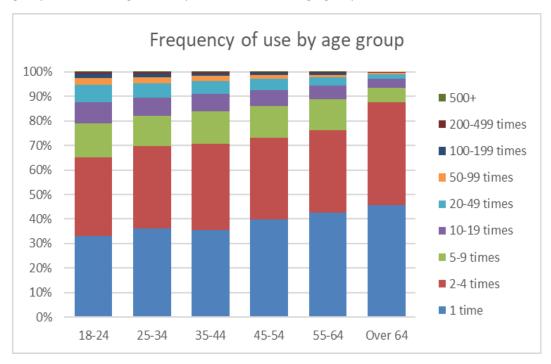




Age

As is common with new technology, usage of E-Scooters is concentrated amongst the young. We have analysed the ride data to separate rides taken by users and the individual riders. This shows that 44% of rides and 40% of riders are 18-24 and 39% of rides and riders are 25-34 (83% of rides and 79% of riders are under 34). At the other end of the age spectrum only 0.15% of rides and 0.34% of riders are over 64. Frequency of use by age group shows a decline in proportion of high frequency use the the higher the age bracket. The proportion of users that use an e-scooter in the lower use brackets (between 1-4 times) increases from 65% of 18-24's to 88% of over 64's. Average Distance

travelled differs by age group with it increasing with age, the only exception to this is the over 64 age group whose mileage is on a par with the 25-34 age group.



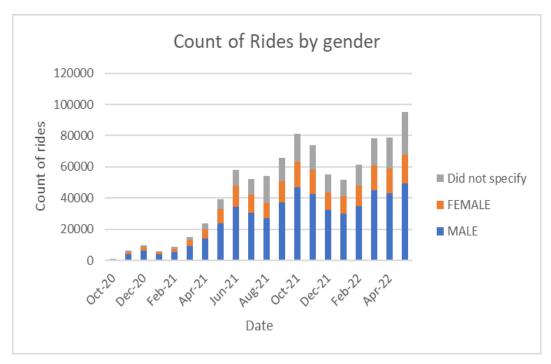
Gender

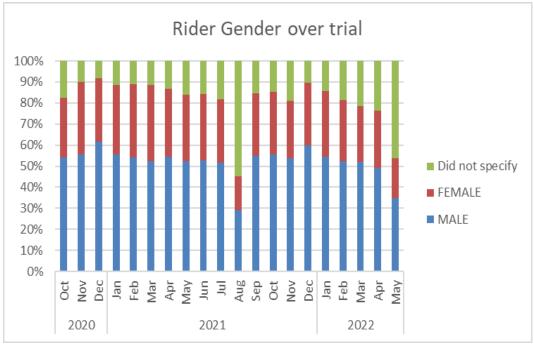
The starkest difference in the user data can be found in the gender breakdown of ride data. The Voi data can be interpreted in different forms. Of all riders to have taken at least one ride, riders reported that 51% were male, 28% were female and 21% did not specify. When looking at all rides by gender it is reported that 57% were male, 21% were female and 22% did not specify. The graphs below show the total rides data over time. The majority male ridership is consistent across national analysis of micro-mobility, including cycling. Cycling UK in their Cycling Statistics 2022 publication report that Men take 2.5 times more trip than women. However, it is inconsistent with cycling research local to Cambridge (2017 GCP 'Big Conversation' travel survey)² which suggested Cambridge cycling is closer to being gender neutral with 46% of cyclists being women. A study explaining Gender Difference in cycling behaviour in the United States³ highlights that a higher proportion of women intercepted cycling did not have children compared to the men asked. This report puts this down to women taking larger 'household responsibilities,' however looking at the gender breakdowns across age groups in Voi Ride data there doesn't appear to be a large drop off in female participation in e-scooter travel in common childbearing years, but rather a general decline in gender share as age increases. Other key aspects noted in the study were that women were more receptive to safety concerns than men, and exposure to cycling in childhood made use more likely. From these points it can be argued that Cambridges cycling culture perpetuates a gender-neutral engagement from citizens and improvement to cycling lanes has put to ease safety concerns. Female riders may be put off by the perceived safety concerns regarding e-scooters, however such conclusions would need further research to gather more evidence than is currently available.

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² <u>Data Story Series: What we know about cycling in and around Cambridge: Episode One | Cambridgeshire Insight Open Data</u>

³ Explaining Gender Difference in Bicycling Behavior - Catherine R. Emond, Wei Tang, Susan L. Handy, 2009 (sagepub.com)





Part One - Conclusion

The number of riders in Cambridge is increasing at a significant pace. The data provided confirms a common theme among journal articles. That the main users of e-scooters are young and male. This can be partially explained with reference to younger age groups having an orientation towards trying new things as well as the presence of a very large student / post-graduate population in the city. The gender disparity is a common theme of micro-mobility, Literature on the subject makes a go of trying to find the reason for this, but without local surveys asking women to give their views we risk making large gender-based assumptions. An issue with the ride data is that there are a significant proportion of individuals that do not specify their gender. If women make up the vast majority of those who do not specify, in theory participation could be more gender neutral. Improvements could be made to ride data collection by offering broader gender identity choices, being inclusive while

capturing the reality of demographic trends. As E-Scooters mature into the daily lives of our cities we may well see higher adoption from women and older age brackets. The priority in the meantime is to make sure any fears are allayed and the benefits of using such a device are widely known.

Part 2 - Where do they go?

Cambridge as confirmed in our previous data story is experiencing an increase in the number of rides of E-Scooters. However, to truly understand the benefit for users we must look at where riders travel and the purpose of the trip. To understand this, we need to look deeper past the ride data into the survey data to understand what they are used for in Cambridge.

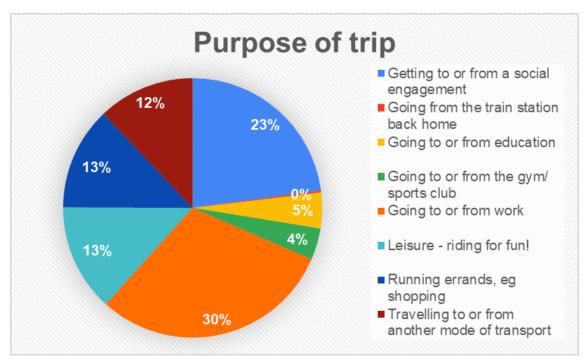
When riders choose to travel can help show their motivations. Our first step in the analysis was to work out if E-Scooters were used as a commuting method. Using ride data we calculated the total number of trips taken by hour of the day and day of the week. Assuming that peak commuting times were summarized as being between 7am-9am and 4pm – 7pm.

The table below shows the percentage of trips taken in a particular hour of the week as a proportion of all rides taken. To estimate the proportion of rides taken for commuting purposes, the numerator used was hours during work week at peak commuting times, divided by the denominator all trips taken. This calculation results in 23.21% were at the assumed peak commuting times. However, only 3.94% took place in morning peak times, while 19.28% were in the late afternoon peak times. In addition, on the weekend ride count was high during the PM peak. This suggests that either individuals are taking one way commuter trips, or the afternoon peak times are not representative of commuters and rather show rides for leisure activities after work finishes. This would mean that commuting is not a substantial proportion of total rides.

Hour of day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
24	1.82%	1.56%	1.91%	1.82%	2.00%	3.02%	4.36%
1	0.99%	0.89%	0.99%	1.06%	1.10%	2.10%	2.70%
2	0.66%	0.58%	0.64%	0.72%	0.73%	1.43%	1.80%
3	0.55%	0.46%	0.54%	0.60%	0.55%	0.99%	1.31%
4	0.43%	0.38%	0.38%	0.38%	0.47%	0.68%	0.85%
5	0.69%	0.67%	0.67%	0.64%	0.58%	0.43%	0.45%
6	2.04%	2.05%	2.02%	1.92%	1.50%	0.80%	0.81%
7	4.12%	4.65%	4.57%	4.37%	3.40%	1.34%	1.27%
8	5.82%	6.24%	5.94%	5.79%	4.89%	2.23%	1.82%
9	4.24%	4.41%	4.15%	4.30%	3.67%	2.92%	3.26%
10	3.65%	3.59%	3.30%	3.43%	3.19%	3.83%	4.51%
11	4.13%	3.79%	3.70%	3.78%	3.79%	5.10%	5.76%
12	4.89%	4.47%	4.50%	4.66%	4.67%	5.56%	6.60%
13	5.43%	4.91%	4.95%	5.07%	5.32%	6.16%	7.22%
14	5.79%	5.16%	5.19%	5.24%	5.56%	6.79%	7.61%
15	6.63%	6.19%	6.18%	6.28%	6.17%	7.16%	7.85%
16	8.46%	8.34%	7.86%	7.95%	7.72%	7.28%	7.66%
17	8.99%	8.88%	8.78%	8.71%	8.23%	7.57%	7.01%
18	7.80%	8.20%	8.38%	8.08%	8.03%	7.03%	6.27%
19	6.32%	6.74%	6.84%	6.62%	6.99%	6.79%	5.84%
20	5.17%	5.05%	5.27%	5.31%	5.88%	5.70%	4.77%
21	4.40%	4.69%	4.74%	4.86%	5.26%	5.15%	4.01%
22	4.00%	4.70%	4.71%	4.62%	5.41%	5.27%	3.50%
23	2.96%	3.39%	3.78%	3.78%	4.90%	4.67%	2.77%

However, despite the given standard error on sample surveys, the survey data for July 2021 shows a proportion at 22% of respondents stating that their purpose of travel was 'commuting', which is similar to the total 23% calculated within commuting times from the ride data. This could mean that the first hypothesis of one-way commutes is more probable. Due to the new nature of the e-scooter, perhaps individuals may be testing the use for travel in the late afternoon when there is less

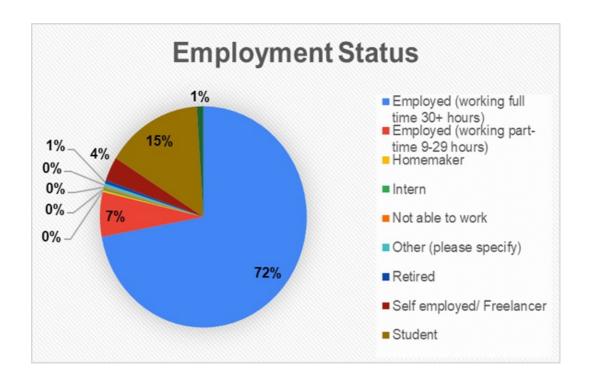
pressure of being on time. While commuting may be a substantial component of total rider data, total ride data places an emphasis on frequency, those who commute may not be using it to do so frequently and so are a lower share of ride data. Alternatively, as after work peaks are busier in general, a one-way PM commute may be combined with other after work activities. The second highest answer in the July 2021 survey is 'leisure' at 32%, followed by 'running errands i.e. shopping' at 19%. The more recent February 2022 survey shows a jump to 30% of respondents 'going to and from work' becoming the primary reason of travel for participants, followed by going to/ from social engagement at 23% and then leisure and running errands tied at 13% each.



To further explore this, we can look the reported Employment status that can be drawn from the surveys. 68% and 72% respectively of the July 2021 and February 2022 surveys were full-time workers, this group were followed by students at 14% and 15%, part-time employees at 7% for both surveys and self-employed at 6% and 4%. The surveys show very similar results which gives us confidence that these are accurate. The clear conclusion that can be taken from these figures is that the groups that use E-Scooters have the most have disposable income available to them. Research backs this up with a study investigating the relationship between low income and E-Scooter usage in the United States showing 'that low income negatively impacts e-scooter use in terms of number of trips, with all cities in the study showing decreases that range between 2.2% and 23.3%.' ⁴ Voi do offer various discounts to make rides cheaper for those on lower income, e.g. VOI 4 All. However, a further study would be needed to determine whether take-up in Cambridge bucks this trend.

⁴ Causal effect of low-income areas on shared dockless e-scooter use - ScienceDirect

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A point that is worth considering when observing where people travel and their reasons is the surrounding infrastructure to facilitate such use. A study on behavioral intervention for micro mobility adoption in New York explores how nudges, policy designed to create a change in behavior, that being towards adoption in the case of E-Scooter's. The study found that the 'biggest obstacles in adoption attitudes is the lack of e-scooters, be it ownership or provision of shared rental systems.' Clarifying that this 'is unique to e-scooters as a budding technology.' Currently in Cambridge we have designated hubs where E-Scooters are grouped to facilitate easy access for potential users. An example of this are the two hubs by Cambridge Station. This enables the use of Scooters for the last mile of travel as part of a commute that started with the train. The Greater Cambridge Greenways project is an example of infrastructure designed to encourage cycling between our market towns and into the centre of Cambridge from the surrounding area. Such routes with the creation of new E-Scooter hubs, could become the arteries of a major micro-mobility shift. However, such a move would need local support and observation to monitor whether there was an impact on cycling take up.

Part Two - Conclusion

Survey respondents highlight use for commuting as the most popular reason for using an e-scooter, however this lining up with the results of the ride data takes a stretch in unusual assumptions, such as heavy commuting use in the late afternoon, but not in the morning. Leisure activities are the second most popular answer with this confirmed by the ride data in when the peak use times are, primarily after the traditional 9-5 working hours, and with heavy usage on the weekend. The survey data shows that the primary users are the full-time employed, this raises questions about the impact of level of income on E-Scooter usage. While the survey does not ask for such information, other studies predominantly in the United States have shown that there is a correlation between low

⁵ <u>Behavioural interventions for micro-mobility adoption: Low-hanging fruits or hard nuts to crack? | Elsevier Enhanced Reader</u>

⁶ Greater Cambridge Greenways

income and lower usage of E-Scooters. If policymakers wish to influence behavior, nudge techniques are a valid option, for example where E-Scooters are stationed may induce demand. Projects such as the Greenways initiative for bicycles could be altered to facilitate greater take-up. More detailed studies are needed to tease out finer points on ridership behavior, in particular exploring afternoon and morning usage thoroughly in direct contact with users. These are early days for this new form of transport, commuting as a reason for travel may increase over the coming years with greater acceptance and assurance of reliability.

Part 3 – Safety

Where E-Scooters face most opposition from the public is the perception of an increased risk to safety for users and also for pedestrians that may encounter the E-Scooters. The July 2021 VOI user survey asks to what extent do you agree with the statement 'I Feel Safe riding a Voi E-Scooter.' 29.68% of respondents, the largest response group, stated they strongly agree. This suggests that those that use that E-Scooters generally feel comfortable about their safety. The Department for Transport (DfT) commissioned a report by Kantar looking into the perceptions of current and future e-scooter use. The report shows that 'safety was seen as the overriding disadvantage among respondents, cited by 53%. Within this, 41% were concerned about the safety of pedestrians, while 35% mentioned rider safety.' In addition, numerous newspaper articles reflect fear to safety with bylines such as 'Cambs police would never do anything else if they confiscated every e-scooter used illegally'.⁷ Beyond the title, the article quotes a police sergeant's view that better education and clear legislation without grey areas should be the priority rather than calling for an outright end to the trial. The article acknowledged that Voi has worked with Police providing an app for officers to report offences such as riding with two people onboard and riding on pavements.

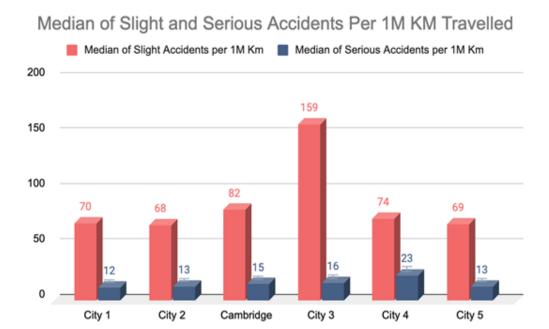
In addition to this Voi has launched a variety of safety measures. Voi has an online safety school called Ride like Voila. The V4 Scooter has replaced all scooters in use. It includes features such as turning indicators, a reinforced fender and improved suspension to aid shock absorption and impact of cobblestones. They have engaged with in-person events on safety issuing free helmets at these events. Scooters have a reaction test feature to encourage riders to think twice before using the scooter intoxicated. They have introduced a helmet selfie feature that awards loyalty points for proving they are wearing a helmet to incentivise use. Therefore, we should consider if negative reactions are a symptom of being a new invention? Despite its destiny to become one of the most popular means of transport the advent of the automobile was not met with widespread affection in the beginning. Critics lamented the displacement of horses and the safety issues, perhaps it is instinctual to be sceptical of the new, especially when concerns about safety arise.

In Collaboration with VOI a study of the severity of musculoskeletal e-scooter injuries in Liverpool ("The Liverpool Study") in the 7 months following the introduction of an e-scooter rental Pilot scheme showed that the injury rate and pattern is similar to those of bicycles in an inner city metropolitan area with a slightly higher rate of 26.1 injuries per million km ridden compared to 24.1 injuries per million km travelled on bicycles. An issue apparent is the focus on musculoskeletal injuries, with the report stating that upon a scoping review the most common e-scooter injuries were head injuries, not recorded in the trial. In the Voi Survey 26% of respondents answered that they wear a helmet, with most feeling it unnecessary or inconvenient to carry. Voi's suggestion of a shared helmet solution had a negative response with 61% of respondents stating they would not use such a scheme. 78.54% of respondents stated hygiene concerns as a primary issue. The graph below shows a clearer image of where Cambridge is in the e-scooter landscape presenting a fuller picture

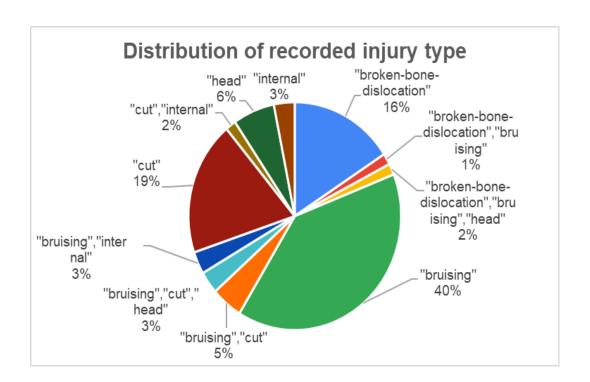
⁷ Cambs police would 'never do anything else' if they confiscated every e-scooter used illegally - Cambridgeshire Live (cambridge-news.co.uk)

⁸ <u>Legalisation of e-scooters in the UK: the injury rate and pattern is similar to those of bicycles in an inner city</u> metropolitan area - ScienceDirect

than the Liverpool studies' focus on a particular type of injury. It shows that Cambridge is currently around the UK average for slight and serious incidents as defined by the Department for Transport.

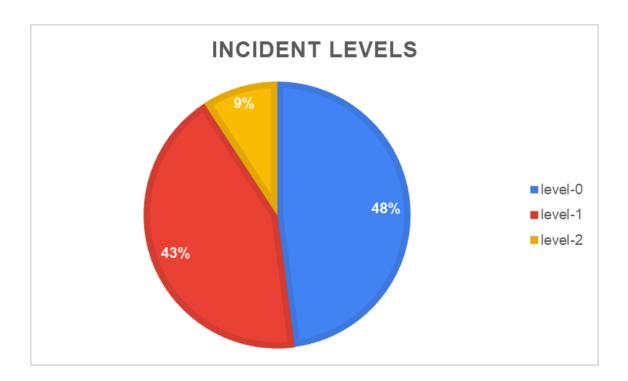


An incident dataset provided by VOI shows that there were 511 incidents ranging from level 0 to level 2, in addition to 1056 almost incidents reported. These are near miss situations that result in no damage to vehicle or any form of injury to the rider or others. Level 0 equates to damaged material items/ property (cars, bikes, property, phones). Level 1 is minor physical damages such as scrape, scratches and bruises. Level 2 are major injuries, including broken bones, sprains, lacerations, concussions and fractures to body. Of the 511 accidents reported, 98 of them reported the type of injury sustained. Below is a pie chart showing the breakdown of the 98 injuries. Bruising appears to be the most common injury at 40% of the 98. This shows an altogether very different result to the Liverpool study with musculoskeletal injuries and head injuries not as significant. However, as this only represents a 1/5 of incidents further studies would have to be taken to confirm the validity of this breakdown.



The Liverpool Study states in the occurrence of injury adherence to rules such as not consuming alcohol, age requirement, driving licence requirement and use of a helmet has been reported to be poor. The study reports that just over 10% of patients had taken alcohol whilst riding e-scooters and over half of e-scooter injuries occurred on pavements or pedestrian zones where pedestrians were also at risk of injury. Voi's survey shows that 94% of respondents know it is forbidden to ride on pavements and 97% know it is forbidden to ride under the influence of drugs or alcohol. While this is more positive, any figure less than 100% can be questioned as not being sufficient, particularly among users engaged enough to take a survey.

While the Liverpool study of Voi data showed that in central areas where accidents were more likely, despite the higher number of pedestrians, they recorded no cases of pedestrian injuries in any area. The Voi incident dataset backs this up showing that pedestrian involvement represents only 2.54% of all accidents, a total of 13 cases over the course of the trial. The findings suggest that riders themselves are most at risk of injury, despite the widespread fear of e-scooters impact on others. Of concern is that in the Voi survey 51% of participants answered that they have completed an online e-scooter traffic school, this figure could be improved upon and consideration should be made to whether such classes could be incentivized to ensure best riding practice and reduce the likelihood of injuries. As shown in the pie chart below, severity of injuries is focused in the first two levels, with the most severe injuries representing only 9% of accidents.



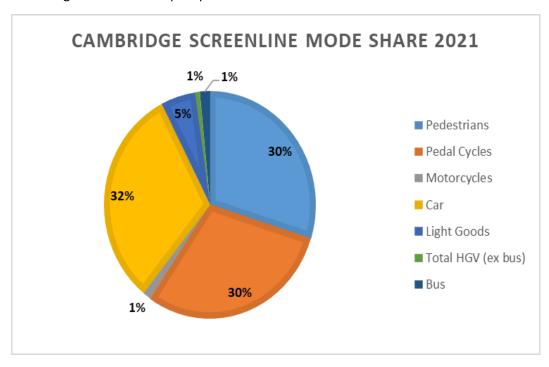
Part 3 - Conclusion

Safety concerns are of key importance going forward to maximise engagement with E-Scooters. Studies and news articles paint a very negative picture of E-Scooter use, while the truth is more nuanced. Safety is an issue, but it is primarily in regards to riders own well-being rather than the safety of pedestrians. A narrow majority have completed a traffic school that teaches fundamentals, most riders surveyed do not use helmets, offers of shared helmets are rejected, not all users realise that riding on pavements and being under the influence of alcohol/drugs are not allowed. However, these are not insurmountable challenges. There is a role to be played by regulation, perhaps by requiring frequent users to take the training. While Voi has taken positive steps to improving safety of scooters, more can be done in relation to helmets and tackling intoxicated use. Trackable shared helmets could be introduced at VOI hubs, when the user has finished use, a drop box could be used for the user to hand-in the helmet, for the operator to clean before reuse to tackle the fear of bad hygiene. The current method of encouraging positive self-responsibility through a reaction test is encouraging but is unlikely to stop an inebriated individual from riding if they are determined to ignore soft warnings. If Cameras were installed on the e-scooters as has been trialed in Northampton⁹ with computer vision technology, after failing the test, the camera could be switched on to record the act. Coupled with clear warnings, this could reduce inebriated use. However, such solutions are expensive by nature and would require effective planning to ensure that they did not make the service significantly more expensive. It should also be noted that beyond Voi, these suggestions could be applied by other companies, including those that operate shared bike schemes. With greater monitoring and innovation the benefits of using e-scooters can be maximised while limiting any risk riders and those within the vicinity of a rider face.

⁹ <u>Voi launches e-scooter trial of computer vision technology designed to prevent pavement riding</u> (voiscooters.com)

Part 4 - Modal Shift

People plan their lives around Public Transport. Where we live, where we work and where we socialise are all determined by how, when, and how fast we can travel. Public Transport is often defined by fixed rigid routes concentrated where footfall is highest, these routes do not service customers door-to-door but rely on customers finding a means to travel to both the initial transport node and from the final node to their destination. This issue is referred to as the first mile/last mile problem. The consumer has to settle for the best available fit for their journey, the issue can be amplified by routes not taking into consideration other transport modes such as changing from a train to an inter-city bus. Where travel is inconvenient consumers out of necessity opt for a more tailored route. The primary means of travel is often to rely on privately owned cars; at 32% being the largest mode share of the Cambridge Screenline for 2021. 10 Those without access to a car may opt for the much more expensive taxi, or take Cambridge's famed popular mobility option, the bicycle. Currently traffic count data for the Cambridge Screenline published by Cambridgeshire County council shows that in 2021 Cycling represented 25.09% of total transport. However, this can be physically demanding and while exercise is certainly healthy, building up a sweat before entering the office or meeting friends will not be for everyone. Giving people more choice, more flexibility, more cost effective and less environmentally damaging means of transport must be the focus of local and national government transport plans.



E-Scooter's are a new mode of transport that offer such a solution. The mean distance of a ride on a VOI E-Scooter is 2408 meters, equating to 1.5 miles. According to the Hubbub Foundation, around 50% of car journeys are 2 miles or less¹¹ and walking this distance would take at least half an hour. Users can choose when they use the e-scooter, allowing combination with other forms of transport. In Voi's customer survey, for the July 2021 survey 19% of respondents stated they used E-Scooters in combination with Public Transport, while in the February 2022 Survey this response rises to 28%.

¹⁰ Road traffic data - Cambridgeshire County Council

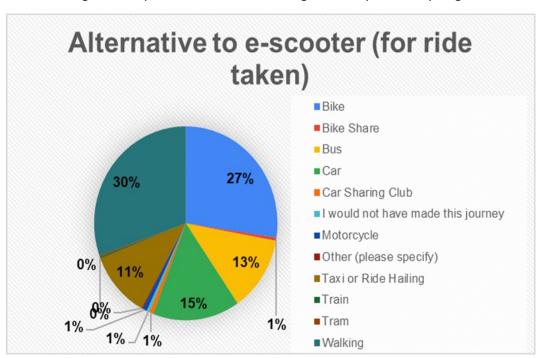
¹¹ Switch short car journeys to cycle, walk or take public transport | Hubbub Foundation

66% of user surveyed in the Kantar study on perceptions towards E-Scooters main reason for using them was so they can decide where exactly they would like to travel to a specific destination.¹²

E-Scooter use is affordable, which means that a broader demographic of society can make use of them. As use does not require exertion other than balance and standing, E-Scooter's can convince those who would not have considered micro-mobility previously to switch their use away from cars. Furthermore, promotion of shared transport options can be seen as a move towards a circular economy. Whereby we can encourage the switch away from single use or personal use products and services towards shared and reusable solutions. In the context of travel, moving away from a car centric urban environment towards viable permanent solutions to travel needs. ¹³

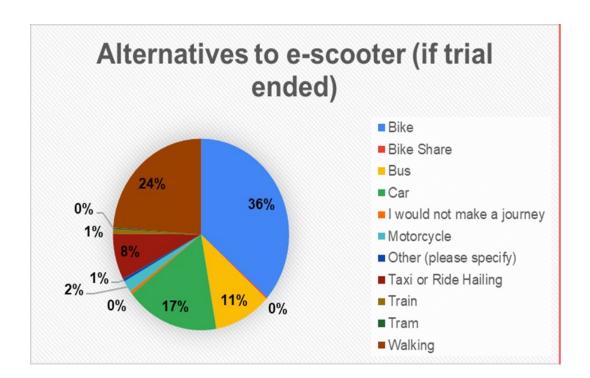
Substitution of more polluting means of transport with greener alternatives is a priority for public policy and urban planning, understanding which modes are impacted by a degree of substitution is crucial. The February 2022 VOI user survey asked whether participants had access to a car/van and access to a bike. 61% of respondents had access to a car/van, while 73% had access to a bike. This shows that most respondents to the survey had alternative means of making their trip.

Both July 2021 and February 2022 user surveys ask participants regarding the trip they took before answering the survey which alternative mode of transport they could have used. Across both Surveys walking was the highest choice at 30%. This was followed by the Bike and then the Car. The Surveys followed this question with, 'if the E-Scooter trial ended what mode of transport would you use?' Walking was less prominent in the answers given, compared to Cycling and Car use.



¹² Perceptions of current and future e-scooter use in the UK (publishing.service.gov.uk)

¹³ Planning for effective transport | Shared by Business (thirdlight.com)



The Kantar study on E-Scooter perceptions shows that 'a majority of respondents (82%) who thought they would buy or hire an e-scooter anticipated that they would reduce or stop using at least one mode of transport, with walking being the most commonly mentioned transport mode that would be reduced by e-scooter use (39%).'12 This shows that a lot of users took a ride on an e-scooter as a convenient alternative to walking, but longer term when making frequent trips they would look for a quicker alternative. A possible negative impact could be the switching from cycling to using an e-scooter, the loss of exercise having a negative health impact.

However, when understanding how to bring about a mode shift it is important to understand the nature of induced demand. This is 'the increment in new usage that would not have occurred without the improvement of the network capacity'. ¹⁴ This not only creates a situation of substitution but also convinces those who would not have previously travelled to make a trip. Examples could be that the ability to use an e-scooter can convince someone who may have shopped online to instead take a trip to the city centre. Instead of waiting for a new movie to be released on a streaming service, they take a trip to the cinema. This increase in economic activity is a boon to the local economy and will contribute towards the survival of our high streets.

In conclusion, E-Scooters are a valuable addition to the urban transport scene that not only encourages a move away from polluting alternatives but expands convenience and encourages economic activity. E-Scooters have a place in a vision for a more connected Cambridgeshire and Peterborough. Transport solutions that give individuals freedom to tailor their route are fundamental in the transition away from cars. By enabling greater flexibility E-Scooters improve riders productivity, such improvements in time efficiency in particular are often the justification for new infrastructure projects such as roads, this also can be the justification for embracing new modes of transport. The combined authority in addition to support of the trial of e-scooters, has trialled a new form of demand responsive transport in Huntingdonshire, whereby those who live in the surrounding villages can order a bus service on the Ting app, with the provider creating an ad-hoc

¹⁴ Latest evidence on induced travel demand: an evidence review (publishing.service.gov.uk)

bus route based on the demand of app users, allowing those who were without a public transport solution the means to travel. More work is needed to create the incentive structure that can trigger a large-scale modal shift. However, without effective alternatives such as e-scooter we cannot lay the building blocks for such a change. A collective vision that embraces innovative alternatives across our region can overcome transport planning issues and ensure everyone can make the travel they desire accessing both employment opportunities and social activities, while ensuring we meet our responsibility to future generations by cutting emissions.

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Agenda No: 2.3

Fengate Phase 1

To: Transport and Infrastructure Committee

Meeting Date: 14th September 2022

Public report: Yes

Lead Member: Mayor Dr Nik Johnson

From: Emma White, Transport Programme Manager

Key decision: No

Forward Plan ref: N/A

Recommendations: The Transport and Infrastructure Committee is recommended to:

- a) Note progress towards the Fengate Phase 1 Full Business Case
- b) Recommend to the Combined Authority Board to approve the drawdown of £550,424 to accelerate the active travel element of the scheme.
- c) Recommend to the Combined Authority Board to approve the drawdown of £315,000 to accelerate utility C4 costs ahead of construction.
- d) Recommend the Combined Authority Board delegate authority to the Interim Head of Transport and Chief Finance Officer to enter into Grant Funding Agreements with Peterborough City Council.

Voting arrangements:

For recommendations b) and c) a vote in favour by at least two thirds of all Members (or their Substitute Members) appointed by the Constituent Councils who are present and voting, to include the Members appointed by Cambridgeshire County Council and Peterborough City Council, or their Substitute Members.

To be carried, the vote must include the vote of the Mayor, or the Deputy Mayor when acting in place of the Mayor.

For recommendation d) a simple majority of all Members present and voting.

1. Purpose

1.1 This report summarises the progress towards the Fengate Phase 1 Business Case (FBC) and recommends the drawdown of £550,424 to the Combined Authority Board to accelerate the active travel elements of the scheme and £315,000 to accelerate utility C4 costs ahead of construction. Peterborough City Council and the CPCA have been considering opportunities to accelerate scheme delivery as the scheme is funded by the Transforming Cities Fund (TCF

2. Background

- 2.1 The Peterborough City Council Local Plan (adopted July 2019) sets out the overall vision, priorities and objectives for Peterborough up to 2036. The updated strategy identifies the required delivery of 19,440 new homes and 17,600 new jobs by 2036.
- 2.2 The largest employment allocation within Fengate is the Red Brick Farm site which covers 12.6 hectares. This is likely to be a mixture of B8 (Storage and Distribution) units and B2 (General Industry) units with ancillary B1 office space.
- 2.3 The Fengate Access Study Area focuses on the north of Fengate, where the Red Brick Farm site is located. The study area is shown in the figure below. It considers Junction 7 and Junction 8 of the A1139 Fletton Parkway (key access to / from the parkway system), access routes into Fengate such as Parnwell Way and Oxney Road, and internal roads within Fengate such as Edgerley Drain Road and Storey's Bar Road.
- 2.4 At the CA Board in 2020 the Strategic Outline Business Case (SOBC) and commencement of the Full Business Case (FBC) and detailed design stage were approved. At the CA Board in Dec 2021 a further £150,000 was approved to complete the FBC.
- 2.5 Early request to release £550,424 to accelerate the construction funding of two of the active travel schemes which form part of the project ahead of the main highway works which are scheduled to commence in April 2023 (subject to CA Board approval planned in January 2023).
- 2.6 The schemes identified for accelerated delivery are:
 - Newark Road Footpath; and
 - Oxney Road Pedestrian Improvements.
- 2.7 Peterborough City Council and the Combined Authority have been considering opportunities to accelerate scheme delivery as the scheme is funded by the TCF. The TCF is time limited and must be spent by 31st March 2024.
- 2.8 Including the Fengate Access Study, there is approximately £17m of TCF funded transport infrastructure to deliver in the 2023/24 financial year in Peterborough. Bringing forward some of the active travel schemes for delivery into the third and fourth quarters of the 2022/23 financial year will reduce the pressure on the wider construction programme, and specifically reduce the risk to funding availability caused by any programme delays.
- 2.9 Recent sensitivity test to understand the scheme BCR in-light of the latest costs demonstrate the scheme offer high value for money with a BCR of 2.46. A Full Business Case (FBC) is currently being produced and will be submitted in December ahead of the January CA Board, and the BCR is expected to increase further with the inclusion of additional active travel

benefits. However, a value for money assessment has been undertaken for the two active travel schemes to demonstrate that they offer value for money ahead of the wider FBC submission.

- 2.10 In summary, the active travel schemes offer very high value for money, and there is a strong case for early investment.
- 2.11 Early request to release £315,000 to accelerate utility C4 costs ahead of construction. Utility C4 costs are part of the construction costs but concern has been raised in the time utility companies are taking to process these. Therefore, if Fengate Phase 1 is approved for construction at January CA board this could be a risk of delay to programme and an issue for the TCF March 2024 spend deadline.
- 2.12 To de-risk the project it is requested these costs are approved at this point in time so are complete and ready for construction to start in January 2023. An initial value for money assessment has confirmed, ahead of submission of the FBC in December, that the Fengate Access Study package of schemes offers high value for money.

3. Financial Implications

3.1 Drawdown £865,424 of £10,973,000 forecast 2022/23 and 2023/24 TCF budget. Seek approval for the full drawdown of the rest of the budget once FBC is complete at CA Board in January.

4. Legal Implications

4.1 None.

5. Public Health Implications

5.1 The delivery of the scheme will have a positive implication for public health due to the scheme encouraging active travel and therefore the subsequent health and wellbeing benefits of exercise.

6. Environmental and Climate Change Implications

- 6.1 The delivery of the scheme will have a positive implication on environment and climate change including:
 - It is expected that providing improved active travel infrastructure will encourage residents to travel by foot or bicycle instead of by car, and therefore help reduce existing and future year peak hour congestion and delay.; and
 - Fengate is a particularly car-dependent employment destination, and the quality
 of the active travel infrastructure is of a lower quality compared to other areas of
 Peterborough. Without an improvement in active travel infrastructure, Fengate will
 remain a car-dependent destination that is less accessible for those able to travel
 by foot or cycle.

- 7. Other Significant Implications
- 7.1 None.
- 8. Appendices
- 8.1 Fengate Active Travel Early Release Technical Note.
- 9. Background Papers
- 9.1 Combined Authority Board reports 5 August 2020

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Technical Note

Description: Fengate Active Travel Early To: Emma White

Funding Release

Reference: From: Ross Percy-Jones

Date: 23/08/2022 cc: Lewis Banks, Richard Jones, Tamara

Lanoix, Sally Savage

Introduction

Peterborough City Council (PCC) is requesting the early release of part of the construction funding for the Fengate Access Study from the Cambridgeshire and Peterborough Combined Authority (CPCA).

This is to accelerate the construction of two active travel schemes, which form part of the Fengate Access Study project, ahead of the main highways works which are scheduled to commence in Spring 2023 (subject to CPCA Board approval in January 2023). The schemes identified for accelerated delivery are:

- Newark Road Footpath
- Oxney Road Pedestrian Crossing.

Peterborough City Council and the CPCA have been considering opportunities to accelerate scheme delivery as the project is funded by the Transforming Cities Fund (TCF). The TCF is time limited and must be spent by 31st March 2024.

Including the Fengate Access Study project, there is approximately £17m of TCF funded transport infrastructure to deliver in Peterborough in the 2023 / 2024 financial year. Bringing forward some of the active travel schemes for delivery into the third and fourth quarters of the 2022 / 2023 financial year will reduce the pressure on the wider construction programme, and specifically reduce the risk to funding availability caused by any programme delays.

A Full Business Case (FBC) is required for the approval of construction funding by the CPCA Board. The Fengate Access Study FBC is due to be submitted in December 2022, ahead of the January 2023 Board meeting. This technical note provides a summary of the business case dimensions in relation to the two active travel schemes introduced above and demonstrates that the schemes offer very high value for money, and that there is a strong strategic case for investment as well as the necessary measures in place to successfully deliver the schemes.



Schemes

The Fengate active travel schemes are designed and ready to be delivered.

The Newark Road Footway scheme consists of the following:

- 473.5 sqm of footway from the south of Newark Road
- 25.0 sqm of tactile paving positioned either side of:
 - The East Vicarage Farm Road arm of the Newark Road / East Vicarage Farm Road Roundabout
 - The Newark Road north arm of the Newark Road / East Vicarage Farm Road Roundabout
 - Access junctions along the entire footway length on the western side of Newark Road.
- 25.0 sqm of carriageway resurfacing.

The Oxney Road Pedestrian Crossing scheme consists of the following:

- A new puffin crossing over Eastfield Road, west of Oxney Road.
- Red tactile paving on each side of the crossing.
- A total green time of 5.0 seconds for pedestrians, with up to 18.0 seconds of red time for motorised vehicles.
- A 2.4m wide footpath between Oxney Road (north of Sainsbury's) and Eastfield Road
- Break up of existing footway between Oxney Road (north of Sainsbury's) and Eastfield Road
- Buff-coloured tactile paving on each side of Oxney Road, where the proposed footpath meets.
- Buff-coloured tactile paving on each side of the Franklyn Crescent arm of the Oxney Road / Eastfield Road / Franklyn Crescent Roundabout.
- Footway resurfacing on the south side of the puffin crossing.

The scheme drawings for each scheme can be provided upon request.

Figure 1 overleaf shows the location of the schemes in Fengate.



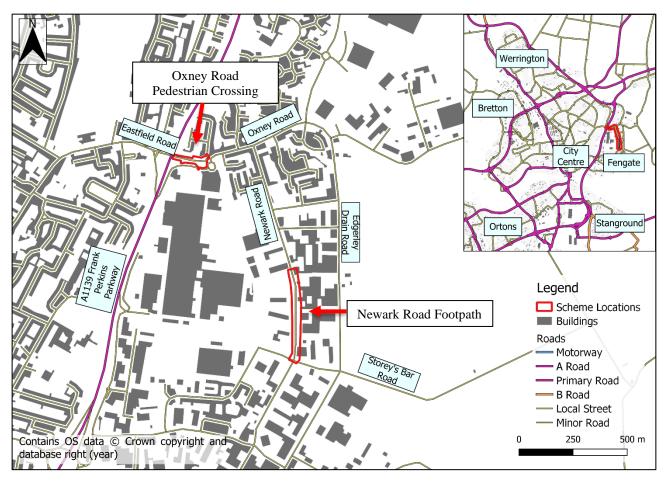


Figure 1: Fengate Active Travel Scheme Locations



Strategic Dimension

The Strategic Dimension considers the policy context in which the schemes have been developed. As well as policy, the need for intervention is explained, which includes the requirement to overcome the peak hour congestion and delay that compromises local growth aspirations.

Policy Context

A policy review of the following, in conjunction with a review of existing and future issues, has been undertaken as part of the Fengate FBC to identify scheme objectives:

National:

- Department for Transport Single Departmental Plan (June 2019)
- o Department for Transport Gear Change: One Year On (November 2020)
- Department for Transport Cycle Infrastructure Design Local Transport Note 1/20 (LTN 1/20) (July 2020)
- The Environment Act 2021

Regional:

- o Combined Authority Annual Report & Business Plan 2021 / 22
- Cambridgeshire and Peterborough Independent Economic Review (CPIER) (September 2018)
- Mayor's Growth Ambition Strategy
- o Cambridgeshire and Peterborough Local Industrial Strategy (June 2019)
- Cambridgeshire and Peterborough Combined Authority Local Transport Plan (January 2020)
- Forthcoming Cambridgeshire and Peterborough Combined Authority Local Transport and Connectivity Plan
- Natural Cambridgeshire Doubling Nature Vision
- Cambridgeshire and Peterborough Independent Commission on Climate Fairness,
 Nature and Communities: Addressing Climate Change in Cambridgeshire and
 Peterborough (October 2021)

Local:

- Peterborough City Council Strategic Priorities
- Peterborough City Council Local Plan (July 2019)
- Peterborough City Council Trees and Woodland Strategy (2018)



Existing and Future Conditions

Trafficmaster Satellite Navigation data (November 2017) has been used to assess baseline vehicular journey times and delay within the study area for the free flow (00:00-05:00), AM peak hour (08:00-09:00), and PM peak hour (17:00-18:00) periods. The approaches of the following junctions have been considered within the Fengate FBC:

- Oxney Road / Edgerley Drain Road priority junction
- Edgerley Drain / Storey's Bar Road / Vicarage Road signalised junction
- Junction 8 signalised junction.

Significant delay was observed at all of these junctions in the AM and PM peak hours when compared to the free flow period.

An assessment of future year highway conditions was undertaken using the Peterborough Transportation Model (PTM3) and large increases in delay per vehicle are forecast to take place at all three junctions.

It is expected that providing improved active travel infrastructure will encourage residents to travel by foot or bicycle instead of by car, and therefore help reduce existing and future year peak hour congestion and delay.

Fengate is a particularly car-dependent employment destination, as shown in Figure 2 below, and the quality of the active travel infrastructure is of a lower quality compared to other areas of Peterborough. The density of cycleways per one square kilometre is also lower than other areas of the city as shown in Figure 3 overleaf.



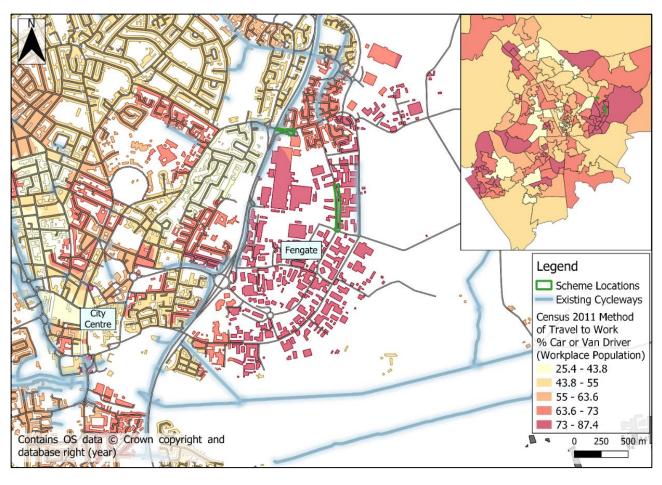


Figure 2: Census 2011 Method of Travel to Work – Percentage Car or Van Driver within Workplace Population





Figure 3: Total Length of Existing Cycleway per One Square Kilometre

The average car travel to work mode share for Fengate is 79%, whereas the whole of Peterborough is 61%. In contrast, Fengate has a low walking travel to work mode share of 3%, as shown in Figure 4 overleaf. The whole of Peterborough has a walking mode share of 8%, which is almost triple of the mode share in Fengate. Without an improvement in active travel infrastructure, Fengate will remain a car-dependent destination that is less accessible for those able to travel by foot or cycle.



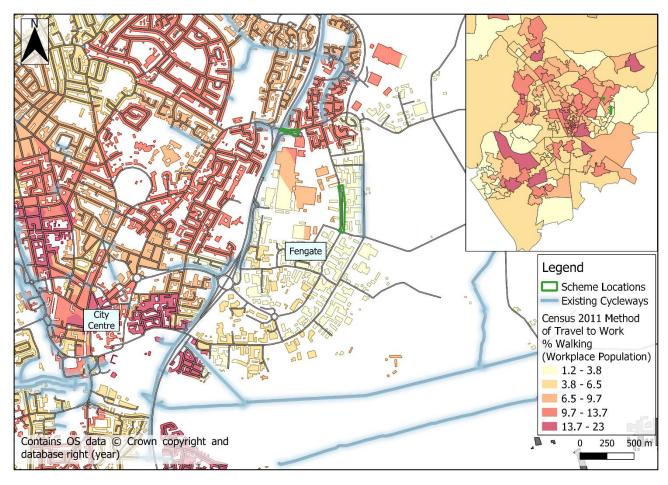


Figure 4: Census 2011 Method of Travel to Work – Percentage Walking within Workplace Population

Local Growth Aspirations

Peterborough is forecast to experience significant employment and population growth over the next few decades, reflecting a continuation of past trends. The Peterborough Local Plan (adopted July 2019) sets out the overall vision, priorities and objectives for Peterborough for the period up to 2036. The updated strategy identifies the required delivery of 19,440 new homes and 17,600 new jobs by 2036. This level of growth will in turn further strengthen the City's economy, contribute to regional growth, and increase the demand for travel on the local network.



Peterborough strives to become a 'destination of choice', to be continually recognised as a regional centre and economic partner with Cambridge. With the attractiveness of the city set to increase as a place to live, work and travel, this in turn creates pressure in relation to housing and employment growth, which in turn increases the strain on the transport infrastructure. Improving the transport infrastructure to enable Peterborough's strong history of growth to continue is the main internal driver for improving access to the key employment area of Fengate.

Tables 1 and 2 show the breakdown of the residential and employment developments that are proposed for Fengate, respectively.

Table 1: Residential Development Proposed for Fengate

	Residential Developments (Units)				
Local Plan Development	Up to 2019	2019-2026	2026-2031	2031-2036	Total Units
Potters Way Fengate	0	18	0	0	18
Fengate South	0	0	150	200	350
Former Perkins Engines Site Newark Road	0	104	0	0	104
Tanholt Farm, Eyesbury Road	0	3	0	0	3
Rear of 83 Oxney Road	0	5	0	0	5
105 Oxney Road	0	8	0	0	8

Table 2: Employment Development Proposed for Fengate

Mixed Commercial Developments (sq.m)						
Local Plan Development	Land Use Class	Up to 2019	2019 -2026	2026 -2031	2031 -2036	Total Size (sq.m)
Red Brick Farm	Employment	0	0	126,600	0	126,600
Oxney Road Site C	Employment	0	0	34,825	0	34,825
Perkins South	Employment	0	0	14,700	0	14,700
Land of Third Drove and fronting Fengate	Employment	0	0	5,950	0	5,950

Local residential and employment growth in Fengate will be compromised if no changes are made to existing congestion and delay. An increase in active travel within Fengate and a reduction in car travel will alleviate congestion and delay.

The October 2021 Cambridgeshire and Peterborough Independent Commission on Climate report recommends a reduction in car miles driven by 15% to 2030 relative to baseline levels to help the region mitigate and adapt to the impacts of climate change. The schemes will provide quality walking infrastructure that would encourage walking to work within Fengate as a more sustainable alternative to car travel.



Scheme Objectives

The project scope is to construct schemes within Fengate that achieve each of the primary objectives of the Fengate FBC.

The primary scheme objectives, as outlined in the Fengate FBC, are as follows:

- Tackle congestion and reduce delay
- Support Peterborough's Growth Agenda and facilitate the development of the Red Brick Farm site
- Protect the local environment and improve biodiversity.
- Reduce dependence on car travel and increase travel by healthier, more sustainable modes.

The secondary scheme objectives, as outlined in the Fengate FBC, are as follows:

- Positively impact traffic conditions on the wider network
- Improve road safety.

The Fengate FBC schemes were developed and shortlisted against the scheme objectives using the DfT's Early Assessment and Sifting Tool (EAST) assessment. An option development workshop was held on 15th May 2018 and attended by representatives from various disciplines within Peterborough Highway Services (PHS). The workshop used EAST to review existing and future issues relating to access to Fengate and site constraints.

As stated in the Department for Transport (DfT) Cycle Infrastructure Design Local Transport Note 1/20 (LTN 1/20), funding for local highways investment where the main element is not cycling or walking will be provided where schemes deliver or improve cycling infrastructure to the standards in LTN 1/20.

The Benefits Realisation Plan for the Fengate FBC will measure the success of the schemes against the scheme objectives.

Key Risks

A project Risk Register is available as part of the Fengate FBC that identifies each of the key risks and mitigation measures. The Risk Register is a live document, which is managed by PCC and is reviewed regularly by the CPCA in monthly Project Board meetings.

A construction Risk Register for each scheme has been produced and can be provided upon request. The Risk Register is a live document and will be regularly updated throughout the ten-week construction period.



Economic Dimension

The Economic Dimension provides evidence of how the proposed improvements are predicted to perform in relation to the stated objectives, identified problems, and targeted outcomes. The Economic Dimension determines whether the proposed improvements are likely to provide good value for money, with benefits outweighing its costs.

This section sets out the approach taken to initially assess the Economic Dimension for the Fengate Active Travel schemes and demonstrates that the proposed schemes would offer Very High Value for Money.

The scheme appraisal in this report focuses on the impacts that can be monetised and these include:

- Mode Shift
- Health
- Journey Quality
- Severance.

A full appraisal of other economic, environmental, social and distributional impacts that cannot be monetised will be assessed quantitatively and qualitatively within the FBC going to the CPCA January Board.

Present Value of Benefits

The active travel and severance Present Value of Benefits (PVB) of each scheme has been assessed using the Active Mode Appraisal Toolkit (AMAT) and the University College London (UCL) Tool to Value Reductions in Community Severance Caused by Roads, respectively.

AMAT requires the following intervention-specific details for calculating active travel benefits:

- Appraisal year 2022
- Intervention opening year 2023
- Final year of funding 2023
- Appraisal period 20 years
- Area type Other Urban
- Number of daily walking and / or cycling trips without the proposed intervention

- Number of daily walking and / or cycling trips with the proposed intervention
- Percentage of an average walking or cycling trip that will use the intervention
- Current walking and cycling infrastructure for the route
- Proposed walking and cycling infrastructure for the route.

The number of walking and cycling trips without the proposed interventions have been sourced from Strava Metro, Census 2011 Method of Travel to Work, Vivacity AI sensors, and historic Automatic Traffic Counts (ATC).



The number of walking trips with the proposed interventions has been calculated by:

- Identifying a comparable location within Peterborough that has a higher walking mode share (based on the Census 2011) and better walking infrastructure
- Identifying the walking mode share for the scheme location based on the Census 2011
- Calculating an uplift factor based on the ratio of Shrewsbury Avenue to Fengate walk trips.
- Applying the resultant uplift factor to the number of walking trips without the proposed interventions.

A comparison between Shrewsbury Avenue in Orton Longueville, which is a comparable land use, and Fengate was undertaken to understand the potential for travel to work by walking. The assessment identified that Shrewsbury Avenue had a travel to work by walking mode share of 5.33%, whereas Fengate had a mode share of 4.45%. The uplift factor for walking would therefore be 1.198.

The number of cycling trips with the proposed interventions has been calculated by:

- Identifying the PCT Government Target (Equality) Ratio (Scenario / Baseline) for the existing route at the scheme location
- Applying the ratio as an uplift factor to the number of cycling trips without the proposed interventions.

Government Target (Equality) is the most conservative of all PCT scenarios and is representative of the Department for Transport's Cycling Delivery Plan (October 2014) target of doubling cycling from 2013 levels nationally. Nearly all PCT scenarios are calculated using a function based on trip distance and hilliness. Not all areas experience the same trip distances and hilliness, and this therefore results in increases that can be below or above a doubling of cycling nationally.

PCT is a measure of cycling potential and not an exact estimate of the impact of a specific scheme or intervention. However, site visits to each scheme location have shown that each scheme is integral to delivering a better-connected network that reduces severance and improves safety and journey quality for cycling. Without any infrastructure improvements, the study area would not be appropriate for increased cycling.

Table 3 below shows the number of walking trips by scenario for each scheme.

Table 3: Do Nothing and Do Something Daily Walking Trips by Scheme

Scheme	Daily Walking Trips		
Concinc	Do Nothing	Do Something	
Oxney Road Pedestrian Crossing	1,701	2,038	
Newark Road Footway	773	926	



The UCL Tool to Value Reductions in Community Severance Caused by Roads (Anciaes and Jones, 2020) is a spreadsheet used to estimate the value of interventions that reduce the barrier effect caused by roads, including changes to road design, traffic, and crossing facilities. This tool is referred to as the "Severance Tool" within this report.

Severance is calculated at each point along a road. The Severance Tool assumes that severance originates from the road conditions at a particular point and the possibility of walking along the road to cross in a place with better road conditions or crossing facilities.

The Severance Tool has only been used for the Oxney Road Pedestrian Crossing scheme and it requires the following intervention-specific details for calculating active travel benefits:

- Length of road segment (100 5,000m)
- Total potential demand for walking trips crossing the road (minimum of 1,000 trips per day)
- Percentage of each age group in the demand
- Average walking speed by age group
- Journey purpose of each age group
- Percentage of demand at each crossing location along the road segment
- Lifetime of the project (maximum of 10 years)
- Road conditions including the number of lanes in each direction, central reservation (wide, narrow, or none), traffic density (low, medium, or high), and traffic speed (10, 20, 30, or 40mph).
- Crossing facilities available at the extreme and middle points of the road segment. Options
 include pedestrian refuge, straight pelican, staggered pelican, footbridge, or underpass.
- Waiting time (0 to 5 minutes).

It has been assumed that the scheme will generate an increase in walking trips and therefore the rule of half must be applied to the benefits associated with the increase.

Table 4 overleaf summarises the benefits for each scheme.



Table 4: Summary of Benefits by Scheme

Benefit Type	Benefit Item	Benefits ('000s)			
Deficit Type	Deficill Rem	Oxney Road	Newark Road	Total	
	Congestion Benefit	21.84	9.91	31.75	
	Infrastructure Maintenance	0.12	0.06	0.18	
Mode Shift	Accident	3.75	1.70	5.46	
	Local Air Quality	0.53	0.24	0.77	
	Noise	0.25	0.11	0.36	
	Greenhouse Gases	1.78	0.81	2.59	
Health	Reduced Risk of Premature Death	793.36	360.19	1,153.55	
Absenteeism		165.06	74.94	240.00	
Journey Quality	Journey Ambience	17.40	33.77	35.51	
Severance (Indicative Monetised Impact)	Reduced Community Severance Caused by Roads	948.70	Not assessed	948.70	
Indirect Taxation	Indirect Taxation	-2.24	-1.02	-3.26	
Total		1,950.43	480.66	2,431.09	

The benefits over a 20-year appraisal period for the Oxney Road and Newark Road schemes are £1,950,430 and £480,660, respectively. Health (49%) and Severance (49%) form most of the benefits for the Oxney Road scheme, whereas Health (90%) accounts for nearly all the benefits for the Newark Road scheme alone.

Present Value of Costs

The Present Value of Costs (PVC) used within the economic assessment are based on initial base investment costs and Optimism Bias (OB) that have been rebased and discounted to 2010 prices and adjusted to market prices using AMAT. Inflation has not been applied to the scheme costs because the costs are to be incurred during the 2022 price year.



Real Cost Increase (inflation) has been applied to the Base Investment Costs for the Oxney Road scheme only for 2022 to 2023 using TAG Data Book May 2022 Annual GDP and BCIS General Civil Engineering Cost Index (2022) values. The inflation factor applied (1.061) has been calculated by dividing the BCIS inflation factor of 1.080 (8.0%) by the TAG GDP factor of 1.018 (1.8%).

The OB rate has been sourced from TAG Unit A1.2 Scheme Costs (May 2022) and uses the Stage 3 Road OB of 20% to reflect the final stage (FBC) that the Fengate Business Case is currently at.

The conversion to market prices is undertaken by applying a market price factor of 1.19 to the discounted costs.

Table 5 below shows the scheme costs used within the economic assessment.

Table 5: Economic Dimension Costs

Cost Type	Oxney Road Pedestrian Crossing	Newark Road Footway	Total
Base Investment Cost	£253,526	£203,237	£456,763
Base Cost with Real Cost Increases	£269,070	£203,237	£472,307
Base Cost with Real Cost Increases and Optimism Bias	£322,883	£243,885	£566,768
Rebased and Discounted to 2010, and Adjusted to Market Prices (PVC)	£187,560	£151,277	£338,837

Net Present Value and Benefit Cost Ratio

The Net Present Value (NPV) has been calculated by subtracting the PVC from the PVB.

The Benefit Cost Ratio (BCR) has been calculated by dividing the PVB by the PVC.

The BCR is used to determine the Value for Money category that each scheme falls within, as shown in Table 6 below. The Value for Money categories have been sourced from the Department for Transport Value for Money Framework: Moving Britain Ahead (2017) document.



Table 6: Value for Money Categories

Value for Money Category	Benefit Cost Ratio (BCR) Range
Very Poor	BCR <= 0.0
Poor	1.0 < BCR > 0.0
Low	1.5 < BCR >= 1.0
Medium	2.0 < BCR >= 1.5
High	4.0 < BCR >= 2.0
Very High	BCR >= 4.0

The scheme should provide a BCR of at least 1.5 (Medium Value for Money) to be considered of good value for money. It should be noted that the CPCA state in its Local Assurance Framework (2021) that a scheme with a BCR less favourable than other alternatives but best delivers on a project's strategic objectives may be the best value way of delivering a project. However, it is for the CPCA Board to judge whether the achievement of the strategic objectives is worth the cost to the CPCA.

Table 7 overleaf provides the Analysis of Monetised Costs and Benefits (AMCB) Table.



Table 7: Analysis of Monetised Costs and Benefits Table

Benefit Item	Value (£'000s)			
Delient item	Oxney Road	Newark Road	Total	
Noise	0.25	0.11	0.36	
Local Air Quality	0.53	0.24	0.77	
Greenhouse Gases	1.78	0.81	2.59	
Journey Quality	1.74	33.77	35.51	
Physical Activity (Health)	958.42	435.13	1,393.55	
Accidents	3.75	1.70	5.46	
Congestion Benefit	21.84	9.91	31.75	
Infrastructure Maintenance	0.12	0.06	0.18	
Indirect Taxation	-2.24	-1.02	-3.26	
Present Value of Benefits (PVB)	1,001.72	480.66	1,482.38	
Broad Transport Budget	187.56	151.28	338.84	
Present Value of Costs (PVC)	187.56	151.28	338.84	
Net Present Value (NPV)	814.17	329.38	1,143.55	
Initial Benefit to Cost Ratio (BCR)	5.34	3.18	4.37	

Severance is not currently considered as an Established Monetised Impact within TAG or the Value for Money Framework. However, it could be considered an Indicative Monetised Impact that when combined with the core benefits reported within the AMCB Table would demonstrate an indicative PVB.

Without severance impacts in the economic assessment of the Oxney Road scheme would provide a PVB of £1,001,720, NPV of £814,170, and a BCR of 5.34 which equates to Very High Value for Money. Including severance impacts increases the BCR from 5.34 to 10.39.



The Newark Road scheme provides a PVB of £480,660, NPV of £329,380, and a BCR of 3.18, which equates to High Value for Money.

Combining both schemes together (without severance) provide a PVB of £1,482,380, NPV of £1,143,550, and a BCR of 4.37, which equates to Very High Value for Money. Including severance impacts increases the overall BCR from 4.37 to 7.17.

Non-monetised Impacts

Impacts that have not been monetised for active travel include:

- Journey time savings for active users (Social and Economy)
- Security (Social)
- Personal Affordability (Social)
- Accessibility (Social).

The distributional impacts of security and personal affordability have been quantitatively assessed. Accessibility has not been assessed on the basis that the guidance within TAG Unit A4.2 focuses solely on public transport.

The following non-monetised environmental impacts have been considered in full within the Fengate FBC:

- Landscape
- Townscape
- Historic Environment
- Biodiversity
- Water Environment.

Security

Security impact appraisal is recommended for road users, public transport passengers or freight, or a combination of these as stated in TAG Unit A4.1 Social Impact Appraisal. Whilst there is no specific guidance for the security of active mode users, the process as outlined within TAG Unit A4.2 Distributional Impact Appraisal has been used. Indicators such as surveillance, lighting and visibility, and landscaping were noted during site visits and used to inform the appraisal.

The security distributional impact appraisal found that each scheme would not deliver any change in terms of security for older people, females, or young people.



Personal Affordability

Personal Affordability appraisal considers how the monetary costs of travel can be a major barrier to mobility for certain groups of people and their ability to access key destinations. The more deprived groups of society typically spend less money on travel, but the cost of travel will account for a greater proportion of their income. The most significant impacts of the costs of travel are on younger and older groups, and low-income households.

Figures 5 and 6 show the distribution of younger (0 to 15) and older (65 plus) age groups across Peterborough in relation to key services that would likely be used, respectively.

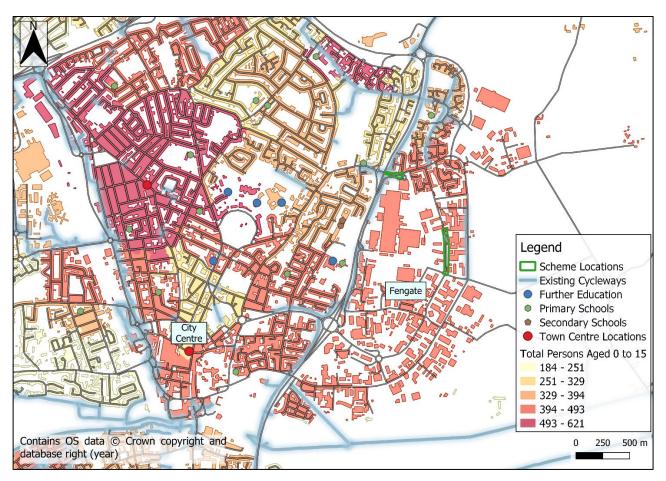


Figure 5: Number of Persons Aged 0 to 15 at LSOA Level across Peterborough in Relation to Key Services



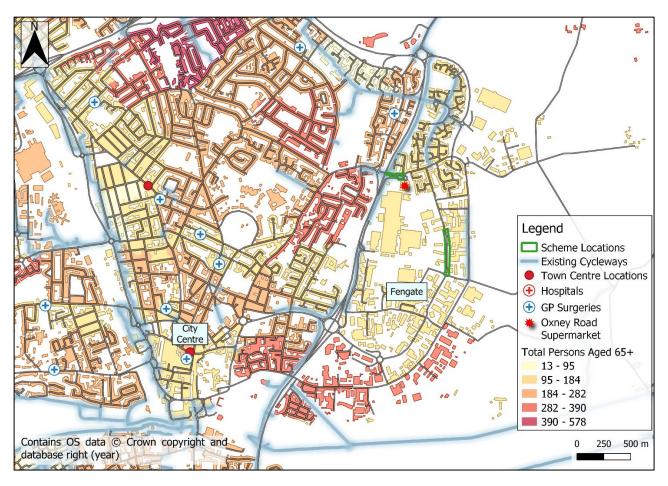


Figure 6: Number of Persons Aged 65+ at LSOA Level in Relation to Key Services

There is a particularly high number of persons aged 0 to 15 that live along Oxney Road and north-east of the nearest secondary schools that would be currently disadvantaged by the lack of a direct crossing point along Eastfield Road. Young people walking to school would have to wait for a gap in the traffic on Eastfield Road to cross or travel further west to find a suitable crossing and even then, they would have to cross the Eye Road Approach and Exit arms of the Eastfield Road / Eye Road Signalised Junction. Without the proposed crossing, it is expected younger people choosing to walk to school are currently experiencing increased journey times and therefore an increased cost of travel.

There is a significant number of persons aged 65 and above to the west of the Oxney Road Supermarket that would be currently disadvantaged by the lack of a direct crossing point along Eastfield Road. Whilst bus travel is free for senior citizens and there is a bus stop at the Oxney Road Supermarket, travelling by bus does not offer the same health benefits as those associated with active travel. The lack of a direct crossing point would increase journey times and the cost of travel for those wanting to walk.



Figure 7 shows the Income Deprivation Domain of the English Indices of Multiple Deprivation dataset for the study area.

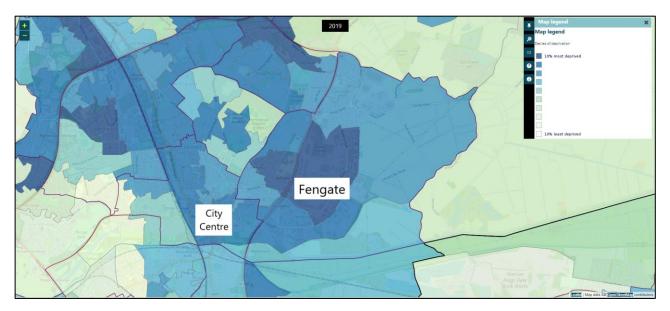


Figure 7: Income Deprivation Domain by LSOA

The LSOAs in and surrounding Fengate are in the top 30% most income deprived deciles for England. An improvement in the walking infrastructure of Fengate would help make walking to work or other local key services a more realistic alternative to car and bus travel for those in income deprived areas that are more greatly affected by the cost of travel for reaching work.

Fengate is a particularly car-dependent employment destination, as previously shown in Figures 2 to 4 of the Strategic Dimension, and the quality of the active travel infrastructure is of a lower quality compared to other areas of Peterborough.

The average car travel to work mode share for Fengate is 79%, whereas the whole of Peterborough is 61%. In contrast, Fengate has a low walking travel to work mode share of 3%, as shown in Figure 6. The whole of Peterborough has a walking mode share of 8%, which is almost triple of the mode share in Fengate. Without an improvement in active travel infrastructure, Fengate will remain a car dependent destination that is less accessible for those who cannot afford to travel by car.



Value for Money Statement

Delivering the Oxney Road Pedestrian Crossing and Newark Road Footway active travel schemes together will provide a PVB of £1,466,780 overall, with a BCR of 4.37 (Very High Value for Money) based on physical activity, journey quality, accidents, noise, local air quality, greenhouse gases, and congestion benefits. Including severance benefits increases the overall PVB to £2,415,600, with a BCR of 7.17.

The schemes are not expected to deliver any change in security impacts for vulnerable active travel users.

The removal of a barrier to travel along Eastfield Road and the provision of a new footway on Newark Road is expected to make walking a more realistic and affordable alternative to car travel to key services in and around Fengate. The schemes would also benefit nearby residential areas that are currently in the top 30% most income deprived deciles for England.

Financial Dimension

The Financial Dimension focuses on the affordability of the proposed schemes, funding arrangements, and technical accounting issues.

The scheme cost estimates for the Financial Dimension have been prepared in line with guidance set out in TAG Unit A1.2 Scheme Costs (May 2022).

The estimates have been costed based on a bill of quantities produced from the preliminary designs and a schedule of construction activities. These costs have been peer reviewed, and include:

- Detailed design costs and additional surveys where required
- Land acquisition and planning costs
- Ecology surveys, and specialist environmental advice
- Staff and legal fees, including local overheads and consultation costs
- Third party costs
- Construction costs, including mobilisation, supervision, and costs associated with statutory undertakers works
- Risk Allowance.

It should be noted that Optimism Bias is not applied within the Financial Dimension and is only for use within the Economic Dimension.

Project costs incurred to date have been omitted from the costs presented in this section as "sunk costs", which is in line with TAG Unit A1.2.

The cost profile is based upon the milestone activities set out in the Management Dimension, and the dates used to calculate the scheme costs, including the application of inflation, are shown in Table 8.



Table 8: Milestone Activities

Timescale	Activity
August 2022	Present Active Travel Schemes Business Case Technical Note to CPCA
September 2022	CPCA Sponsors present papers to CPCA Board to request approval of funding. Raising Work Orders and mobilising works
October 2022 – December 2022	Newark Road scheme construction undertaken
January 2023 – March 2023	Oxney Road scheme construction undertaken
January 2023	CPCA Board to make funding decision for the main Fengate project. This was the original CPCA Board date for the Fengate active travel schemes.

Table 9 below shows the Financial Dimension Scheme Cost Estimates. The costs calculated for use within the Economic Assessment are presented in the Economic Dimension.

Table 9: Financial Dimension Scheme Cost Estimates

Description of Cost Type	Oxney Road	Newark Road
Base Investment Cost	253,526	203,237
Risk Adjusted Base Cost	275,960	252,387
Risk Adjusted Base Cost with Industry Inflation (Outturn Cost)	298,037	252,387

The Outturn cost represents the amount required to deliver the scheme, and is the amount requested for early release.

The schemes will be delivered within the same year as the cost estimates and therefore inflation has not been applied. Therefore, the outturn costs for Oxney Road Pedestrian Crossing and Newark Road Footpath are £298,037 and £252,387, respectively.



Budgets and Funding Cover

It is anticipated that the full combined Outturn Cost of £550,424 will be funded from the Transforming Cities Fund (TCF). The TCF is time limited and must be spent by 31st March 2024.

There are not known to be any financial constraints beyond the availability of funding from the TCF, which is currently considered adequate to cover the scheme costs.

Commercial Dimension

The Commercial Dimension serves to demonstrate that the Fengate active travel schemes can be reliably procured and implemented through existing channels whilst ensuring value for money in delivery of the scheme.

All phases to date and future phases of construction and site supervision will be delivered by Peterborough Highway Services (PHS). All skills and competencies to deliver this scheme are available within the PHS contract and its supply chain.

The scheme construction will be procured using a Target Cost payment mechanism. This incentivises both parties to work together to reduce cost through a pain / gain mechanism. To ensure that the procurement remains commercially competitive and offers value for money, all subcontract packages will be subject to competitive tendering.

Management Dimension

The Management Dimension demonstrates that the Council, through the PHS Framework, has the necessary experience and governance structure to successfully manage the delivery of the Fengate active travel schemes.

PHS has successfully delivered the following active travel schemes in recent years:

Pop-up cycleways:

- Between Midland Road and Bourges Boulevard along Thorpe Road on the eastbound carriageway. Installed during the first COVID-19 lockdown in 2020.
- Along the southbound side of Priestgate. Designed in 2020 and installed in late 2021, the cycleway consisted of a cycle lane delineated by 'Rediweld One Piece Wand Orca' units. Cones were taken down in 2022.
- Between St. Johns Street and Cattle Market Road along City Road. Designed in 2020 and installed in late 2021, the cycleway consisted of a cycle lane delineated by 'Rediweld One Piece Wand Orca' units. Cones were taken down in 2022.
- Westbound between the Junction 39 roundabout and Cattle Market Road. Designed in 2020 and installed in late 2021, the cycleway consisted of a cycle lane delineated by 'Rediweld One Piece Wand Orca' units. Cones were taken down in 2022.



- In both directions along Broadway. Designed in 2020 and installed in late 2021, the cycleway consisted of a cycle lane delineated by 'Rediweld One Piece Wand Orca' units.
 Cones were taken down in 2022.
- Haddon Cycleway. Designed in 2021 and constructed in 2022, the scheme improved the footway
 / cycleway connection between Haddon Hill and Orton Goldhay.
- Toucan Crossings:
 - Bishop's Road toucan crossing upgraded in 2019 to allow for cycle use.
 - Oundle Road toucan crossing by Peterborough High School
 - Lincoln Road / Manor House Road crossing improved to a toucan crossing between 2021 and 2022.

To date, the delivery of the scheme has been managed by a Project Team, led by a PCC Project Manager. The Project Team consists of all the key project delivery partners and has been responsible for the daily running of the project. The Project Team includes key stakeholders such as the CPCA.

The existing PHS Project Board has overseen the continued development and delivery of the schemes to date by the Project Team and has made key decisions relating to the delivery of the project. The Project Board has been supported by technical specialists, with key stakeholders invited to attend as necessary.



Key project milestones for progressing to scheme delivery are outlined in Table 10.

Table 10: Key Project Milestones

Timescale	Activity
August 2022	Present Active Travel Schemes Business Case Technical Note to CPCA
September 2022	CPCA Sponsors present papers to CPCA Board to request approval of funding. Raising Work Orders and mobilising works
October 2022 – December 2022	Newark Road scheme construction undertaken
January 2023 – March 2023	Oxney Road scheme construction undertaken
January 2023	CPCA Board to make funding decision for the main Fengate project. This was the original CPCA Board date for the Fengate active travel schemes.
March 2024	One-year post-scheme monitoring undertaken
March 2028	Five-year post-scheme monitoring undertaken

Stakeholder engagement was undertaken by the Project Team following approval of the SOC and were in line with the timings of the Public Consultation (February 2021 – March 2021). All stakeholders were consulted via email or letter for comments on the Preferred Scheme of the Fengate Access Study prior to the completion of Detailed Design.

Communication with stakeholders was maintained throughout the project and feedback from stakeholders largely centred on the environment, biodiversity, and sustainable travel elements of the Fengate Access Study preferred scheme. All feedback has been incorporated into the Detailed Design where appropriate.

A construction Risk Register for each scheme has been produced and can be provided upon request. The Risk Register is a live document and will be regularly updated throughout the ten-week construction period.

The schemes will be monitored and evaluated in line with the CPCA Assurance Framework and DfT guidance. The monitoring and evaluation will include a range of qualitative and quantitative data collection methods that will be undertaken one year and five years post scheme completion.

Outputs from the monitoring and evaluation stage will be summarised within a Scheme Evaluation Report to determine whether the schemes have been delivered as planned and justify the investment. Where outcomes differ from what is expected, data collected during the monitoring and evaluation phases will be used to form an evidence base that will assist in understanding the reasons for this and any lessons that can be learnt.



Agenda No: 2.4

A1260 JUNCTION 32/3

To: Transport and Infrastructure Committee

Meeting Date: 14th September 2022

Public report: Yes

Lead Member: Mayor Dr Nik Johnson

From: Emma White, Transport Programme Manager

Key decision: No

Forward Plan ref: N/A

Recommendations: The Transport and Infrastructure Committee is recommended to:

- a) Note progress towards the A1260 Junction 32/3 Full Business Case.
- b) Recommend to the Combined Authority Board to approve the drawdown of £518,988 to accelerate the active travel element of the scheme.
- c) Recommend the Combined Authority Board delegate authority to the Interim Head of Transport and Chief Finance Officer to enter into Grant Funding Agreements with Peterborough City Council.

Voting arrangements:

For recommendation b) A vote in favour by at least two thirds of all Members (or their Substitute Members) appointed by the Constituent Councils who are present and voting, to include the Members appointed by Cambridgeshire County Council and Peterborough City Council, or their Substitute Members *or*

A vote in favour by at least two thirds of all Members (or their Substitute Members) present and voting.

To be carried, the vote must include the vote of the Mayor, or the Deputy Mayor when acting in place of the Mayor.

For recommendation c) A simple majority of all Members present and voting

1. Purpose

1.1 This report summarises the progress towards the A1260 Junction 32/3 Full Business Case (FBC) and recommends the drawdown of to the Combined Authority Board of £518,988 to accelerate the active travel elements of the scheme. Peterborough City Council and the Combined Authority have been considering opportunities to accelerate scheme delivery as the scheme is funded by the Transforming Cities Fund (TCF).

2. Background

- 2.1 Junction 3 is a large, grade separated junction between two of Peterborough's busiest strategic roads. The junction is a crucial cornerstone of the Parkway Network, connecting the A1139 Fletton Parkway and A1260 Nene Parkway, thus providing the majority of access to southwest Peterborough. The junction is used by trips from across the Peterborough area, and experiences significant peak hour congestion, on the A1260 Nene Parkway and the A1260 The Serpentine approaches. Because of its strategic location, the junction is critical to Peterborough's growth aspirations. It is heavily used by trips in the southwest of Peterborough, as it accommodates eastbound, westbound, and northbound trips. A large number of facilities, businesses, and residences are also accessed by the southern arm.
- 2.2 In July 2020 the Strategic Outline Business Case (SOBC) was tabled at the CA Board which identified issues and sifted possible solutions. This resulted in a number of complimentary proposed options. At this Board £500,000 was approved to progress the study to Full Business Case stage.
- 2.3 The A1260 Full Business Case is due to be submitted in December 2022 on time and budget. The Outline Business Case was approved at CA Board in August 2020 and demonstrated the scheme offer high value for money with a BCR of 3.251. This is expected to increase at FBC as active travel benefits have been captured and the scheme has been value engineered.
- 2.4 Early request to release £518,988 to accelerate the construction funding of two of the active travel schemes which form part of the project ahead of the main highway works which are scheduled to commence in April 2023 (subject to CA Board approval planned in January 2023).
- 2.5 The schemes identified for accelerated delivery are:
 - Malborne Way Footpath (completes the missing link along an existing route)
 - Shrewsbury Avenue Cycleway (new cycle way and resurfacing of existing route).
- 2.6 Peterborough City Council and the Combined Authority have been considering opportunities to accelerate scheme delivery as the scheme is funded by the TCF. The TCF is time limited and must be spent by 31st March 2024.
- 2.7 Including the Junction 3 project, there is approximately £17m of TCF funded transport schemes to deliver in the 2023/24 financial year in Peterborough. Bringing forward some of the active travel schemes for delivery into the third and fourth quarters of the 2022/23 financial year will reduce the pressure on the wider construction programme, and specifically reduce the risk to funding availability caused by any programme delays.
- 2.8 A FBC is currently being produced and will be submitted in December ahead of the January CA Board. However, a value for money assessment has been undertaken for the two active travel schemes to demonstrate that they offer value for money ahead of the wider FBC

submission.

2.9 In summary, the active travel schemes offer very high value for money, and there is a strong case for early investment.

3. Financial Implications

3.1 Drawdown £518,988 of the £6,722,000 forecast 2022/23 and 2023/24 TCF budget. Seek approval for the full drawdown of the rest of the budget once FBC is complete at CA Board in January.

4. Legal Implications

4.1 None.

5. Public Health Implications

5.1 The A1260 Junction 32/3 seeks to encourage active travel by improving the footpath and cycle ways in the area. Increasing those walking and cycling as the subsequent health and wellbeing benefits of exercise. Therefore, the delivery of the scheme will have a positive implication for public health.

6. Environmental and Climate Change Implications

6.1 The delivery of the scheme will have a positive implication on environment and climate change by encouraging active travel in the area and therefore reducing existing and future year peak hour congestion and delay. Without an improvement in active travel infrastructure, they study area will remain a car dependent destination with untapped potential for walking and cycling.

7. Other Significant Implications

7.1 None.

8. Appendices

8.1 Appendix 1 – Fengate Active Travel Early Release Technical Note.

9. Background Papers

9.1 Combined Authority Board reports 5 August 2020



Technical Note

Description: Junction 3 Active Travel Early To: Nathan Bunting, Emma White

Funding Release

Reference: From: Ross Percy-Jones

Date: 23/08/2022 cc: Lewis Banks, Richard Jones, Tamara

Lanoix, Sally Savage

Introduction

Peterborough City Council (PCC) is requesting the early release of part of the construction funding for the Junction 3 Improvement Scheme from the Cambridgeshire and Peterborough Combined Authority (CPCA).

This is to accelerate the construction of two active travel schemes, which form part of the Junction 3 project, ahead of the main highways works which are scheduled to commence in Spring 2023 (subject to CPCA Board approval in January 2023). The schemes identified for accelerated delivery are:

- Malborne Way Footpath
- Shrewsbury Avenue Cycleway.

Peterborough City Council and the CPCA have been considering opportunities to accelerate scheme delivery as the scheme is funded by the Transforming Cities Fund (TCF). The TCF is time limited and must be spent by 31st March 2024.

Including the Junction 3 project, there is approximately £17m of TCF funded transport infrastructure to deliver in the 2023 / 2024 financial year in Peterborough. Bringing forward some of the active travel schemes for delivery into the third and fourth quarters of the 2022 / 2023 financial year will reduce the pressure on the wider construction programme, and specifically reduce the risk to funding availability caused by any programme delays.

A Full Business Case (FBC) is required for the approval of construction funding by the CPCA Board. The Junction 3 Improvement Scheme FBC is due to be submitted in December 2022, ahead of the January 2023 Board meeting. This technical note provides a summary of the business case dimensions in relation to the two active travel schemes introduced above and demonstrates that the schemes offer very high value for money, and there is a strong strategic case for investment as well as the necessary measures in place to successfully deliver the schemes.

As stated in the Department for Transport (DfT) Cycle Infrastructure Design Local Transport Note 1/20 (LTN 1/20), funding for local highways investment where the main element is not cycling or walking will be provided where schemes deliver or improve cycling infrastructure to the standards in LTN 1/20.



Schemes

The Junction 3 active travel schemes are designed and are ready to be delivered.

The Malborne Way Footpath scheme, which completes a missing link along an existing route, consists of the following:

- 1.6m wide dropped crossing over the Saltmarsh approach to the Malborne Way / Saltmarsh priority junction
- 2.5m wide footway for 220m between the Malborne Way / Saltmarsh priority junction in the north and the footpath ramp adjacent to the Lime Academy Orton access junction.
- 1.2m wide dropped crossing over the Lime Academy Orton access junction.

The Shrewsbury Avenue Cycleway scheme consists of the following:

- A 3.5m wide cycleway for 450m from the southernmost point of Shrewsbury Avenue to the southwest corner of Stillwells Nature Reserve.
- Resurfacing to make the existing route more attractive, comfortable, and safer.

The scheme drawings for each scheme are available upon request.

Figure 1 overleaf shows the location of the schemes in the Junction 3 study area, which is situated between the Ortons and Hampton areas in the south of Peterborough.

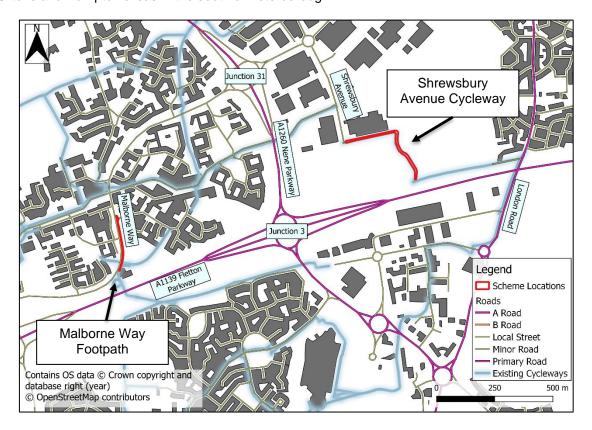


Figure 1: Junction 3 Active Travel Scheme Locations



Strategic Dimension

The Strategic Dimension considers the policy context in which the schemes have been developed. As well as policy, the need for intervention is explained, which includes the requirement to overcome the peak hour congestion and delay that compromises local growth aspirations.

Policy Context

A policy review of the following, in conjunction with a review of existing and future issues, has been undertaken as part of the Junction 3 FBC to identify scheme objectives:

National:

- o Department for Transport Single Departmental Plan (June 2019)
- o Department for Transport Gear Change: One Year On (November 2020)
- Department for Transport Cycle Infrastructure Design Local Transport Note 1/20 (LTN 1/20) (July 2020)
- The Environment Act 2021

Regional:

- o Combined Authority Annual Report & Business Plan 2021 / 22
- Cambridgeshire and Peterborough Independent Economic Review (CPIER) (September 2018)
- Mayor's Growth Ambition Strategy
- o Cambridgeshire and Peterborough Local Industrial Strategy (June 2019)
- Cambridgeshire and Peterborough Combined Authority Local Transport Plan (January 2020)
- Forthcoming Cambridgeshire and Peterborough Combined Authority Local Transport and Connectivity Plan
- Natural Cambridgeshire Doubling Nature Vision
- Cambridgeshire and Peterborough Independent Commission on Climate Fairness,
 Nature and Communities: Addressing Climate Change in Cambridgeshire and
 Peterborough (October 2021)

Local:

- o Peterborough City Council Strategic Priorities
- Peterborough City Council Local Plan (July 2019)
- Peterborough City Council Trees and Woodland Strategy (2018)



Existing and Future Conditions

Evidence of existing and future conditions demonstrates the following issues that need to be overcome for growth to be realised:

- Extensive peak hour queues on the A1260 Nene Parkway
- Peak hour queueing on the A1260 The Serpentine
- High accident rate, particularly rear end shunts
- Poor pedestrian / cycle facilities and connectivity.

Pedestrian and cycle facilities within the immediate vicinity of Junction 3 are primarily situated to the south of Junction 3, with pathways and an underpass connecting the residential area of Hampton Hargate to the business park area along Phorpres Way (east of the A1260 The Serpentine).

A non-motorised user (NMU) audit was conducted as part of the Junction 3 FBC to inform active travel scheme designs. The audit included a review the quality of the walking and cycling facilities present at Junction 3 and the wider study area and identified any improvements that could be made alongside construction of the Junction 3 highway scheme. During the audit the following points were considered:

- Quality of the pedestrian / cycle footpaths
- Location of crossing points and the ease of crossing
- Extent of street lighting
- Perceived safety of the underpass.

Wider pedestrian and cycle facilities within the study area, such as the Malborne Way and Shrewsbury Avenue schemes, would help facilitate north-south active user trips across the A1139 Fletton Parkway.

It is expected that providing improved active travel infrastructure will encourage residents to travel by foot or bicycle instead of by car, and therefore help reduce existing and future year peak hour congestion and delay.

Local employment areas to the north, south, and east of Junctions 31 and 3 are particularly car-dependent, as shown in Figure 2 below. However, car availability for residents is lower in the Ortons and Hampton, where the schemes are located, than other areas of Peterborough as shown in Figure 3 overleaf. Improving the quality of strategic active travel corridors such as Malborne Way and the Shrewsbury Avenue Cycleway is expected to reduce the need to travel by car to local employment sites and increase the appeal of active travel.



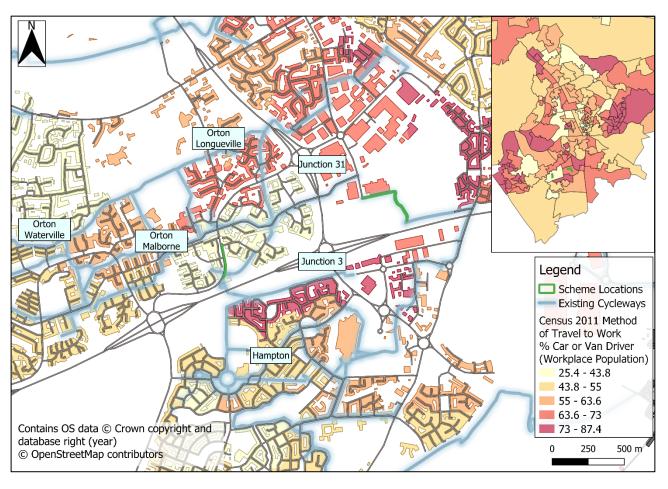


Figure 2: Census 2011 Method of Travel to Work – Percentage Car or Van Driver within Workplace Population



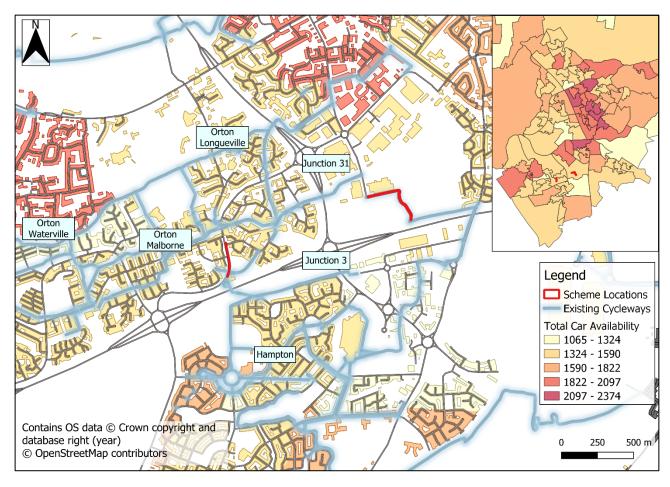


Figure 3: Census 2011 Total Car Availability by LSOA

The average car travel to work mode share for the Ortons and Hampton is 62%, whereas the whole of Peterborough is 61%. Whilst local car driver levels to workplaces are representative of overall Peterborough levels and local car availability is lower than the rest of the city, there is still potential to reduce car driver trips from local residential areas and increase the number of walking and cycling commuter trips.

Figure 4 shows the ratio of the local propensity to cycle under the Government Target Equality scenario of the Propensity to Cycle Tool (PCT) to Census 2011 cycle commuting levels.



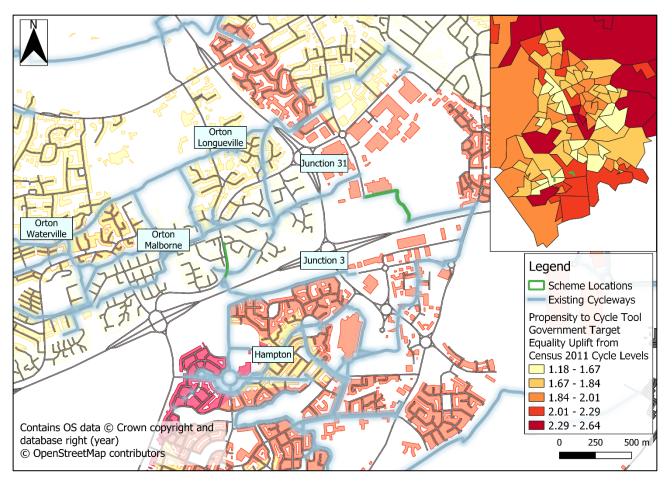


Figure 4: Ratio of Propensity to Cycle Tool Government Target Equality to Census 2011 Cycle Commuting Trips

There is the potential to uplift cycling from Census 2011 levels as follows:

- In the Ortons to the west of Junction 31 by a factor of between 1.18 and 1.67
- In Hampton by a minimum factor of 1.67 and a maximum factor of 2.64
- In the Ortons to the east of Junction 41 by a factor of between 2.01 and 2.29.

The Census 2011 Method of Travel to Work data has also been analysed to identify the number of car driver trips that are undertaken within a walkable distance through the study area and could feasibly use the routes that would be improved as shown in Figure 5 overleaf.



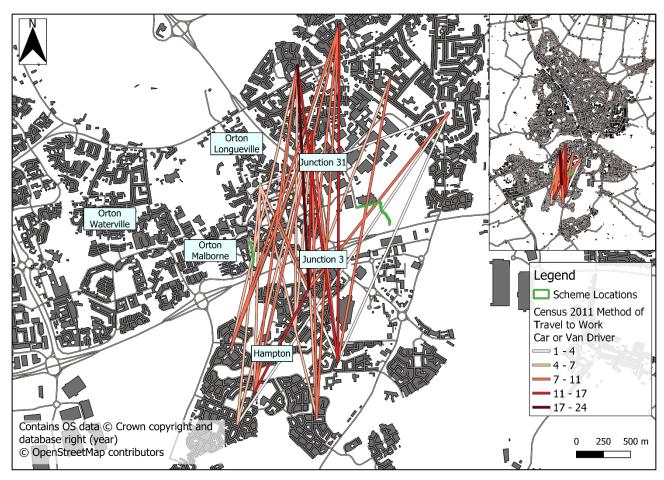


Figure 5: Census 2011 Method of Travel to Work - Car or Van Driver Trips Undertaken Over a Walkable Distance

There are 353 daily car or van driver home to work trips in 2011 that are undertaken within a walkable distance through the study area. If 10% of these car or van trips shifted to walking, the number of local home to work walking trips would increase to about 94 from 59 which equates to a ratio of 1.60. If 25% of these car or van trips shifted to walking, the number of local home to work walking trips would increase to about 147 which equates to a ratio of 2.50.

Without an improvement in active travel infrastructure, the study area will remain a car-dependent destination with untapped potential for walking and cycling.

Local Growth Aspirations

Peterborough is forecast to experience significant employment and population growth over the next few decades, reflecting a continuation of past trends. The Peterborough Local Plan (adopted July 2019) sets out the overall vision, priorities and objectives for Peterborough for the period up to 2036. The updated strategy identifies the required delivery of 19,440 new homes and 17,600 new jobs by 2036. This level of growth will in turn further strengthen the City's economy, contribute to regional growth, and increase the demand for travel on the local network.



Peterborough strives to become a 'destination of choice', to be continually recognised as a regional centre and economic partner with Cambridge. With the attractiveness of the City set to increase as a place to live, work and travel, this in turn creates pressure in relation to housing and employment growth, which in turn increases the strain on the transport infrastructure. Improving the transport infrastructure to enable Peterborough's strong history of growth to continue is the main internal driver for change at Junction 3.

The Local Transport Plan identifies Junction 3 as a key scheme for introducing infrastructure requirements that are needed to address existing capacity constraints on the network and those that are required to cater for the travel demand arising from the growth ambitions of the City.

Junction 3, London Road, and the A1139 Fletton Parkway footbridge are gateways to a large residential and employment area known as Hampton. The Hampton Township has been developed over the past 25 years and is identified for a significant proportion of residential and employment growth in the Local Plan for the next 15 years.

Table 1 shows the developments by land use that are proposed for the Hampton area, respectively.

Table 1: Development in the Hampton Area

Site Name	Residential Units	Employment (GFA m²)	Retail (GFA m ²)	Leisure (GFA m²)	Jobs
British Sugar Offices	-	6,922	-	-	590
Serpentine Green Extension	-	-	12,335	11,866	257
Great Haddon (Core + Employment)	5,350	324,500	11,500	-	10,686
Alwalton Gateway	-	17,200	-	-	2,250
Hampton Heights	350	-	-	-	-
Hampton Leys	1,700	-	-	-	-

Local residential and employment growth will be compromised if no changes are made to existing congestion and delay. An increase in local active travel within the Junction 3 study area and a reduction in car travel will alleviate congestion and delay.

The October 2021 Cambridgeshire and Peterborough Independent Commission on Climate report recommends a reduction in car miles driven by 15% to 2030 relative to baseline levels to help the region mitigate and adapt to the impacts of climate change. The schemes will provide quality active travel infrastructure that would encourage walking and cycling as a more sustainable alternative to car travel.



Scheme Objectives

The project scope is to construct schemes within the Junction 3 study area that achieve each of the primary objectives of the Junction 3 FBC.

The primary scheme objectives, as outlined in the Junction 3 FBC, are as follows:

- Tackle congestion and improve journey time reliability
- Support Peterborough's Growth Agenda
- Create wider economic benefits
- Protect and improve the biodiversity value within the study area
- Reduce dependence on car travel and increase travel by healthier, more sustainable modes.

The secondary scheme objectives, as outlined in the Junction 3 FBC, are as follows:

- Positively impact traffic conditions on the wider network
- Improve road safety.

The Junction 3 FBC schemes were developed and shortlisted against the scheme objectives using the DfT's Early Assessment and Sifting Tool (EAST) assessment. An option development workshop was held on 4th December 2018 and attended by representatives from various disciplines within Peterborough Highway Services (PHS). The workshop used EAST to review existing and future issues at Junction 3 and the surrounding network.

As stated in the Department for Transport (DfT) Cycle Infrastructure Design Local Transport Note 1/20 (LTN 1/20), funding for local highways investment where the main element is not cycling or walking will be provided where schemes deliver or improve cycling infrastructure to the standards in LTN 1/20.

The Benefits Realisation Plan for the Junction 3 FBC will measure the success of the schemes against the scheme objectives.

Key Risks

A project Risk Register is available as part of the Junction 3 FBC that identifies each of the key risks and mitigation measures. The Risk Register is a live document, which is managed by PCC and is reviewed regularly by the CPCA in monthly Project Board meetings.

A construction Risk Register for each scheme has been produced and is available upon request. The Risk Register is a live document and will be regularly updated throughout the ten-week construction period.



Economic Dimension

The Economic Dimension provides evidence of how the proposed improvements are predicted to perform in relation to the stated objectives, identified problems, and targeted outcomes. The Economic Dimension determines whether the proposed improvements are likely to provide good value for money, with benefits outweighing its costs.

This section sets out the approach taken to initially assess the Economic Dimension for the Junction 3 Active Travel schemes and demonstrates that the proposed schemes would offer Very High Value for Money.

The scheme appraisal in this report focuses on the impacts that can be monetised and these include:

- Mode Shift
- Health
- Journey Quality.

A full appraisal of other economic, environmental, social and distributional impacts that cannot be monetised will be assessed quantitatively and qualitatively within the FBC going to the CPCA January Board.

Present Value of Benefits

The active travel Present Value of Benefits (PVB) of each scheme has been assessed using the Active Mode Appraisal Toolkit (AMAT).

AMAT requires the following intervention-specific details for calculating active travel benefits:

- Appraisal year 2022
- Intervention opening year 2023
- Final year of funding 2023
- Appraisal period 20 years
- Area type Other Urban
- Number of daily walking and / or cycling trips without the proposed intervention
- Number of daily walking and / or cycling trips with the proposed intervention
- Percentage of an average walking or cycling trip that will use the intervention
- Current walking and cycling infrastructure for the route
- Proposed walking and cycling infrastructure for the route.

The number of walking and cycling trips without the proposed interventions have been sourced from Strava Metro, Census 2011 Method of Travel to Work, Vivacity AI sensors, and historic Automatic Traffic Counts (ATC).



It was estimated in the Strategic Dimension that there is a potential for walking commuter trips to increase by a factor of 1.600 if 10% of short distance car or van driver trips that could use the proposed infrastructure made the switch to walking. However, the Transport for Quality of Life Overview of Evidence on Increasing Active Travel report (September 2019) identified that improvements to network and flagship routes could generate 18% new walking / cycling trips after only one year, which equates to an uplift factor of 1.180.

A separate exercise has been undertaken to estimate the potential uplift in walking trips from improving walking connectivity in an area such as Fengate where there is low footpath provision to match the level of provision along Shrewsbury Avenue in Orton Longueville. This was achieved by calculating the ratio of walking mode share along Shrewsbury Avenue to the walking mode share in Fengate. Shrewsbury Avenue was found to have a travel to work by walking mode share of 5.33%, whereas Fengate had a mode share of 4.45%. The uplift factor for walking would therefore be 1.198, which is similar to the new trip generation factor observed in the Transport for Quality of Life report.

An uplift factor of 1.198 has therefore been used as the core assumption to provide a conservative estimate of the number of walking trips with the proposed interventions.

A sensitivity test has also been undertaken that assesses the impact of using the Strategic Dimension uplift factor of 1.600.

The number of cycling trips with the proposed improvements to the Shrewsbury Avenue Cycleway has been calculated by:

- Identifying the PCT Government Target (Equality) Ratio (Scenario / Baseline) for the existing route at the scheme location
- Applying the ratio as an uplift factor to the number of cycling trips without the proposed intervention

Government Target (Equality) is the most conservative of all PCT scenarios and is representative of the Department for Transport's Cycling Delivery Plan (October 2014) target of doubling cycling from 2013 levels nationally. Nearly all PCT scenarios are calculated using a function based on trip distance and hilliness. Not all areas experience the same trip distances and hilliness, and this therefore results in increases that can be below or above a doubling of cycling nationally.

PCT is a measure of cycling potential and not an exact estimate of the impact of a specific scheme or intervention. However, a site visit to the Shrewsbury Avenue Cycleway has shown that the scheme is integral to delivering a better-connected network that improves safety and journey quality for cycling. Without any infrastructure improvements, the study area would not be appropriate for increased cycling.

TEMPro v8.0 Core Scenario 2019 to 2023 walk and cycle growth factors for Peterborough have been applied to the average weekday trips for all scenarios.

Table 2 overleaf shows the number of walking and cycling trips by scenario for each scheme.



Table 2: Do Nothing and Do Something Daily Walking Trips by Scheme

	Daily Walking Trips		Daily Cycling Trips			
Scheme	Without Scheme (2023)	With Scheme – Core (2023)	With Scheme – Sensitivity Test (2023)	Without Scheme (2023)	With Scheme – Core (2023)	With Scheme – Sensitivity Test (2023)
Shrewsbury Avenue Cycleway	156	186	249	159	266	
Malborne Way Footpath	233	280	376			



Table 4 below summarises the benefits for each scheme for the Core Scenario.

Table 3: Summary of Benefits by Scheme – Core Scenario

		Benefits ('000s)			
Benefit Type	Benefit Item	Shrewsbury Avenue Cycleway	Malborne Way Footpath	Total	
	Congestion Benefit	£32.45	£2.98	£41.59	
	Infrastructure Maintenance	£0.18	£0.02	£0.23	
Mode Shift	Accident	£5.58	£0.51	£7.15	
	Local Air Quality	£0.79	£0.07	£1.01	
	Noise	£0.37	£0.03	£0.47	
	Greenhouse Gases	£2.65	£0.24	£3.4	
Health	Reduced Risk of Premature Death	£688.73	£108.29	£1,020.67	
	Absenteeism	£91.56	£22.53	£160.62	
Journey Quality	Journey Ambience	£2.24	£6.60	£10.06	
Indirect Taxation	Indirect Taxation	£-3.33	£-0.31	£-4.27	
Total		£790.00	£140.96	£930.96	

The benefits over a 20-year appraisal period for the Shrewsbury Avenue and Malborne Way schemes are £790,000 and £140,960, respectively. Health forms most of the benefits for the Shrewsbury Avenue and Malborne Way schemes, with 95.0% and 92.8%, respectively.



Table 4 below summarises the benefits for each scheme for the Sensitivity Test.

Table 4: Summary of Benefits by Scheme – Sensitivity Test

		Benefits ('000s)			
Benefit Type	Benefit Item	Shrewsbury Avenue Cycleway	Malborne Way Footpath	Total	
	Congestion Benefit	£36.53	£9.14	£45.67	
	Infrastructure Maintenance	£0.21	£0.05	£0.26	
Mode Shift	Accident	£6.28	£1.57	£7.85	
	Local Air Quality	£0.89	£0.22	£1.11	
	Noise	£0.42	£0.10	£0.52	
	Greenhouse Gases	£2.98	£0.75	£3.73	
Health	Reduced Risk of Premature Death	£837.04	£331.94	£1,168.98	
	Absenteeism	£122.41	£69.06	£191.48	
Journey Quality	Journey Ambience	£2.65	£7.82	£10.47	
Indirect Taxation	Indirect Taxation	-£3.75	-£0.94	-£4.69	
Total		£977.35	£419.66	£1,397.01	

The benefits over a 20-year appraisal period for the Shrewsbury Avenue and Malborne Way schemes are £977,350 and £419,660, respectively. Health forms most of the benefits for the Shrewsbury Avenue and Malborne Way schemes, with 95.4% and 95.5%, respectively.



Present Value of Costs

The Present Value of Costs (PVC) used within the economic assessment are based on initial base investment costs and Optimism Bias (OB) that have been rebased and discounted to 2010 prices and adjusted to market prices using AMAT. No inflation has been applied because the scheme costs will be incurred within the same price year. A developer contribution of £50,000 for the Shrewsbury Avenue Cycleway has been included within the Economic Dimension costs.

The OB rate has been sourced from TAG Unit A1.2 Scheme Costs (May 2022) and uses the Stage 3 Road OB of 20% to reflect the final stage (FBC) that the Junction 3 Business Case is currently at.

The conversion to market prices is undertaken by applying a market price factor of 1.19 to the discounted costs.

Table 5 below shows the scheme costs used within the economic assessment.

Table 5: Economic Dimension Costs

Cost Type	Shrewsbury Avenue Cycleway	Malborne Way Footpath	Total
Base Investment Cost	£223,948	£227,305	£451,253
Base Cost and Optimism Bias	£268,738	£272,766	£541,504
Rebased and Discounted to 2010, and Adjusted to Market Prices (PVC)	£135,547	£169,237	£304,784

Net Present Value and Benefit Cost Ratio

The Net Present Value (NPV) has been calculated by subtracting the PVC from the PVB.

The Benefit Cost Ratio (BCR) has been calculated by dividing the PVB by the PVC.

The BCR is used to determine the Value for Money category that each scheme falls within, as shown in Table 6 overleaf. The Value for Money categories have been sourced from the Department for Transport Value for Money Framework: Moving Britain Ahead (2017) document.



Table 6: Value for Money Categories

Value for Money Category	Benefit Cost Ratio (BCR) Range
Very Poor	BCR <= 0.0
Poor	1.0 < BCR > 0.0
Low	1.5 < BCR >= 1.0
Medium	2.0 < BCR >= 1.5
High	4.0 < BCR >= 2.0
Very High	BCR >= 4.0

The scheme should provide a BCR of at least 1.5 (Medium Value for Money) to be considered of good value for money. It should be noted that the CPCA state in its Local Assurance Framework (2021) that a scheme with a BCR less favourable than other alternatives but best delivers on a project's strategic objectives may be the best value way of delivering a project. However, it is for the CPCA Board to judge whether the achievement of the strategic objectives is worth the cost to the CPCA.

Table 7 provides the Analysis of Monetised Costs and Benefits (AMCB) Table.



Table 7: Analysis of Monetised Costs and Benefits Table – Core Scenario

Benefit Item	Value (£'000s)			
Benefit Rem	Shrewsbury Avenue	Malborne Way	Total	
Noise	0.37	0.03	0.40	
Local Air Quality	0.79	0.07	0.86	
Greenhouse Gases	2.65	0.24	2.89	
Journey Quality	2.24	6.60	8.84	
Physical Activity (Health)	780.29	130.82	911.11	
Accidents	5.58	0.51	6.09	
Congestion Benefit	32.45	2.98	35.43	
Infrastructure Maintenance	0.18	0.02	0.20	
Indirect Taxation	-3.33	-0.31	-3.64	
Present Value of Benefits (PVB)	790.00	140.96	930.96	
Broad Transport Budget	135.55	169.24	304.79	
Present Value of Costs (PVC)	135.55	169.24	304.79	
Net Present Value (NPV)	654.45	-28.28	626.17	
Initial Benefit to Cost Ratio (BCR)	5.83	0.83	3.05	

The Shrewsbury Avenue scheme provides a PVB of £790,000, NPV of £654,450, and a BCR of 5.83, which equates to Very High Value for Money.

The Malborne Way scheme provides a PVB of £140,960, NPV of £-28,280, and a BCR of 0.83, which equates to Poor Value for Money.

Combining both schemes together provide a PVB of £930,960, NPV of £626,170, and a BCR of 3.05, which equates to High Value for Money.



A sensitivity test has also been undertaken that assesses the impact of using the Strategic Dimension uplift factor of 1.600. Applying the high uplift resulted in a combined PVB of £1,397,010, NPV of £1,092,280, and a BCR of 4.58, which equates to Very High Value for Money.

The most significant difference in the sensitivity test is that Malborne Way scheme goes from a BCR of 0.83 to 2.48, which is High Value for Money.

Non-monetised Impacts

Impacts that have not been monetised for active travel include:

- Journey time savings for active users (Social and Economy)
- Security (Social)
- Personal Affordability (Social)
- Accessibility (Social).

The distributional impacts of security and personal affordability have been quantitatively assessed. Accessibility has not been assessed on the basis that the guidance within TAG Unit A4.2 focuses solely on public transport.

The following environmental impacts are to be considered in full within the Junction 3 FBC:

- Landscape
- Townscape
- Historic Environment
- Biodiversity
- Water Environment.

Security

Security impact appraisal is recommended for road users, public transport passengers or freight, or a combination of these as stated in TAG Unit A4.1 Social Impact Appraisal. Whilst there is no specific guidance for the security of active mode users, the process as outlined within TAG Unit A4.2 Distributional Impact Appraisal has been used. Indicators such as surveillance, lighting and visibility, and landscaping were noted during site visits and used to inform the appraisal.

The security distributional impact appraisal found that each scheme would not deliver any change in terms of security for older people, females, or young people.

Personal Affordability

Personal Affordability appraisal considers how the monetary costs of travel can be a major barrier to mobility for certain groups of people and their ability to access key destinations. The more deprived groups of society typically spend less money on travel, but the cost of travel will account for a greater proportion of their income.



The most significant impacts of the costs of travel are on younger and older groups, and low-income households.

Figures 5 and 6 show the distribution of younger (0 to 15) and older (65 plus) age groups across Peterborough in relation to key services that would likely be used, respectively.

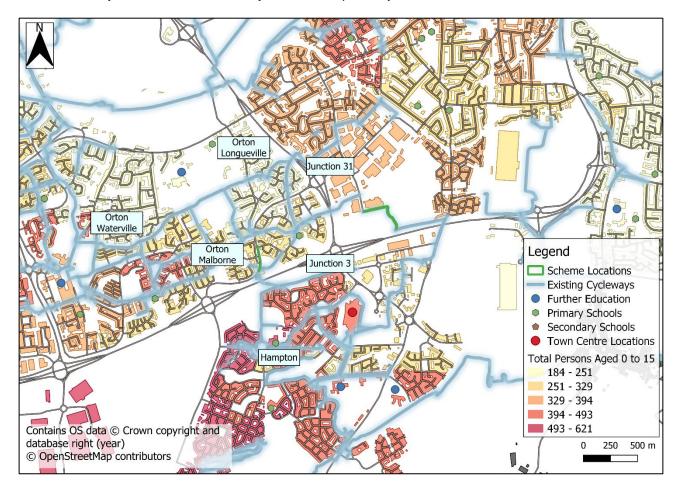


Figure 6: Number of Persons Aged 0 to 15 at LSOA Level across Peterborough in Relation to Key Services



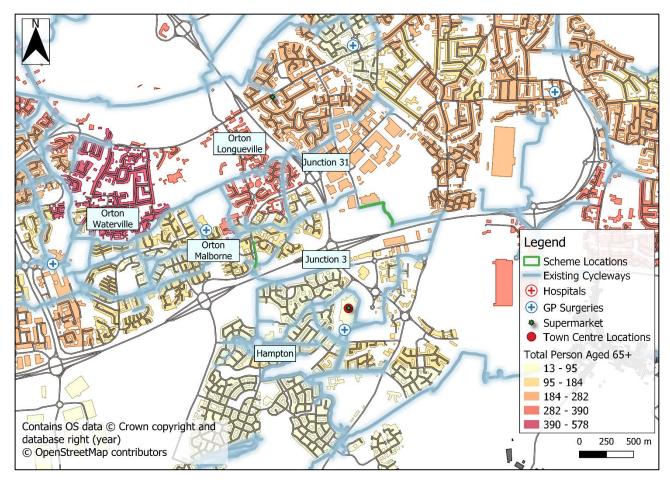


Figure 7: Number of Persons Aged 65+ at LSOA Level in Relation to Key Services

The Malborne Way Footpath will likely be used by young people travelling to Nene Park Academy and St. Botolph's C of E Primary School from residential areas in Orton Malborne and Hampton. There is a particularly high number of persons aged 0 to 15 in Hampton and would likely represent the greatest proportion of young people using the footpath. There is currently no marked footpath that connects the footbridge over Fletton Parkway and the footpath north of Saltmarsh. Without a footpath, the north-south route between Hampton and the schools in Orton Longueville will not be considered desirable for walking to school and will therefore encourage more costly escort education car driver trips.

The Malborne Way Footpath will likely be used by people aged 65 and above living in the Ortons and Hampton to and above travelling to GP surgeries in Orton Malborne and Hampton, and the retail outlets at Serpentine Green in Hampton. Whilst bus travel is free for senior citizens, there is no suitable bus between Hampton and



Orton Longueville or Orton Malborne. The lack of a quality footpath will make walking to local key services less desirable for senior citizens and overall travel less affordable.

Figure 7 shows the Income Deprivation Domain of the English Indices of Multiple Deprivation dataset for the study area.

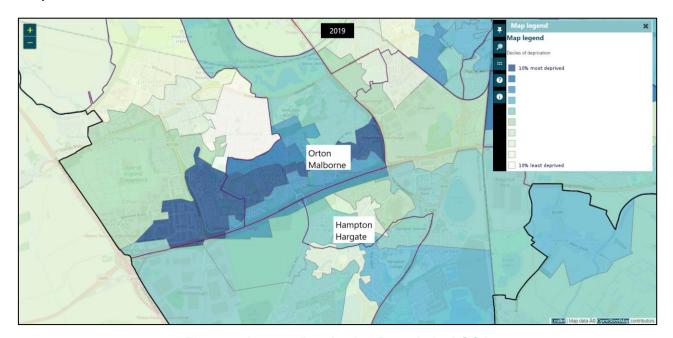


Figure 8: Income Deprivation Domain by LSOA

The Malborne Way and Shrewsbury Avenue study areas have LSOAs within the 10% most deprived deciles for England. An improvement in the walking and cycling infrastructure within the study area would help make walking to work or other local key services a more realistic alternative to car and bus travel for those in income deprived areas that are more greatly affected by the cost of travel for reaching work.

Areas along Malborne Way and Shrewsbury Avenue, and in Hampton are particularly car-dependent employment destinations, as previously shown in Figure 2 of the Strategic Dimension, and there is potential to improve the local walking and cycling network to a higher standard.

The average car travel to work mode share for the Ortons and Hampton is 62%, whereas the whole of Peterborough is 61%. Whilst local car driver levels to workplaces are representative of overall Peterborough levels and local car availability is lower than the rest of the city, there is still potential to reduce car driver trips from local residential areas and increase the number of walking and cycling commuter trips. This is particularly important in residential areas suffering with high income deprivation levels where residents will be struggling with the costs of travel.

Without an improvement in active travel infrastructure, the study area will remain a car dependent destination that is less accessible for those who cannot afford to travel by car.



Value for Money Statement

Delivering the Shrewsbury Avenue Cycleway and Malborne Way Footpath active travel schemes together will provide an overall PVB of £961,980, NPV of £626,170, and a BCR of 3.05 (High Value for Money) based on physical activity, journey quality, accidents, noise, local air quality, greenhouse gases, and congestion benefits in the core scenario.

The schemes are not expected to deliver any change in security impacts for vulnerable active travel users.

The removal of a barrier to travel along Malborne Way is expected to make walking a more realistic and affordable alternative to car travel to key services within the study area for groups most affected by personal affordability. The schemes would also benefit nearby residential areas that are currently in the top 10% most income deprived deciles for England.

Financial Dimension

The Financial Dimension focuses on the affordability of the proposed schemes, funding arrangements, and technical accounting issues.

The scheme cost estimates for the Financial Dimension have been prepared in line with guidance set out in TAG Unit A1.2 Scheme Costs (May 2022).

The estimates have been costed based on a bill of quantities produced from the preliminary designs and a schedule of construction activities. These costs have been peer reviewed, and include:

- Detailed design costs and additional surveys where required
- Land acquisition and planning costs
- Ecology surveys, and specialist environmental advice
- Staff and legal fees, including local overheads and consultation costs
- Third party costs
- Construction costs, including mobilisation, supervision, and costs associated with statutory undertakers works
- Risk Allowance.

It should be noted that Optimism Bias is not applied within the Financial Dimension and is only for use within the Economic Dimension.

Project costs incurred to date have been omitted from the costs presented in this section as "sunk costs", which is in line with TAG Unit A1.2.

The cost profile is based upon the milestone activities set out in the Management Dimension, and the dates used to calculate the scheme costs, including the application of inflation, are shown in Table 8.



Table 8: Milestone Activities

Timescale	Activity
August 2022	Present Active Travel Schemes Business Case Technical Note to CPCA
September 2022	CPCA Sponsors present papers to CPCA Board to request approval of funding. Raising Work Orders and mobilising works
October 2022 – December 2022	Malborne Way scheme construction undertaken
October 2022 – November 2022	Shrewsbury Avenue scheme construction undertaken
January 2023	CPCA Board to make funding decision for the main Junction 3 project. This was the original CPCA Board date for the Junction 3 active travel schemes.

Table 9 below shows the Financial Dimension Scheme Cost Estimates.

Table 9: Financial Dimension Scheme Cost Estimates

Description of Cost Type	Shrewsbury Avenue	Malborne Way
Base Investment Cost	£223,948	£227,305
Risk Adjusted Base Cost	£255,958	£263,029
Risk Adjusted Base Cost with Industry Inflation (Outturn Cost)	£255,959	£263,029
Inflated Risk Adjusted Costs Incorporating Whole Life Costs (60-year assessment period).	£255,958	£263,029

The costs calculated for use within the Economic Assessment are presented in the Economic Dimension.

The Outturn cost represents the amount required to deliver the scheme, and is the amount requested for early release.

The schemes will be delivered within the same year as the cost estimates and therefore inflation has not been applied. Therefore, the outturn costs for Shrewsbury Avenue and Malborne Way are £255,959 and £263,029, respectively.



Budgets and Funding Cover

It is anticipated that the full combined Outturn Cost of £518,988 will be funded from the Transforming Cities Fund (TCF). The TCF is time limited and must be spent by 31st March 2024.

A £50,000 developer contribution has been secured as a contribution towards the Shrewsbury Avenue Cycleway and must be paid prior first occupation of the development (currently under construction). Once received, this contribution will be used in the delivery of the Junction 3 project (which includes the Shrewsbury Avenue Cyclway scheme).

There are not known to be any financial constraints beyond the availability of funding from the TCF, which is currently considered adequate to cover the scheme costs.



Commercial Dimension

The Commercial Dimension serves to demonstrate that the Junction 3 active travel schemes can be reliably procured and implemented through existing channels whilst ensuring value for money in delivery of the scheme.

Construction and site supervision will be delivered by Peterborough Highway Services (PHS). All skills and competencies to deliver this scheme are available within the PHS contract and its supply chain.

The scheme construction will be procured using a Target Cost payment mechanism. This incentivises both parties to work together to reduce cost through a pain / gain mechanism. To ensure that the procurement remains commercially competitive and offers value for money, all subcontract packages will be subject to competitive tendering.

Management Dimension

The Management Dimension demonstrates that the Council, through the PHS Framework, has the necessary experience and governance structure to successfully manage the delivery of the Junction 3 active travel schemes.

PHS has successfully delivered the following active travel schemes in recent years:

- Pop-up cycleways:
 - Between Midland Road and Bourges Boulevard along Thorpe Road on the eastbound carriageway. Installed during the first COVID-19 lockdown in 2020.
 - Along the southbound side of Priestgate. Designed in 2020 and installed in late 2021, the cycleway consisted of a cycle lane delineated by 'Rediweld One Piece Wand Orca' units. Cones were taken down in 2022.
 - Between St. Johns Street and Cattle Market Road along City Road. Designed in 2020 and installed in late 2021, the cycleway consisted of a cycle lane delineated by 'Rediweld One Piece Wand Orca' units. Cones were taken down in 2022.
 - Westbound between the Junction 39 roundabout and Cattle Market Road. Designed in 2020 and installed in late 2021, the cycleway consisted of a cycle lane delineated by 'Rediweld One Piece Wand Orca' units. Cones were taken down in 2022.
 - In both directions along Broadway. Designed in 2020 and installed in late 2021, the cycleway consisted of a cycle lane delineated by 'Rediweld One Piece Wand Orca' units.
 Cones were taken down in 2022.
- Haddon Cycleway. Designed in 2021 and constructed in 2022, the scheme improved the footway / cycleway connection between Haddon Hill and Orton Goldhay.
- Toucan Crossings:



- o Bishop's Road toucan crossing upgraded in 2019 to allow for cycle use.
- Oundle Road toucan crossing by Peterborough High School
- Lincoln Road / Manor House Road crossing improved to a toucan crossing between 2021 and 2022.

To date, the delivery of the scheme has been managed by a Project Team, led by a PCC Project Manager. The Project Team consists of all the key project delivery partners and has been responsible for the daily running of the project. The Project Team includes key stakeholders such as the CPCA.

The existing PHS Project Board has overseen the continued development and delivery of the schemes to date by the Project Team and has made key decisions relating to the delivery of the project. The Project Board has been supported by technical specialists, with key stakeholders invited to attend as necessary.

Key project milestones for progressing to scheme delivery are outlined in Table 10.

Table 10: Key Project Milestones

Timescale	Activity
August 2022	Present Active Travel Schemes Business Case Technical Note to CPCA
September 2022	CPCA Sponsors present papers to CPCA Board to request approval of funding. Raising Work Orders and mobilising works
October 2022 – December 2022	Malborne Way scheme construction undertaken
October 2022 – November 2022	Shrewsbury Avenue scheme construction undertaken
January 2023	CPCA Board to make funding decision for the main Junction 3 project. This was the original CPCA Board date for the Junction 3 active travel schemes.



Stakeholder engagement was undertaken by the Project Team following approval of the SOC and were in line with the timings of the Public Consultation (October 2020 to November 2020). All stakeholders were consulted via email or letter for comments on the Preferred Scheme of the Junction 3 business case prior to the completion of the designs.

Communication with stakeholders was maintained throughout the project and feedback from stakeholders largely centred on the environment, biodiversity, and sustainable travel elements of the Junction 3 preferred scheme. All feedback has been incorporated into the Detailed Design where appropriate.

A construction Risk Register for each scheme has been produced and is available upon request. The Risk Register is a live document and will be regularly updated throughout the ten-week construction period.

The schemes will be monitored and evaluated in line with the CPCA Assurance Framework and DfT guidance. The monitoring and evaluation will include a range of qualitative and quantitative data collection methods that will be undertaken one year and five years post scheme completion.

Outputs from the monitoring and evaluation stage will be summarised within a Scheme Evaluation Report to determine whether the schemes have been delivered as planned and justify the investment. Where outcomes differ from what is expected, data collected during the monitoring and evaluation phases will be used to form an evidence base that will assist in understanding the reasons for this and any lessons that can be learnt.



Agenda Item No:2.5

Kings Dyke Level Crossing Closure

To: Transport and Infrastructure Committee

Meeting Date: 14 September 2022

Public report: Yes

Lead Member: Mayor Dr Nik Johnson

From: Anna Graham, Transport Programme Manager

Key decision: No

Forward Plan ref: N/A

Recommendations: The Transport and Infrastructure Committee is recommended to:

Recommend that the Combined Authority Board approve the drawdown of £1.9m of subject to approval funding for Kings Dyke levelling crossing

closure from the Medium-Term Financial Plan.

Voting arrangements: A vote in favour by at least two thirds of all Members (or their Substitute

Members) appointed by the Constituent Councils, to include the Members appointed by Cambridgeshire County Council or Peterborough

City Council, or their Substitute Members or

To be carried, the vote must include the vote of the Mayor, or the Deputy

Mayor when acting in place of the Mayor.

1. Purpose

1.1 To seek approval from the Combined Authority Board for the drawdown of funding from the subject to approval funding from the Medium-Term Financial Plan (MTFP).

2. Background

- 2.1 The A605 is an important east-west route between the Fens and Peterborough, providing connections to the A1(M) and the A47 via the Peterborough Parkway Network. It currently suffers significant congestion during closures at the level crossing which services approximately 120 daily train movements. The scheme's objective is to remove this road-rail conflict.
- 2.2 At its meeting in October 2018 the Combined Authority Board approved funding of up to £16.4m from the MTFP and the apportionment of 40 / 60 as a split of any under/overspend against the budget between Cambridgeshire County Council [CCC] (40%) and the Combined Authority (60%).
- 2.3 The main contractor, Jones Bros Civil Engineering UK, was appointed for the construction phase which commenced on 15 June 2020. The scheme is forecast to complete in December 2022 and the project remains on programme to achieve this.
- 2.4 The total scheme budget of £29.98 million is made up of £5.58 million from Cambridgeshire County Council [CCC] (Local Transport Bodies and residual capital), £8 million Growth Deal funding approved by the former Local Enterprise Partnership and £16.4 million from the Cambridgeshire and Peterborough Combined Authority's Gainshare.
- 2.5 In April 2020, CCC's Economy and Environment Committee recommended to the General Purposes Committee that additional funding of £2.018 million be allocated to the scheme to cover the value of the risk register as outlined in CCC's Economy and Environment Committee paper, Annex 1. In addition to the £2.018 million the Committee recommended £1.5 million Covid-19 risk contingency be created. The General Purposes Committee approved both recommendations April 2020.
- 2.6 The approval of the £3.5m at the General Purposes Committee in April 2020 changed the budget to £33.5m for the project, however, the approval of the October 2018 CA Board paper agreed that funding more than the £29.98 million budget would be apportioned between the Combined Authority and CCC, 60/40.
- 2.7 The current forecast for the project and current Combined Authority share is detailed in in the table below.

Budget	Forecast	Variance	CPCA Share
£29,980,000.00	£33,056,132	-£3,076,132.00	-£1,845,679.20

2.8 Whilst construction progresses well, a key activity was the requirement to part fill the Star Pit to support the embankment for the bridge. This was a complex engineering challenge and has needed additional work than originally envisaged. This is being worked through collaboratively between CCC and their contractor. The forecast is based on the assumed outcome of the Star Pit work and includes disallowed cost deductions.

- 2.9 Within the existing approved budget there is £1.1m and this is being held for contingency if the assumed outcome of the Star Pit work is different.
- 2.10 CCC has received and spent the £8 million Local Growth Funding and the £16.4 million from gainshare.
- 2.11 The project remains on target to complete in December 2022.

3. Financial Implications

3.1 The MTFP has a subject to approval amount of £2.1m for Kings Dyke levelling crossing closure and if approved, the funding will be spent in the current financial year.

4. Legal Implications

- 4.1 The Kings Dyke Level Crossing project has a signed Grant Funding Agreement in place between the Combined Authority and CCC.
- 4.2 The Grant Funding Agreement includes the approved apportionment of 40 / 60 as a split of any under / overspend against the budget between CCC (40%) and the Combined Authority (60%).

5. Public Health Implications

5.1 The £1.5 million contingency was used to enable safe working on site throughout the Covid – 19 pandemic and suitable precautions remained onsite enabling teams to continue to work.

6. Environmental and Climate Change Implications

6.1 The project is in construction and includes areas of landscaping that aims to reduce the visual impact of the road. In addition, the planting offers the opportunity for biodiversity.

7. Other Significant Implications

7.1 None

8. Appendices

- 8.1 Appendix 1 County Council's 23 April 2020 Economy and Environment Committee Paper
- 8.2 Appendix 2 County Council's 23 April 2020 General Purposes Committee Paper.

9. Background Papers

- 9.1 October 2018 Combined Authority Board Paper
- 9.2 January 2021 Transport and Infrastructure Paper

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INTEGRATED FINANCE MONITORING REPORT FOR THE PERIOD ENDING 29TH FEBRUARY 2020

To: General Purposes Committee

Date: 23rd April 2020

From: Chief Finance Officer

Electoral division(s): All

Forward Plan ref: 2020/031 Key decision: Yes

Purpose: To present financial information to assess progress in delivering the

Council's Business Plan.

Recommendations: General Purposes Committee (GPC) is recommended to:

- a) Approve the allocation of the Levy Account Surplus grant (£219,368) to the corporate grants account within Funding Items, as set out in section 5.1;
- b) Approve the earmarking of the unringfenced grant received (£14.612m) for the purposes of responding to the coronavirus pandemic during 2020/21, as set out in section 5.2;
- c) Approve the debt write-offs of £27,170.32, £26,589.16 and £26,324.23 (totalling £80,083.71) relating to the estates of service users where there is now no prospect of these debts being recovered, as set out in section 6.2;
- d) Approve additional prudential borrowing of up to £2.018 million in future years for the completion of the Kings Dyke Level Crossing Closure scheme, reducing to £807,200 subject to the CPCA approving its 60% share of the increase, as set out in section 7.7;
- e) Approve additional prudential borrowing for the creation of a £1.5 million Covid-19 risk contingency for the Kings Dyke Level Crossing Closure scheme, reducing to £600,000 subject to the CPCA approving its 60% share, as set out in section 7.7;
- f) Note the additional 2019/20 contributions of £677k expected in relation to the Combined Authority funded Wisbech Town Centre Access Study scheme, as set out in Appendix 3;
- g) Approve additional prudential borrowing of £808k in 2020/21 for the Outdoors Centres scheme, as set out in Appendix 3;
- h) Approve additional prudential borrowing of £1m in 2020/21 for the A14 Improvement Scheme contribution, as set out in Appendix 3;
- i) Approve the allocation of the Business Rates Relief Reconciliation of Authorities' 2018/19 Tax Loss Payments grant (£188,008) to the corporate grants account within Funding Items, as set out in Appendix 3.

	Officer contact:		Member contacts:
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1. PURPOSE

1.1 To present financial and performance information to assess progress in delivering the Council's Business Plan.

2. OVERVIEW

2.1 The following summary provides the Authority's forecast financial position at year-end and its key activity data for care budgets.

Finance and Key Activity

Revenue	budget
<u>outturn</u>	

+£0.5m (+0.1%) variance at end of year

AMBER

This is a £0.346m decrease in the revenue pressure since last month's forecast.

This is a £2.863m decrease in the in-year capital expenditure compared to last month's forecast.

<u>Capital programme</u> outturn

-£60.2m (-17.2%) variance at end of year

GREEN

Older people aged 65+ receiving	long term services		
	Feb 20	N/a 10	Trend since May 19
Niversia		May 19	
Nursing	487	489	Stayed the same
Residential	927	873	Increasing
Community	1,538	1,476	Increasing
Adults aged 18+ receiving long t	<u>erm</u>		
services			
	Feb 20	May 19	Trend since May 19
Nursing	57	45	Increasing
Residential	357	376	Stayed the same
Community	2,650	2,855	Decreasing
Children open to social care			
	Feb 20	Apr 19	Trend since Apr 1
Children in Care	741	783	Decreasing
Child Protection	328	581	Decreasing
Children in need *	1,838	2,207	Decreasing

- 2.2 The key issues included in the summary analysis are:
 - The overall revenue budget position is showing a forecast year-end pressure of +£0.5m. The pressures are largely within People & Communities (P&C) (+£4.6m), Commercial & Investment (C&I) (+£1.7m), and LGSS Operational (£0.6m). These are partially offset by underspends in Place & Economy (P&E) (-£3.4m), Corporate Services (-£1.3m), Funding Items (-£0.5m), CS Financing (-£0.7m) and Public Health (-£0.4m). See section 3 for details.
 - The Capital Programme is forecasting a -£60.2m underspend at year-end after the capital programme variations budget has been utilised in full. See section 7 for details.

This report presents forecasts up to 29 Feb 2020, before the extent and implications of coronavirus pandemic could be anticipated.

Additionally, explanatory notes within this item were largely prepared before the outbreak, without consideration of the economic impacts

As at the date of publication, the Council expects material financial impacts to occur in the 2020-21 financial year, utilising the grant described under recommendation (b)

3. REVENUE BUDGET

3.1 A more detailed analysis of financial performance is included below:

Key to abbreviations

CS Financing - Corporate Services Financing

DoT — Direction of Travel (up arrow means the position has improved since last month)

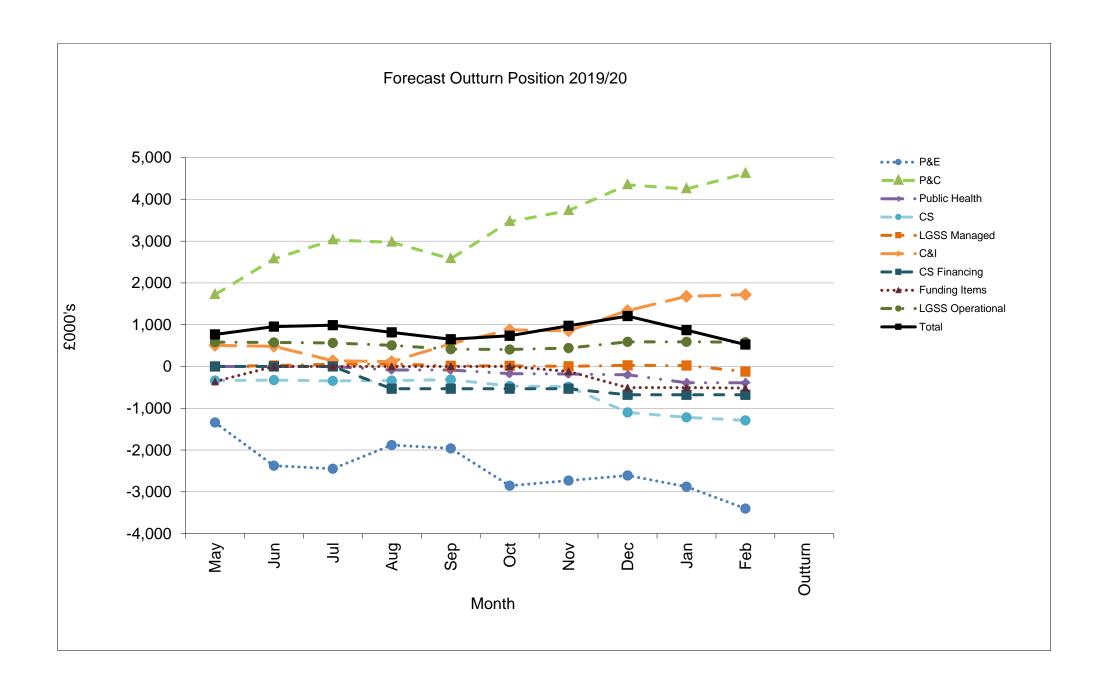
Original Budget as per Business Plan	Forecast Variance (Jan)	Service	Current Budget for 2019/20	Actual (Feb)	Forecast Variance (Feb)	Forecast Variance (Feb)	Overall Status	DoT
£000	£000		£000	£000	£000	%		
57,504	-2,878	Place & Economy	53,771	43,940	-3,400	-6.3%	Green	↑
254,936	4,247	People & Communities	263,422	226,450	4,618	1.8%	Red	↓
390	-390	Public Health	390	-4,007	-390	-	Green	\leftrightarrow
10,221	-1,218	Corporate Services	12,210	11,463	-1,290	-10.6%	Green	1
14,048	22	LGSS Managed	10,916	8,377	-122	-1.1%	Green	↑
-9,502	1,679	Commercial & Investment	-8,706	87	1,720	-	Amber	↓
28,161	-677	CS Financing	27,558	11,086	-677	-2.5%	Green	\leftrightarrow
355,758	785	Service Net Spending	359,561	297,396	459	0.1%	Amber	1
20,357	-504	Funding Items	18,447	9,709	-516	-2.8%	Green	1
376,115	281	Subtotal Net Spending	378,008	307,105	-58	0.0%	Green	1
		Memorandum items:						
8,161	589	LGSS Operational	6,103	6,915	582	9.5%	Amber	↑
	870	Grand Total Net Spending	384,111	314,020	524	0.1%	Amber	1
170,024		Schools	170,024					
554,300		Total Spending 2019/20	554,135					

The budget figures in this table are net.

For budget virements between Services throughout the year, please see Appendix 1.

The budget of £390k stated for Public Health is cash limit budget. In addition to this, Public Health has a budget of £24.7m from ring-fenced public health grant, which makes up its gross budget.

The 'Funding Items' budget comprises the £8.7m Combined Authority Levy, the £407k Flood Authority Levy and £9.3m change in general and corporate reserves budget requirement. The forecast outturn on this line reflects any variance in the amount received from corporate grants and business rates from what was budgeted; a negative outturn indicates a favourable variance, i.e. more income received than budgeted.



- 3.2 Key exceptions this month are identified below.
- 3.2.1 Place & Economy: -£3.400m (-6.3%) underspend is forecast at year-end.

• Traffic Management – a -£0.252m underspend is forecast, of which -£0.039m relates to a change since last month. There is a higher level of income from road closures and opening permits -0.252 (-267%) than was originally budgeted.

- Waste Management a -£2.492m underspend is forecast. This is an increase of -£0.417m on the underspend position previously reported in October, of which -£0.200m relates to a change since last month. This is primarily due to:
 - Breakdowns at the Mechanical Biological Treatment (MBT) facility and the recent damage caused by storm Ciara mean that less waste has been processed through the MBT, which has resulted in a significant reduction in our landfill tax spend for the first quarter of the year. The current level of plant performance and additional MBT breakdowns combined with less residual waste being delivered for treatment, has increased the forecast underspend on landfill tax by £590k to -£2.390m.

(-7%)

-0.011

(-0%)

- Highways Development Management— a -£0.764m underspend is forecast. This is an increase of -£0.264m on the underspend position previously reported in May, which relates in full to a change since last month. There is an expectation that section 106 and section 38 fees will come in higher than budgeted for new developments which will lead to an overachievement of income. However, this is an unpredictable income stream and the forecast outturn is updated regularly.
- A combination of more minor variances sum with the above to lead to an overall outturn of -£3.700m. For full and previously reported details see the <u>P&E Finance</u> <u>Monitoring Report</u>, (https://tinyurl.com/vhlg2x7).
- 3.2.2 **People & Communities:** +£4.618m (+1.8%) pressure is forecast at year-end.

% £m Strategic Management - Adults - a -£4.271m underspend is forecast. This is a decrease of £0.837m on the underspend position previously reported in December, of which £0.739m relates to a change since last month. This line contains grant and financing mitigations that are partially offsetting care pressures. Government has continued to recognise pressures on the social care system through the Adult Social Care Precept and -4.271(-497%)a number of ringfenced grants. As well as using these grants to make investments into social care to bolster the social care market, reduce demand on health and social care services and mitigate delayed transfers of care, we are able to hold a portion as a contingency against in-year care pressures.

Mental Health Services – a -£0.011m underspend is forecast.
 This is a decrease of £0.278m on the position previously reported in July, of which -£0.087m relates to a change since last month.

 An underspend on the Section 75 contract resulting from Page 175 of 392

vacancies and an increase in the expected level of contributions from clients towards the cost of their care have offset the previously reported pressure.

Strategic Management - Children & Safeguarding

 £0.300m underspend is forecast which relates in full to a change since last month. Across District teams and Child and Family Centres, an overachievement of the vacancy savings target is expected of £300k, due to a combination of more posts being vacant and recruitment to vacancies taking longer than anticipated.

-0.300 (-8%)

SEND Specialist Services (0-25 years)— a +£11.5m pressure is currently forecast. This is an increase of +£1.0m on the position previously reported last month. Continuing increases have been forecast for a number of Dedicated Schools Grant (DSG) funded High Needs Block budgets including funding for special schools and units (£4.3m), top-up funding for mainstream schools and Post-16 provision (£3.9m), out of school tuition (£3.2m) and Special Educational Needs (SEN) Placements (£0.6m). These are partially offset by a -£0.5m underspend on wider Special Educational Needs and Disability (SEND) Specialist services. A SEND Project Recovery team has been set-up to oversee and drive the delivery of the SEND recovery plan to address the current pressure on the High Needs Block. Current estimates forecast an in-year pressure of approximately £11.5m as a result of the continuing rise in Education, Health and Care Plans (EHCPs). This is a ring-fenced grant and, as such, pressures do not currently affect the Council's bottom line but are carried forward as a deficit balance into the next year.

+11.500 (+21%)

Financing DSG – a -£11.5m required contribution from DSG is forecast. This is an increase of -£1.0m on the required contribution reported last month. This represents the amount that will be drawn down from the DSG reserve in excess of what was budgeted to cover pressures in DSG-funded areas. These pressures are primarily Funding to Special Schools and Units (£4.3m), High Needs Top Up Funding (£3.9m), Out of School Tuition (£3.2m) and SEN Placements (£0.6m), partially offset by SEND Specialist Services (-£0.5m) underspend, as reported above.

-11.500 (-19%)

• Home to School/ College Transport – Mainstream – a +£0.250m pressure is forecast, of which +£0.050m relates to a change since last month. While savings were achieved as part of the annual tender process we are continuing to see a significant increase in the costs being quoted for routes in some areas of the county, which are in excess of the inflation that was built into the budget. Where routes are procured at particularly high rates these are agreed on a short-term basis only with a view to reviewing and retendering at a later date in order to reduce spend where possible, however there is no guarantee that lower prices will be secured in future.

+0.250 (+3%)

There have also been pressures due to the number of in-year admission requests when the balls of the first full. These

situations require us to provide transport to schools further away, outside statutory walking distance. The effect on the transport budget is taken into account when pupils are placed in-year, which has mitigated the effect of this to some degree, however in many cases the only viable transport is an individual or low-occupancy taxi.

- A combination of more minor variances sum with the above to lead to an overall outturn of +£4.618m. For full and previously reported details see the <u>P&C Finance</u> <u>Monitoring Report</u>, (https://tinyurl.com/ujobozx).
- 3.2.3 **Public Health:** -£0.390m (-%) underspend is forecast for year-end. There are no exceptions to report this month; for full and previously reported details see the PH Finance Monitoring Report, (https://tinyurl.com/yx4pvxr6).
- 3.2.4 **Corporate Services:** -£1.290m (-10.6%) underspend is forecast for year-end. There are no exceptions to report this month; for full and previously reported details see the <u>CS & LGSS Finance Monitoring Report</u>, (https://tinyurl.com/t5h2sdw).
- 3.2.5 **LGSS Managed:** -£0.122m (-1.1%) underspend is forecast for year-end. There are no exceptions to report this month; for full and previously reported details see the <u>CS & LGSS Finance Monitoring Report</u>, (https://tinyurl.com/t5h2sdw).
- 3.2.6 **CS Financing:** -£0.677m (-2.5%) underspend is forecast for year-end. There are no exceptions to report this month; for full and previously reported details see the <u>CS & LGSS Finance Monitoring Report</u>, (https://tinyurl.com/t5h2sdw).
- 3.2.7 **Commercial & Investment**: +£1.720m (-%) pressure is forecast for year-end. There are no exceptions to report this month; for full and previously reported details see the <u>C&I</u> <u>Finance Monitoring Report</u>, (https://tinyurl.com/srlq2wm).
- 3.2.8 **Funding Items:** -£0.516m (-2.8%) underspend is forecast at year-end. There are no exceptions to report this month.
- 3.2.9 **LGSS Operational:** +£0.582m (+9.5%) pressure is forecast at year-end. There are no exceptions to report this month; for full and previously reported details see the <u>CS & LGSS Finance Monitoring Report</u>, (https://tinyurl.com/t5h2sdw).

Note: exceptions relate to Forecast Outturns that are considered to be in excess of +/- £250k.

4. KEY ACTIVITY DATA

4.1 The latest key activity data for: Children in Care Placements; Special Educational Needs (SEN) Placements; Adults & Safeguarding; Adult Mental Health; Older People (OP); and Older People Mental Health (OPMH) can be found in the latest P&C Finance Monitoring Report (section 5), (https://tinyurl.com/ujobozx).

5. FUNDING CHANGES

5.1 Surplus on the Levy Account additional allocation

The 2019-20 Levy Account Surplus final allocations were published by Government on 25th February 2020. £40m of the surplus on the 2019-20 business rates retention levy account will be distributed to local authorities. As a result of growth in business rates collected by local authorities in 2018-19 and the associated levy payments, there is a surplus in the Government's 2018-2014 vor account.

Cambridgeshire County Council's allocation is £219,368.

It is proposed that this additional income is held in the corporate grants section of Funding items, and transferred to corporate reserves at year end, subject to General Purposes Committee (GPC) approval.

General Purposes Committee is asked to approve the allocation of the Levy Account Surplus grant (£219,368) to the corporate grants account within Funding Items. This will offset pressures across the Council, reducing the transfer from the general fund reserve at year-end.

5.2 Coronavirus (COVID-19) pandemic funding

At the end of March 2020, the Council received £14.612m in unringfenced funds from the Ministry of Housing, Communities and Local Government (MHCLG). This funding is intended to help Councils address the pressures they are facing in response to the pandemic. MHCLG expect the majority of the funding will be spent on meeting the increased demand for adult social care, including providing additional support to providers.

MHCLG brought forward the funding date for this amount to ensure that Councils have adequate upfront cashflow in the current circumstances, meaning that it has been received in 2019/20.

General Purposes Committee is asked to approve the earmarking of the unringfenced grant received (£14.612m) for the purposes of responding to the coronavirus pandemic during 2020/21.

At the time of writing, the financial impacts of the pandemic are being estimated, projected and monitored with weekly reporting to the strategic management team. As well as adult social care there are wide range of other additional costs and reduced income likely. GPC will be updated further in due course. The Council holds general reserves partly to respond to unforeseen and exceptional events and is recording spend in detail such that it is in a position to reclaim further amounts were these to exceed the grant level.

Additionally, the Council is working in collaboration to spend on purchasing of care placements that are recharged to the NHS as part of arrangements to ensure the swiftest possible hospital discharges during the current period. District Councils are also receiving funding to support financial hardship (including through Council tax support) and for the businesses in their areas.

6. DEBT WRITE-OFFS

6.1 As per the Scheme of Financial Management, debts over £25,000 recommended to be written off will be reported to the General Purposes Committee to seek authorisation to write off.

6.2 Three estates of service users debt write-off requests

There are three debts of over £25,000 relating to the estates of service users who have died. In each case efforts to trace relatives/beneficiaries are now exhausted, in one case any assets are now held overseas and in others there is suspected (although unproven) deprivation of funds by a relative. The Council cannot establish further contacts, does not believe there are currently further assets to recover and does not believe there is a realistic prospect of improving Plaise possion 392 ough court action. It has reached the point

where there is no prospect of recovering these debts so approval is now being sort from General Purposes Committee to account for write offs. It should be emphasised that debt write offs are used exceptionally, and social care contributions are collected successfully from thousands of clients each month.

General Purposes Committee is asked to approve the debt write-offs of £27,170.32, £26,589.16 and £26,324.23 (totalling £80,083.71) relating to the estates of service users where there is now no prospect of these debts being recovered.

7. CAPITAL PROGRAMME

7.1 A summary of capital financial performance by service is shown below:

			2019-20			
Original 2019/20 Budget as per Business Plan £000	Forecast Variance - Outturn (Jan) £000	Service	Revised Budget for 2019/20	Actual- Year to Date (Feb)	Forecast Variance - Outturn (Feb) £000	Forecast Variance - Outturn (Feb) %
43,908	-18,185	P&E	60,923	24,756	-22,864	-37.5%
	,		· · · · · · · · · · · · · · · · · · ·		,	
129,267	-0	P&C	101,627	81,481	1,900	1.9%
3,457	-90	CS	7,863	5,234	-90	-1.1%
2,827	-472	LGSS Managed	3,239	3,807	-556	-17.2%
90,443	-38,608	C&I	175,554	120,730	-38,608	-22.0%
-		Outturn adjustment	ı	ı	1	-
269,902	-57,355	Total Spending	349,206	236,008	-60,218	-17.2%

TOTAL SCHEME							
Total Scheme Revised Budget (Feb)	Total Scheme Forecast Variance (Feb)						
£000	£000						
422,898	-						
678,525	-12,717						
25,077	-						
5,524	-202						
374,473	-						
-	-						
1,506,497	-12,919						

Notes:

- 1. The 'Revised Budget' incorporates any changes in the funding available to what was originally budgeted. A breakdown of the use of the capital programme variations budget by service is shown in section 7.2.
- 2. The reported P&E capital figures do not include Greater Cambridge Partnership, which has a budget for 2019/20 of £30.8m and is currently forecasting an in-year underspend of -£5.0m at year-end.
- 3. The 'Total Scheme Forecast Variance' reflects the forecast variance against budget of the total expenditure for all active capital schemes across all financial years.

7.2 A summary of the use of capital programme variations budgets by services is shown below. As forecast underspends are reported, these are offset with a forecast outturn for the variation budget, leading to a balanced outturn overall up to the point when re-phasing exceeds this budget.

2019-20								
Service	Capital Forecast Programme Variance - Variations Budget (Feb)		Capital Programme Variations Budget Used	Capital Programme Variations Budget Used	Revised Forecast Variance - Outturn (Feb)			
	£000	£000	£000	%	£000			
P&E	-13,505	-36,369	13,505	100.00%	-22,864			
P&C	-13,399	-11,499	11,499	85.82%	1,900			
CS	-1,431	-1,521	1,431	100.00%	-90			
LGSS Managed	-585	-1,141	585	100.00%	-556			
C&I	-26,312	-64,920	26,312	100.00%	-38,608			
Outturn adjustment	-	-	1,900	-	-			
Total Spending	-55,232	-115,450	55,232	100.00%	-60,218			

- As at the end of February 2020, People & Communities (P&C) is forecasting an overall utilisation of -£11.5m of the -£13.4m capital programme variations budget originally allocated to P&C. At this stage of the financial year it is forecast that P&C will not require any further capital programme variations budget. Place & Economy schemes, Corporate Services, LGSS Managed schemes and C&I schemes have exceeded the capital variations budget allocated to them, forecasting in-year underspends of -£22.9m, -£0.1m, -£0.6m and -£38.6m respectively. Taking these forecasts altogether gives an overall forecast underspend of -£60.2m across the capital programme.
- 7.4 A more detailed analysis of <u>current year</u> key exceptions this month by programme for individual schemes of £0.25m or greater are identified below.

7.4.1 **Place & Economy:** a -£22.9m (-37.5%) in-year underspend is forecast after the capital programme variations budget has been utilised in full.

	Forecast Spend - Outturn (Feb)	Forecast Spend - Outturn Variance (Feb)	Variance Last Month (Jan)		Breakdown of Variance			
Revised Budget for 2019/20				Movement	Underspend/ pressure	Rephasing		
£'000	£'000	£'000	£'000	£'000	£'000	£'000		
Safety Schemes								
594	273	-321	0	-321	0	-321		

An in-year underspend of -£0.3m is forecast across Safety Schemes, which relates in full to a change since last month. The underspend is mainly due to the A142 scheme where design work delays has meant the scheme will roll into 2020/21.

Delivering the Tr	ansport St	rategy Aims				
3,079	1,377	-1,702	-817	-885	-100	-1,602

An in-year underspend of -£1.7m is forecast across Delivering the Transport Strategy Aims – Highway Schemes. This is a change of -£885k on the position previously reported in November, which relates in full to a change since last month. This relates primarily to the following schemes which have been delayed and will either be only part delivered this financial year or carried out in 2020/21:

- Cambridge, Victoria Avenue/Maids Causeway Scheme to roll into 2020/21 £125k design/consultation difficulties have delayed delivery on site.
- Cambridge, Oxford Road/Windsor Road Scheme to roll into 2020/21 £293k Consultation delays - Revised Plan upon public consultation comments
- Ely, Broad Street/Back Hill Scheme to roll into 2020/21 £80k Construction works stage in 2020/21
- Wimblington, March Road cycle improvements Scheme continuing into 2020/21 £120k Scheme commenced on site 8/3/2020 (8wks)

Operating the Network

16,889 | 15,745 | -1,144 | -612 | -532 | 0 | -1,114

An in-year underspend of -£1.1m is forecast across Operating the Network schemes. This is a change of -£666k on the position previously reported in July, of which -£532k relates to a change since last month. This relates primarily to the following schemes:

Signals - C233 Cherry Hinton Rd Cambridge (At Queen Ediths Way / Robin Hood junction) Projected £575k underspend in 2019-20.

Work on this scheme has been delayed as a nearby cycle scheme was pushed back to start in January 2020. With the Highways site so close work can begin after this work is complete. The current plan is to construct from April 2020 onwards. The revised outturn is based on work to complete modelling and get the scheme to a construction-ready level.

Carriageway Maintenance

- Bar Hill scheme now slipping into 2020/21 £170k starts 6th April
- Fenton Road scheme now slipping into 2020/21 £250k starts 30th March.

Energy Efficiency Fund

365 93 -272 -190 -82 0 -272

An in-year underspend of -£0.3m is forecast, of which -£82k relates to a change since last month. A number of schemes will be carried forward to 2020-21, as a number were delayed until it was confirmed what the Spokes buildings would be as part of the Cambs 2020 scheme.

Wisbech Town Centre Access Study

1,182 847 -335 346 -681 0 -335

An in-year underspend of -£0.3m is forecast on the Wisbech Town Centre Access Study scheme. This is a change of -£681k on last month's position. This project was originally shown within the Combined Authority Schemes. However, the work has been separated out onto a unique capital group to facilitate easier tracking. For this year the work will be invoiced and dealt with alongside all the other Combined Authority schemes. Work originally expected to be carried out this financial year will now be rephased into next financial year.

Connecting Cambridgeshire

14,133 597 -13,536 -11,428 -2,108 0 -13,356

An in-year underspend of -£13.5m is forecast. This is a change of -£2,108k on the position previously reported in September, and relates in full to a change since last month. Due to the nature of the contract with BT, the majority of the costs are back ended and expenditure will not be incurred until 2020/21 and 2021/22. The total scheme cost is still £36.29m.

- For full and previously reported details see the P&E Finance Monitoring Report, (https://tinyurl.com/vhlg2x7).
- 7.4.2 **People & Communities:** +£1.9m (+1.9%) accelerated spend accelerated spend is forecast after utilising -£11.5m of the -£13.4m capital programme variations budget allocated to P&C.

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	Forecast	Forecast	Forecast Variance		Breakdown of Variance				
Revised Budget for 2019/20	Spend - Outturn (Feb)	Spend - Outturn Variance (Feb)	Last Month (Jan)	Movement	Underspend/ pressure	Rephasing			
£'000	£'000	£'000	£'000	£'000	£'000	£'000			
Basic Need - Primary									
34,420	32,555	-1,865	-1,600	-265	-1,861	-4			

An in-year underspend of -£1.9m is forecast across Basic Need – Primary schemes. This is a change of -£0.3m on the position reported last month. This is primarily due to changes on the scheme outlined below:

Chatteris Addition	onal Places					
4,600	2,300	-2,300	-2,100	-200	0	-2,300

- £1.6m rephasing is anticipated in 2019/20 due to issues around Highways and planning permission. This scheme has now been combined with that listed separately for Cromwell Community College following approval from the Department for Education (DfE) to a proposal to extend the school's age range to enable it to provide all-through education, 4-19. A further £0.7m rephasing adjustment has been made on receipt of the contractor's revised cashflow that identifies £200k of the rephasing is due to poor ground conditions and weather. The contractor expects time to be recovered in the programme so there will be no delay to the completion date.
 - For full and previously reported details see the <u>P&C Finance Monitoring Report</u>, (https://tinyurl.com/ujobozx).
 - 7.4.3 **Corporate Services:** a -£0.1m (-1.1%) in-year underspend is forecast after the capital programme variations budget has been utilised in full. There are no exceptions to report this month; for full and previously reported details see the <u>CS & LGSS Finance Monitoring</u> Report, (https://tinyurl.com/t5h2sdw).
 - 7.4.4 **LGSS Managed:** a -£0.6m (-17.2%) in-year underspend is forecast after the capital programme variations budget has been utilised in full. There are no exceptions to report this month; for full and previously reported details see the <u>CS & LGSS Finance Monitoring Report</u>, (https://tinyurl.com/t5h2sdw).
 - 7.4.5 **Commercial & Investment**: a -£38.6m (-22.0%) in-year underspend is forecast after the capital programme variations budget has been utilised in full. There are no exceptions to report this month; for full and previously reported details see the C&I Finance Monitoring Report, (https://tinyurl.com/srlq2wm).
 - 7.5 A more detailed analysis of <u>total scheme</u> key exceptions this month by programme for individual schemes of £0.25m or greater are identified below:
 - 7.5.1 **Place & Economy:** a total scheme balanced budget is forecast. There are no exceptions to report this month; for full details see the P&E Finance Monitoring Report, (https://tinyurl.com/vhlg2x7).
 - 7.5.2 **People & Communities:** a -£12.717m (-1.9%) total scheme underspend is forecast. There are no exceptions to report this month; for full details see the P&C Finance Monitoring Report, (https://tinyurl.com/ujobozx).
 - 7.5.3 **Corporate Services:** a total scheme balanced budget is forecast. There are no exceptions to report this month; for full and previously reported details see the <u>CS & LGSS Finance Monitoring Report</u>, (https://tinyurl.com/t5h2sdw).

- 7.5.4 **LGSS Managed:** a -£0.202m (-3.7%) total scheme underspend is forecast. There are no exceptions to report this month; for full and previously reported details see the <u>CS & LGSS Finance Monitoring Report</u>, (https://tinyurl.com/t5h2sdw).
- 7.5.5 **Commercial & Investment**: a total scheme balanced budget is forecast. There are no exceptions to report this month; for full and previously reported details see the <u>C&I</u> Finance Monitoring Report, (https://tinyurl.com/srlq2wm).
- 7.6 A breakdown of the changes to funding has been identified in the table below.

Funding Source	B'ness Plan Budget	Rolled Forward Funding1	Revised Phasing	Additional/ Reduction in Funding	Revised Budget	Outturn Funding	Funding Variance
	£m	£m	£m	£m	£m	£m	£m
Department for Transport (DfT) Grant	16.0	0.5	-0.3	1.9	18.2	18.5	0.3
Basic Need Grant	6.9	1	ı	-	6.9	6.9	-
Capital Maintenance Grant	4.7	-	-	-1.1	3.5	3.5	-
Devolved Formula Capital	1.0	2.0	1	-0.2	2.8	2.8	-
Specific Grants	8.4	0.0	-	1.1	9.5	7.7	-1.8
S106 Contributions & Community Infrastructure Levy	19.4	3.3	-12.8	0.6	10.5	9.6	-0.9
Capital Receipts	45.4	10.4	-10.5	-0.6	44.7	17.2	-27.5
Other Contributions	24.6	3.3	-	5.7	33.5	23.9	-9.6
Revenue Contributions	10.1	-	-	1	10.1	-	-10.1
Prudential Borrowing	133.4	22.2	-13.4	67.2	209.4	198.8	-10.6
TOTAL	269.9	41.7	-37.0	74.6	349.2	289.0	-60.2

¹ Reflects the difference between the anticipated 2018/19 year end position used at the time of building the initial Capital Programme budget, as incorporated within the 2019/20 Business Plan, and the actual 2018/19 year end position.

7.7 The Economy and Environment (E&E) Committee considered a report on 23rd April 2020 detailing the changes to the forecast budget required to deliver the Kings Dyke Level Crossing Closure scheme and to consider the requirement for additional funding. The recommendations to the Committee were to approve the award of the design and construction contract to the preferred bidder, subject to the approval of the necessary additional funding and request General Purposes Committee (GPC) allocate the additional funding required of £2.018m from prudential borrowing.

This initial allocation is on the basis that it will reduce to £807,200 subject to the Cambridgeshire & Peterborough Combined Authority (CPCA) approving its 60% share of the £2.018 million increase, in accordance with the legal funding agreement. The annual cost of this additional prudential borrowing will start at £40k per annum, decreasing each year thereafter over 40 years. The E&E Committee meeting was held immediately prior to this GPC meeting, the resolution of the Committee will therefore be verbally reported. The report to E&E Committee is available here.

The outbreak of the Coronavirus pandemic has the potential to have a significant impact on this project. It is recommended that a specific Covid-19 project contingency budget be created to allow the project to proceed as quickly as possible and without the need for a further Committee cycle as long as the risks identified are within this contingency budget. E&E Committee recommends to GPC that a specific Covid-19 contingency budget of £1.5 million be created to fund any additional costs directly associated with the project caused by the impact of Covid-19. This budget would only be required where the impact cannot be reasonably avoided and closely managed risk mitigation controls will be in place to minimise the impact in collaboration with the contractor. This allocation is on the basis that it will reduce to £600,000 subject to the Cambridgeshire & Peterborough Combined Authority (CPCA) approving its 60% share, in accordance with the legal funding agreement. The annual cost of this additional prudential borrowing would start at £30k per annum, decreasing each year thereafter over 40 years.

General Purposes Committee is asked to approve additional prudential borrowing of £2.018 million in future years for the completion of the Kings Dyke Level Crossing Closure scheme, reducing to £807,200 once the CPCA has approved its 60% share of the increase.

General Purposes Committee is asked to approve additional prudential borrowing for the creation of a £1.5 million Covid-19 risk contingency for the Kings Dyke Level Crossing Closure scheme.

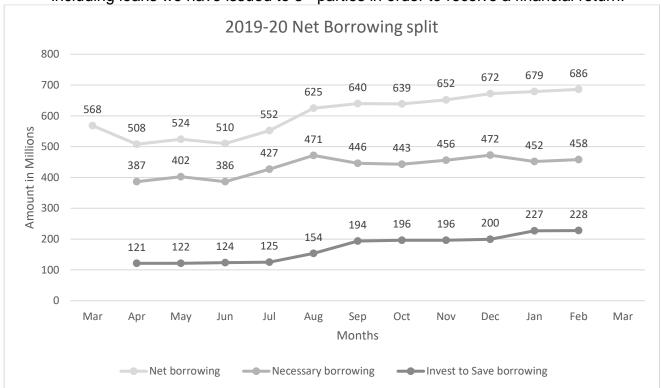
8. BALANCE SHEET

8.1 A more detailed analysis of balance sheet health issues is included below:

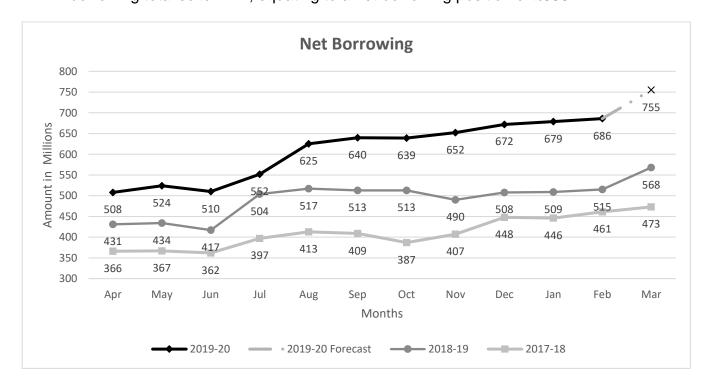
Measure		Year End Target	Actual as at the end of Feb 2020 ¹
Level of debt outstanding (owed to the council) 91	Adult Social Care	£3.37m	£5.24m
days +, £m	Sundry	£1.71m	£2.32m

¹ The debt figures from Oct 19 onwards exclude Cambridgeshire & Peterborough CCG debts as these are considered collectable and are subject to separate reconciliation. The amount of debt owed by Cambridgeshire & Peterborough CCG exceeding one year hold was £3.67m. The overdue amounts primarily relate to funding contributions to nursing care and for aftercare provided under section 117 of the Mental Health Act. The CCG now funds care homes for nursing care directly, rather than via the Council, so this issue relates to historic sums accrued between 2017 and 2019. Individual payments continue to be received and officers are working to reconcile these to payments owed and allocate against specific invoiced amounts. Both the Council and the CCG continue to work together to agree, expedite and reconcile payments for clients eligible 10 NHS funding?

8.2 The graph below shows the estimated split of the net borrowing between necessary borrowing and Invest to Save borrowing. Of the gross borrowing in 2019-20, it is estimated that £228m relates to borrowing for Invest to Save or Invest to Earn schemes, including loans we have issued to 3rd parties in order to receive a financial return.



8.3 The graph below shows net borrowing (borrowings less investments) on a month by month basis and compares the position with the previous financial year. At the end of February 2020, investments held totalled £86m (excluding 3rd party loans) and gross borrowing totalled £772m, equating to a net borrowing position of £686m.



The Council's cash flow profile – which influences the net borrowing requirement - varies considerably during the year, due to the timing difference between outgoing payments (payroll, supplier payments etc.) and income streams (grants, council tax etc.). As illustrated by 2018-19 actual net borrowing positions, cash flows at the beginning of the year are typically stronger tham at the patch example of the year, as many grant receipts are

received in advance of spend. The 2019-20 net borrowing position is expected to take a similar path, rising more substantially towards the end of the financial year as capital projects are progressed to completion and financed.

- 8.5 The Treasury Management Strategy Statement (TMSS) sets out the plan for treasury management activities over the forthcoming year. It identifies the expected levels of borrowing and investments based upon the Council's financial position and forecast capital programme. When the 2019-20 TMSS was set in February 2019, it anticipated that net borrowing would reach £732.1m by the end of this financial year. Based on the 2018-19 outturn position and subsequent revisions to the capital programme, this is now forecast to be £755.0m by the end of this financial year.
- 8.6 From a strategic perspective, the Council continues to temporarily utilise cash-backed resources in lieu of additional borrowing (known as internal borrowing) and where borrowing is undertaken loans are raised for shorter terms, both to generate net interest cost savings and consequently holding less investments reduces the Councils exposure to credit risk. However, this approach carries with it interest rate risk and officers continue to monitor options as to the timing of any potential longer term borrowing should underlying interest rates be forecast to rise in a sustained manner.
- 8.7 There is a link between the capital financing borrowing requirement, the net borrowing position and consequently net interest costs. However, the Debt Charges budget is prudently formulated with sensitivity to additional factors including projected levels of cash-backed reserves, forecast movements in interest rates, and the overall borrowing requirement for the Council over the life of the Business Plan and beyond.
- 8.8 Further detail around the Treasury Management activities can be found in the latest <u>Treasury Management Report</u>, (https://tinyurl.com/uogtglm).
- 8.9 The Council's reserves include various earmarked reserves (held for specific purposes), as well as provisions (held for potential liabilities) and capital funding. A schedule of the Council's reserves and provisions can be found in <u>Appendix 2</u>.

9. ALIGNMENT WITH CORPORATE PRIORITIES

9.1 A good quality of life for everyone

There are no significant implications for this priority.

9.2 Thriving places for people to live

There are no significant implications for this priority.

9.3 The best start for Cambridgeshire's children

There are no significant implications for this priority.

9.4 Net zero carbon emissions for Cambridgeshire by 2050

There are no significant implications for this priority.

10. SIGNIFICANT IMPLICATIONS

10.1 Resource Implications

This report provides the latest resources information for the Council and so has a direct impact.

10.2 Procurement/Contractual/Council Contract Procedure Rules Implications

There are no significant implications within this category.

10.3 Statutory, Legal and Risk Implications

There are no significant implications within this category.

10.4 Equality and Diversity Implications

There are no significant implications within this category.

10.5 Engagement and Consultation Implications

No public engagement or consultation is required for the purpose of this report.

10.6 Localism and Local Member Involvement

There are no significant implications within this category.

10.7 **Public Health Implications**

There are no significant implications within this category.

Implications	Officer Clearance
•	
Have the resource implications been cleared by Finance?	Yes Name of Financial Officer: Chris Malyon
Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by Finance?	No Name of Legal Officer: Not applicable
Has the impact on Statutory, Legal and Risk implications been cleared by LGSS Law?	No Name of Legal Officer: Not applicable
Have the equality and diversity implications been cleared by your Service Contact?	No Name of Officer: Not applicable
Have any engagement and communication implications been cleared by Communications?	No Name of Officer: Not applicable
Have any locations and Local March as	NI-
Have any localism and Local Member involvement issues been cleared by your Service Contact?	No Name of Officer: Not applicable
Have any Public Health implications been cleared by Public Health	No Name of Officer: Not applicable

Source Documents	Location
P&E Finance Monitoring Report (February 20) P&C Finance Monitoring Report (February 20) PH Finance Monitoring Report (February 20) CS and LGSS Cambridge Office Finance Monitoring Report (February 20) C&I Finance Monitoring Report (February 20) Capital Monitoring Report (February 20) Report on Debt Outstanding (February 20)	1 st Floor, Octagon, Shire Hall, Cambridge

APPENDIX 1 – transfers between Services throughout the year (only virements of £1k and above (total value) are shown below)

	P&C	Public Health	P&E	CS Financing	Corporate Services	LGSS Managed	C&I	LGSS Op	Financing Items
	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Opening Cash Limits as per Business Plan	254,936	390	57,504	28,161	10,221	14,048	-9,502	8,161	20,357
Greater Cambridge Partnership budgets not reported in CCC budget					-602				
Budget Build correction- Impact of Local Government Pay offer on CCC Employee Costs					-430	430			
External audit fees budget transfer					27	-27			
19/20 Council tax income generation proposal to precept income						2,			
codes					200				
Transfer of Cultural & Community Services from P&E to P&C	4,721		-4,721						
Movement of Contract Efficiency saving target from Corporate Services					49		-49		
Inflation allocation adjustment for Children's Services Legal from CS	30				-30				
Remove Traded Services Central income target from Central	00								
Services Risks budget.					-58		58		
Correction of apprenticeship levy					-7	7			
Correction of staffing budget					48			-48	
Community & Safety – Trading Standards moving from P&E to P&C	694		-694						
Review of 2019-20 budget as approved by GPC at 16th July 2019 meeting, Agenda item 5a	2,360				-322	-250	122		-1,910
Transfer Concessionary Fares budget to P&E	-12		12						
Adjustment to match revised LGSS Law SLA						-5		5	
Transfer of commercial scheme debt charges budget				-603			603		
Transfer P&E Management restructure savings			-22		22				
Repatriation of the Professional Finance Services from LGSS to					1,631			-1,631	
Corporate Services as approved by GPC 22nd Oct 2019					.,			.,	
Repatriation of the Democratic & Members' Services from LGSS to Corporate Services as approved by GPC 22nd Oct 2019					1,438	-1,053		-385	
Allocation of £230k School Improvement Grant to P&C as approved									
by GPC 26th Nov 2019	230								
Transfer from Fostering to Communications	-23				23				
Transfer from Democratic Services to Place Planning and	8				-8				
Organisation Service	O				-0				
Transfer Insurance budgets in line with annual Insurance Fund	479		1,692			-2,233	62		
processes Transfer IT staffing budget					10			-10	
Transfer it staming budget					10			10	
Current budget	263,422	390	53,772	27,558	12,211	10,917	-8,706	6,093	18,447
Rounding	0	0	0	0	1	1	0	-1	0

APPENDIX 2 – Reserves and Provisions

	Balance 2019-20				
Fund Description	at 31 March 2019	Movements in 2019-20	Balance at 29 Feb 2020	Forecast Balance 31 March 2020	Notes
	£000s	£000s	£000s	£000s	
General Reserves					
- County Fund Balance	12,850	4,699	17,549	17,025	
- Services	•		•		
1 P&C	0	0	0	0	
2 P&E 3 CS	0	0	0	0	
4 LGSS Operational	112	-26	86	366	
subtotal	12,962	4,673	17,635	17,391	
Earmarked	12,002	4,070	17,000	17,001	
- Specific Reserves					
5 Insurance	4,060	-1,793	2,268	2,268	
subtotal	4,060	-1,793	2,268	2,268	
- Equipment Reserves					
6 P&C	8	0	8	8	
7 P&E	0	0	0	0	
8 CS	3	0	3	3	
9 C&I	56	0	56	0	
subtotal	67	0	67	11	
Other Earmarked Funds	4 000	120	070	070	
10 P&C 11 PH	1,008 2,886	-130 98	878 2,984	878 2,258	
12 P&E	5,571	-959	4,612	3,437	Includes liquidated damages in respect of the
					Guided Busway
13 CS	3,193	239	3,432	3,548	
14 LGSS Managed	63	0	63	0	
15 C&I	600	0	600	679	Continue we alter a distance when
16 Transformation Fund	24,504	2,014	26,518	22,638	Savings realised through change in MRP policy.
17 Innovate & Cultivate Fund	1,561	-360	1,201	893	
subtotal	39,386	902	40,288	34,331	
SUB TOTAL	56,475	3,783	60,258	54,000	
Canital Basanus					
<u>Capital Reserves</u> - Services					
18 P&C	29,463	0	29,463	29,463	
19 P&E	6,069	141	6,210	1,000	
20 LGSS Managed	0,000	0	0,210	0	
21 C&I	20,415	13,549	33,964	0	
22 Corporate	54,694	22,565	77,259	67,636	Section 106 and Community Infrastructure Levy balances.
subtotal	110,641	36,255	146,896	98,099	
GRAND TOTAL	167,116	40,037	207,153	152,100	

In addition to the above reserves, specific provisions have been made that set aside sums to meet both current and long term liabilities that are likely or certain to be incurred, but where the amount or timing of the payments are not known. These are:

	Balance	2019	9-20	Forecast	
Fund Description	at 31 March 2019	Movements in 2019-20	Balance at 29 Feb 2020	Balance 31 March 2020	Notes
	£000s	£000s	£000s	£000s	
- Short Term Provisions					
1 P&E	0	0	0	0	
2 P&C	200	0	200	200	
3 CS	0	0	0	0	
4 LGSS Managed	3,460	0	3,460	3,460	
5 C&I	0	0	0	0	
subtotal	3,660	0	3,660	3,660	
- Long Term Provisions					
6 LGSS Managed	3,613	0	3,613	3,613	
subtotal	3,613	0	3,613	3,613	
GRAND TOTAL	7,273	0	7,273	7,273	

APPENDIX 3 - RECOMMENDATIONS FROM DECEMBER 19 AND JANUARY 20 REPORTS

The January 20 and December 19 Integrated Finance Monitoring Reports included the following recommendations to General Purposes Committee (GPC) that have not yet received approval, as the last Integrated Finance Monitoring Report to be presented at a meeting of GPC was the November report, on 28th January 2020.

GPC is asked to approve the recommendations in the January report, which is published online here and in the December report, which is published online here.

January 20 Integrated Finance Monitoring Report

Three recommendations concerning capital funding, found in sections 6.7, 6.8 and 6.9:

6.7 Key funding changes (of greater than £0.25m or requiring approval):

Funding	Service	Amount (£m)	Reason for Change
Addition/Reduction in Funding -Other contributions			A net increase in contributions of +£677k is expected in relation to the Wisbech Town Centre Access Strategy, which is a Combined Authority (CA) scheme. This is in line with an increase in the level of work expected to be carried out by CCC on this scheme compared to the level anticipated in November. The Combined Authority is invoiced on a monthly basis for work on CA schemes. [Please note that this is a reduction of £346k on the amount anticipated in the December Integrated Finance Monitoring Report.]
			General Purposes Committee is asked to note the additional 2019/20 contributions of £677k expected in relation to the Combined Authority funded Wisbech Town Centre Access Study scheme.

6.8 At the February Commercial & Investment (C&I) Committee meeting C&I Committee recommended to General Purposes Committee (GPC) that an additional £808k capital investment is made in 2020/21 into property at the three Cambridgeshire Outdoor centres to fund essential repair, maintenance and reconstruction, facilitating the continued compliant operation of the centres. £99k for the most urgent health and safety and safeguarding work has already been approved under the delegated authority of the Chief Finance Officer. The costs are broken down as follows:

The state of the s	2019-20 (£)	2020-21 (£)
Grafham Water Centre: workshop	0	440,461
Grafham Water Centre: other costs	33,879	175,500
Grafham Water Centre total	33,879	615,961
Stibbington Centre	6,240	139,386
Burwell House	59,046	52,260
Total for three centres	99,165	807,607

The purpose of the investment is to carry out essential maintenance work identified by the Property Team in collaboration with the staff of each Outdoors Centre. The cost of reactive maintenance is highly likely to increase in the near future if proactive investment

is not made into properties – particularly with regards to the workshop at the Grafham Water Centre. Compliance with health and safety and safeguarding regulations already means that several buildings at the Grafham Water Centre are not fully operational. Accordingly, there is a high risk that the centres will be unable to offer some or all of the products which they currently provide to customers if investment is not made into property at the centres. This would result in a significant loss of income and reputational damage.

Further information can be found in the paper <u>here</u>. The scheme will be funded by borrowing; the annual cost of borrowing for this scheme (including the initial £99k) will start in 2021/22 at £51k, and decreases each year thereafter.

General Purposes Committee is asked to approve additional prudential borrowing of £808k in 2020/21 for the Outdoors Centres scheme.

6.9 At the March Economy and Environment (E&E) Committee meeting, E&E Committee recommended to General Purposes Committee (GPC) that the £1m contribution towards the A14 Improvement Scheme for 2020/21 is funded from prudential borrowing.

The Cambridgeshire and Peterborough Combined Authority (CPCA) is the Local Transport Authority, and receives funding for Local Transport Plan (LTP) capital grants from the Department for Transport (DfT), including the Integrated Transport Block (ITB) grant. In the past few years since its establishment, the CPCA has passported the LTP capital grant funding to the County Council. In September 2013 the County Council Cabinet agreed a contribution of £25m paid over a maximum period of 25 years towards the A14 Improvement Scheme. It was identified that the funding for this would come from a top slice of the ITB capital grant. The ITB funding was much higher at that time. The value of the ITB funding has since been reduced from around £10m to £3.19m per year.

The first £1m contribution to the A14 is expected to be due in 2020/21 when Highways England has delivered the improvement scheme. Currently no decision has yet been taken on where within the ITB this £1m per annum funding for the A14 will come from for 2020/2021 and given the ITB funding has reduced in recent years it is proposed to ask General Purposes Committee (GPC) to approve it is instead funded from Prudential Borrowing.

Further information can be found in the paper here. As a result of this change in funding to borrowing; the increase in the annual cost of borrowing for Place and Economy schemes will start in 2021/22 at £53k, and decreases each year thereafter.

General Purposes Committee is asked to approve additional prudential borrowing of £1m in 2020/21 for the A14 Improvement Scheme contribution.

December 19 Integrated Finance Monitoring Report

One recommendation concerning revenue funding, found in section 5.1:

5.1 <u>Business Rates Relief Reconciliation of Authorities' 2018/19 Tax Loss Payments Grant</u>

The Council is due to receive an additional £188k in 2019/20 from the Ministry for Housing, Communities and Local Government (MHCLG) for Business Rates Relief; Reconciliation of Authorities' 2018/19 Tax Loss Payments. Local Authorities receive interim section 31 grant payments during the year based on 2018/19 NNDR1 forecasts which recompense authorities for their individual reduction in non-domestic rating income in 2018/19. Following receipt of NNDR3 returns for 2018/19 and a reconciliation process, MHCLG has issued a new grant determination to reimburse local authorities who had

previously under forecasted the amount of business rates relief given in 2018/19. As a result Cambridgeshire County Council's additional allocation for 2019/20 is £188,008.

It is proposed that this additional income is held in the corporate grants section of Funding items, and transferred to corporate reserves at year end, subject to General Purposes Committee (GPC) approval.

General Purposes Committee is asked to approve the allocation of the Business Rates Relief Reconciliation of Authorities' 2018/19 Tax Loss Payments grant (£188,008) to the corporate grants account within Funding Items. This will offset pressures across the Council, reducing the transfer from the general fund reserve at year-end.

King's Dyke Level Crossing Closure Scheme

2020/002

To: Economy and Environment Committee

Meeting Date: 23rd April 2020

From: Steve Cox, Executive Director, Place & Economy

Electoral division(s):

Purpose:

Forward Plan ref:

Whittlesey North & Whittlesey South

procurement process for the Design and Construction contract for the Kings Dyke Level Crossing closure scheme, and to seek Committee's approval to award the contract to the preferred bidder subject to the approval of

To inform the Committee of the outcome of the

Key decision:

Yes

further funding by General Purposes Committee.

Recommendation: The Economy and Environment Committee is

recommended to:

a) Note the procurement process which, subject to approval, will reduce the budget required for the scheme by almost £10 million when compared to the previous construction contract price;

- b) Approve the award of the Design and Construction contract to the preferred bidder as detailed in section 2.8 of this report, subject to approval of further funding by General Purposes Committee;
- c) Support the recommendation to General Purposes Committee that additional funding of £2.018 million be allocated to the scheme;
- d) Support the recommendation to General Purposes Committee that a £1.5 million Covid-19 risk contingency be created;
- e) Delegate authority to the Executive Director Place and Economy, in consultation with the Chairman and Vice-Chairman of the relevant Committee to use the Covid-19 contingency in relation to risks directly related to the Covid 19 pandemic to aid to project delivery.

	Officer contact:		Member contacts:
Name:	Andrew Preston	Names:	Cllr. Ian Bates/Cllr Tim Wotherspoon
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	Growth		
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Tel:	01223 715664	Tel:	01223 706398

1. BACKGROUND

- 1.1 On 15th August 2019, the Economy and Environment (E&E) Committee approved the procurement of a new Design and Construction contract for the Kings Dyke scheme. This decision followed a significant increase in the proposed construction contract price from the previous contractor. A link to the report that informed this decision can be found at the end of this report.
- 1.2 At the time this meant that the budget required would have needed to increase to £41.6 million, almost £12 million more than the approved budget of £29.98 million. This was on the basis that the construction target price had increased from £15.9 million to £26.2 million plus associated contingencies. The breakdown can be found in the confidential appendix of this report.
- 1.3 The August 2019 E&E Committee agreed that the procurement of the new Design and Construction contract should proceed as an open market tender. This had to be conducted as a European Union (EU) tender as the estimated contract value was above the European Procurement threshold. A restricted two stage tender process was followed.

2. MAIN ISSUES

Procurement

- 2.1 The first stage of the procurement process was publication of a contract notice in the Official Journal of the European Union (OJEU) on 1st October 2019 and the issue of Selection Questionnaires (SQ). The SQ invites an interested provider to make a submission which is evaluated for financial and safety suitability, along with capacity and relevant experience, particularly with respect to some of the likely risks involved in delivering the project. The SQ received an excellent response with nine contractors expressing interest in the Design and Construction contract.
- 2.2 All nine SQ submissions were evaluated and the highest scoring contractors were invited to tender. The Invitation to Tender (ITT) was issued on 19th November 2019 to the six contractors considered most suitable.
- 2.3 A four month tender period then followed, which included 83 tender clarifications to questions from bidders and two specific opportunities for bidders to check design assumptions with the Council.
- 2.4 Independent specialist planning advice was also provided to bidders by the Local Planning Authority in response to the potential impact of any proposed design changes. This was on

- the basis that the design must comply with the current planning consent and only nonmaterial amendments were permitted.
- 2.5 This tender period closed on 13th March 2020 and three of the six contractors submitted a final tender. Unfortunately one of the tenders was deemed to be non-compliant and therefore subsequently had to be rejected from the process. This was on the basis that the proposed design was outside the planning permission red line boundary. The ITT contained a fundamental requirement that all proposals must remain inside this boundary, otherwise a new planning permission would be required, which was not acceptable.
- 2.6 The tender required a quality submission to demonstrate how the contractors proposed to build a high quality product to meet the requirements of the County Council, along with a target cost for the design and construction of the scheme. The tenders were submitted on the LGSS e-tendering system and the cost and quality submissions were evaluated by independent teams. No cost information was shared with the quality evaluation team until the evaluations had been completed. The scores for each component were then combined to give an overall score. The overall score was calculated on a ratio 60% price to 40% quality to identify the preferred bidder. The evaluation was undertaken by officers and consultants and independently moderated by LGSS Procurement Officers.
- 2.7 At this stage in the procurement process information on the bidders and details of the tendered prices are confidential. The overall result of the evaluation is set out in Table 1 below, with further details in the confidential Appendix 1.

Table 1 - Tender evaluation scores

Bidder Financial Score		Quality Score	Total Score
	(Max 60%)	(Max 40%)	%
Bidder 1	60.00	23.00	83.00
Bidder 2	47.93	17.50	65.43

- 2.8 From the table it can be seen that Bidder 1 has provided the most economically advantageous tender and also scored highest in both financial and quality assessments. It is therefore recommended that the contract for the design and construction of the Kings Dyke Level Crossing closure scheme is awarded to Bidder 1. Details of the bidders' tendered prices are shown in the confidential Appendix 1 that will be circulated to committee members.
- 2.9 Subject to approval of the recommendations in this report and those to General Purposes Committee, the formal notification of the intention to award the contract will be immediately issued to all shortlisted contractors, which will trigger the stand still period. When undertaking a procurement exercise that is above the EU thresholds, a standstill period must be held before awarding the contract. The mandatory standstill period gives

- unsuccessful bidders at least ten calendar days after being notified of an award decision to challenge the decision before the contract is signed with the successful bidder.
- 2.10 At the end of the stand still period the details of the contract award can be made publicly available, including the name of the bidder and tender price. This information will be included within the contract award notice in the OJEU and the Council will actively communicate this information.

Financial Implications

- 2.11 Whilst the confidential Appendix 1 shows the overall estimated budget now required to deliver the scheme has reduced by almost £10 million from the previous tender exercise, a further £2.018 million more than the currently allocated budget is still required to deliver the scheme when all expected expenditure and contingencies are included. With these, the total cost of the scheme and budget required is expected to be £32m compared to the previous figure of £41.6m
- 2.12 The breakdown included in the confidential Appendix 1 shows that this is based on the significant reduction in the preferred bidders' tender price over the Council's previous contractor in August 2019, despite the additional forecast costs associated with re-tendering and re-negotiation of land licenses.
- 2.13 The current approved scheme budget of £29.98 million is made up of £5.58 million from the County Council (Local Transport Bodies and residual capital), £8 million Growth Deal funding approved by the former Local Enterprise Partnership (LEP) and £16.4 million from the Cambridgeshire and Peterborough Combined Authority's (CPCA) Transforming Cities Fund.
- 2.14 The Growth Deal funding has now been fully spent and a funding agreement between the County Council and the CPCA formalises further expenditure of the £16.4 million Transforming Cities funding. The funding agreement also contains provision for any further costs above or below the current budget figure to be apportioned on the basis of 60% from/to the CPCA and 40% from/to the County Council.
- 2.15 The County Council's General Purposes Committee at its meeting on 23rd April 2020 will be asked to fund the additional £2.018 million required for this scheme. However, this is on the understanding that a £1.21 million contribution towards this cost will be sought from the CPCA, in accordance with the funding agreement. Whilst all further monies need to be fully quantified and secured, the full amount of additional funding is being sought from GPC to allow a contract for the scheme to be signed as soon as possible and not be delayed.
- 2.16 The business case for allocating further funding to this project remains very strong. As reported previously, the independently reviewed Major Schemes Business Case (MSBC) prepared in line with the Department for Transport (DfT) WebTag guidelines demonstrated very high levels of benefits from the scheme compared to its cost.
- 2.17 In fact the economic and transport user benefits were valued to be 8.37 times greater than the estimated cost to deliver this scheme. This is an exceptionally high benefit to cost ratio (BCR) with a figure in excess of 2 usually deemed to represent excellent value for money by the DfT.

2.18 The change in estimated scheme cost is unlikely to have a meaningful impact on a BCR of 8.37, however, the exercise to update it needs to be completed and is underway. This will be reported verbally to both Economy & Environment and General Purposes Committees.

Programme

2.19 The current timeline for project completion and the initial realisation of benefits is as follows, subject to successfully securing approvals for additional funding;

May 2020	Sign contract with preferred contractor		
June 2020	Work to finalise design commences		
December 2020	Construction commences		
December 2022	Construction complete		

- 2.20 It should be noted that there are risks that could potentially impact on this timeline and the revised and updated costed risk register can be found in Appendix 2 of this report. It is this list of risks that, when added together, set the value of the risk contingency that has been allowed for within the total estimated budget required. The more significant key programme risks from this register are listed below;
 - agreement of final construction contract terms.
 - completion of utility diversions. Ideally need to be carried out before construction commences. (May be carried out alongside construction but this brings some additional risk).
 - Agreement of Network Rail possessions which need to be coordinated with the revised construction programme.
 - Delays in gaining necessary Network Rail approvals
 - Significant adverse weather
 - Unforeseen ground conditions.
- 2.21 All red rated risks will be reported to E&E Committee on a monthly basis alongside financial and programme information within the monthly finance monitoring report.

Coronavirus (Covid-19) Pandemic

- 2.22 The outbreak of the Coronavirus pandemic has the potential to have a significant impact on this project. However, given the rapidly changing position with the virus and government responses, it is difficult to accurately quantify the risks. This is made even more challenging by it not being possible to discuss the impact with the preferred bidder until the notification of award has been issued following Committee approval.
- 2.23 The risk of impact on the design and construction contract is a Council owned risk and has the potential to lead to significant cost and programme increases. These could be caused by a range of issues, from materials not being available from suppliers to loss of capacity or productivity due to the availability of resources or required changes to working practices.

- 2.24 When discussions can take place with the chosen contractor, these risks can be more fully considered and potential options available to mitigate them identified. However, even at that stage, the nature of the risk will be uncertain and will depend on the course of the pandemic and actions to contain it throughout the year and outside of the Council and contractors control. Therefore, it is recommended that a specific Covid-19 project contingency budget be created to allow the project to proceed as quickly as possible and without the need for a further Committee cycle as long as the risks identified are within this contingency budget.
- 2.25 Committee is therefore asked to recommend to General Purposes Committee that a specific Covid-19 contingency budget of £1.5 million be created to fund any additional costs directly associated with the project caused by the impact of Covid-19. This budget would only be required where the impact cannot be reasonably avoided and closely managed risk mitigation controls will be in place to minimise the impact, in collaboration with the contractor.
- 2.26 It is proposed that all requests for use of this contingency be reviewed and approved by the Executive Director, Place & Economy in consultation with the Chairman and Vice-Chairman of this Committee. These decisions will be reported to E&E Committee on a monthly basis within the Finance Monitoring report and spending against the main project budget and the Covid-19 contingency will be clearly identified separately.
- 2.27 Whilst GPC is being asked to allocate the full amount of this additional Covid-19 contingency, it is proposed that discussions take place with the Combined Authority to fund this on a 60:40 basis as with the additional project funding noted in paragraph 2.15.

3. ALIGNMENT WITH CORPORATE PRIORITIES

3.1 A good quality of life for everyone

There are no significant implications for this priority.

3.2 Thriving places for people to live

The following bullet points set out details of implications identified by officers:

- Eliminating the delays at the level crossing will help to promote growth in the local area. This will help to promote jobs, business and housing.
- Both roundabouts have been sized to allow the 4th arm to be constructed which will open up development potential to the south.

3.3 The best start for Cambridgeshire's children

There are no significant implications for this priority.

3.4 Net zero carbon emissions for Cambridgeshire by 2050

- This transport scheme is aimed at reducing vehicle delays and congestion thereby reducing emissions from slower moving traffic or idling engines.
- The closure of the level crossing will facilitate an increase in train paths for both freight and passenger use of the rail network, reducing Heavy Goods Vehicle (HGV) and car movements.
- The assessed quality submissions showed that the Contractor's design seeks to minimise carbon emitted in construction by reducing vehicle movements and selecting materials with low carbon embodiment.

4. SIGNIFICANT IMPLICATIONS

4.1 Resource Implications

- The report above sets out details of significant resource implications in Section 2.16 onwards. Committee is asked to note the increased costs of £2.018m and request General Purposes Committee to approve the additional funding from Prudential Borrowing. This will reduce to £807,200 if the Cambridgeshire & Peterborough Combined Authority approves its 60% share of this increase, in accordance with the funding agreement. The annual cost of this £807k additional prudential borrowing will start at £40k per annum and decrease each year thereafter over 40 years.
- A Target Cost Contract has been selected, therefore actual costs will be paid (but subject to a pain/gain mechanism). The Target Price will vary to reflect any increase or decrease in the scope of the work required. In construction projects where unpredictable issues may arise, costs will almost certainly vary from the agreed Target Cost. At the end of the contract, any variance between the final target price and actual cost is apportioned between the contractor and the employer, allowing the contractor to share any savings made or to contribute towards overspend. This mechanism incentivises all parties to work collaboratively to deliver the project as economically as possible as underspends (gain) or overspends (pain) are shared in an agreed proportion.
- The contract is being managed and supervised in accordance with New Engineering Contract (NEC) requirements. All claimed costs and adjustments to the target price will be assessed by the NEC Project Manager, including specialist cost consultants, in negotiation with the contractor to ensure that they are justified, evidenced and demonstrate value for money.

4.2 Procurement/Contractual/Council Contract Procedure Rules Implications

The following bullet points set out details of significant implications identified by officers:

- A restricted OJEU process has been completed in accordance with contract procedure rules.
- Contract implications relating to Covid-19 are included in section 2.22 to 2.30 above.

4.3 Statutory, Legal and Risk Implications

Risks are detailed in the Risk Register presented to this Committee 5th March 2020 and updated in the Appendix. The register will be monitored throughout the project and mitigation agreed with relevant parties.

All red rated risks will be reported to E&E Committee on a monthly basis alongside financial and programme information within the monthly finance monitoring report.

The following bullet points set out significant implications identified by Officers:

- Risk categories include project funding, governance and technical risks such as coordinating work with Network Rail and Statutory Undertakers, unforeseen ground conditions, contaminated material and construction in Star Pit
- Additionally, there is a risk with Network Rail possessions not being available when required. It will be the responsibility of the successful contractor to organise and book the required possessions to suit its programme.
- The preferred bidder has not allowed what is thought to be an adequate risk allowance
 within their tender price. There is therefore a risk that the actual cost of the project may
 exceed the target price at completion. Under the pain/gain share percentage mechanism
 within the contract, the Council would be liable for a share of these additional costs above
 the target price. An appropriately priced risk has therefore been incorporated into the
 priced risk contingency.
- Challenges from unsuccessful tenderers.
- Health and Safety on the scheme will be managed in accordance with all relevant legislation, including the Construction Design and Management Regulations 2015 and all other relevant legislation.

4.4 Equality and Diversity Implications

There are no significant implications within this category. An Equalities Impact Assessment screening has been undertaken for the project previously.

4.5 Engagement and Communications Implications

The following sets out significant implications identified by Officers:

- A public engagement event on 12th August 2019 reaffirmed the preferred scheme option and was successfully followed up on 30th October 2019 with a more detailed discussion from a group of residents around 250-260 Peterborough Road.
- Further engagement will be undertaken in-line with the Communications Plan that will be overseen by the Project Board and Member Advisory Group.

4.6 Localism and Local Member Involvement

The following sets out significant implications identified by Officers:

 As set out above, local County, Town and District members will be engaged in the project via a Local Liaison Group. The first meeting was held on 19th February 2020 and further meetings will be arranged as and when required. This group may refer any concerns it may have to the King's Dyke Project Board or to the Member Advisory Group.

4.7 Public Health Implications

• The removal of the significant amount of traffic congestion currently caused by the level crossing will have a positive impact on air and noise pollution, which cause a wide range of health problems.

Implications	Officer Clearance		
•			
Have the resource implications been cleared by Finance?	Yes Name of Financial Officer: Sarah Heywood		
Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the LGSS Head of Procurement?	Yes Name of Officer: Jon Collyns		
Has the impact on statutory, legal and risk implications been cleared by the Council's Monitoring Officer or LGSS Law?	Yes Name of Legal Officer: Fiona McMillan		
Have the equality and diversity implications been cleared by your Service Contact?	Yes Name of Officer: Elsa Evans		
Have any engagement and communication implications been cleared by Communications?	Yes Name of Officer: Sarah Silk		
Have any localism and Local Member involvement issues been cleared by your Service Contact?	Yes Name of Officer: Andrew Preston		
Have any Public Health implications been cleared by Public Health	No Name of Officer: Tess Campbell		

Source Documents	Location
Kings Dyke Economy and Environment Committee Report, Decision Summary and Minutes from 15th August 2019	https://cambridgeshire.cmis.uk.co m/ccc_live/Meetings/tabid/70/ctl/ ViewMeetingPublic/mid/397/Meeti ng/1048/Committee/5/Default.asp x
General project documentation including Major Schemes Business Case.	https://www.cambridgeshire.gov.u k/residents/travel-roads-and- parking/transport-projects/kings- dyke-crossing



Agenda No: 2.6

March Area Transport Study (MATS)

To: Transport and Infrastructure Committee

Meeting Date: 14th September 2022

Public report: Yes

Lead Member: Mayor Dr Nik Johnson

From: Emma White, Transport Programme Manager

Key decision: No

Forward Plan ref: N/A

Recommendations: The Transport and Infrastructure Committee is recommended to:

- a) Note progress towards the MATS Full Business Case (FBC)
- b) Recommend to the Combined Authority Board to approve the drawdown of £962,000 to complete the MATS FBC2.
- c) Note the change in construction cost of MATS Broad Street to £4,148,387.
- d) Recommend to the Combined Authority Board to reallocate £200,000 of the underspend from the March Quick Wins to cover extra C4 utility costs.
- e) Note the progress on the Pedestrian and Cycling Strategy for the March Area Transport Study.
- f) Recommend to the Combined Authority Board to approve the drawdown of £562,800 to continue work on the Pedestrian and Cycling Strategy.
- g) Recommend the Combined Authority Board delegate authority to the Interim Head of Transport and Chief Finance Officer to enter

into Grant Funding Agreements with Cambridgeshire County Council.

Voting arrangements:

For recommendations b), d) and f) A vote in favour by at least two thirds of all Members (or their Substitute Members) appointed by the Constituent Councils who are present and voting, to include the Members appointed by Cambridgeshire County Council and Peterborough City Council, or their Substitute Members

To be carried, the vote must include the vote of the Mayor, or the Deputy Mayor when acting in place of the Mayor.

For recommendation g) A simple majority of all Members present and voting.

1. Purpose

- 1.1 This report summarises the progress and proposed way forward for the March Area Transport Study (MATS) Full Business Case (FBC) with the recommendation to the Combined Authority Board for the drawdown of £962,000 to complete the FBC 2. The report also notes the change in construction and C4 utility costs of the Broad Street scheme.
- 1.2 The report also summarises the progress on the Pedestrian and Cycling Strategy Walking and cycling project as part of MATS and requests the drawdown on £562,800 to undertake further work.

2. Background

- 2.1 The March Area Transport Strategy (MATS) was first approved for inclusion in the Transport Programme at the March 2018 by the Combined Authority, which Cambridgeshire County Council (CCC) took forward the study to establish the issues and find potential solutions to address these in an efficient and effective manner.
- 2.2 Fenland District Councils' vision for the areas is outlined within its Local Plan published in 2014. The aim is 'to maximise the potential of the area and deliver jobs, skills, improved housing and new infrastructure', and make the district 'a better place to live, work and visit'. The Local Plan includes the delivery of 4,200 new homes in March as well 30 hectares of employment land to provide new jobs
- 2.3 The 2011 March Area Transport Study provided the transport evidence base for the Local Plan and assessed the impact of traffic growth resulting from its implementation. In addition, it proposed measures to improve the towns transport network for both current and future traffic demand. The current MATS builds upon this work and assesses potential improvement options to deliver future economic and housing growth
- 2.4 CCC has been funded by the Combined Authority to progress several transport interventions that address the project objectives and the issues raised.
- 2.5 The MATS Strategic Outline Business Case (SOBC) was submitted in October and the Outline Business Case (OBC) was tabled at CA Board in November 2021 along with approval for the next stage of the MATS project including Full Business Case (FBC) and Detailed Design. This paper also outlined within its Other Significant Implications section that the Future High Street Fund (FHSF) scheme was reliant on the MATS Broad Street project undertaking detailed design and commencing construction. This paper noted the construction costs for Broad Street to be £3,736,263.
- 2.6 Also, as part of the MATS study a package of minor schemes were approved for delivery in September 2020 which included nine schemes of which most are complete.

Business Case

2.7 The original proposal for the MATS FBC was to undertake Detailed Design and submit a single FBC to cover the four schemes due to be delivered in the short term (Broad Street, St Peters Road, Peas Hill and Twenty Foot Road) whilst developing the Preliminary Design for the Northern Industrial Link Road (NILR) which is a longer-term aspiration. A second, or updated, FBC was then going to be submitted in several years' time once the NILR was fully designed

and ready to deliver. This approach included all the relevant costs required to develop the schemes up to the point of delivery, including C3 utility costs, planning engagement costs and Early Contractor Involvement (ECI) costs, but deferred other costs (such as C4 utility costs and procurement costs) to the construction phase to avoid committing large sums of money too early on.

- 2.8 This approach was adjusted several months ago to accelerate the delivery tasks associated with the Broad Street scheme due to the programme pressures associated with Broad Street and its interdependency with the Future High Street Fund, which has time limitations associated with the funding. As such, the C4 utility and procurement costs for Broad Street were approved for early release by the CPCA Board in March 2022, enabling the project team to commit to a construction start date in early 2023 for Broad Street (subject to an approved FBC which is due in December 2022). Bringing the C4 utility and procurement costs for this scheme into the FBC phase of work will improve the cost certainty and give the Independent Technical Evaluators (ITE) greater confidence to sign off the FBC, especially given the value of the package as a whole.
- 2.9 It has recently been decided to split the MATS FBC out into a further phase. This is because the remaining short-term schemes (St Peters Road, Peas Hill and Twenty Foot Road) will not be as developed as Broad Street by December as the funding for C4 utility and procurement costs for these schemes has not yet been accelerated, and the ITE would need to consider the FBC (and funding ask) in its entirety, rather than on a scheme-by-scheme basis. This should give the ITE the confidence to sign off on the FBC costs for Broad Street in December 2022 and ensure that construction for that scheme can start on time.
- 2.10 Therefore, the following approach has been agreed with the ITE:
 - FBC1: Full Business Case for Broad Street, with the remaining schemes remaining at an Outline Business Case level. Construction funding requested for Broad Street only.
 - FBC2: Full Business Case for St Peters Road, Peas Hill and Twenty Foot Road, with NILR remaining at an Outline Business Case level. Construction funding requested for St Peters Road, Peas Hill and Twenty Foot Road only.
 - FBC3: Full Business Case for NILR. Construction funding requested for NILR only.
- 2.11 This paper requests the release of further funding of £962,000 to allow the C4 utility and procurement costs (plus other associated tasks) for St Peters Road, Peas Hill and Twenty Foot Road to now also be accelerated, enabling the same level of cost certainty to be included within FBC2 as will be provided in FBC1 for Broad Street. This does not represent new or additional costs but is a request to bring forward activities (and associated costs) initially intended for the construction phase of the project, into the FBC phase, which in turn will enable more time for contractor pricing input and the inclusion of fully developed Target Costs within the FBC for these schemes.
- 2.12 The project will go out for engagement late September.

Construction Costs – Broad Street

2.13 Due to current and forecasted high levels of inflation an extra allowance of £168,000 is needed for the construction of Broad Street in addition to the £3,780,387 approved in CA Board in March 2022. This money will be released once the FBC1 is complete and approved by the CA Board planned for January 2023.

C4 Utility Costs – Broad Street

- 2.14 C4 utility diversion costs have returned higher than the C3 estimates, to commission the works and meet the MATS Broad Street and FHSF deadlines it is proposed to utilise the £200,000 underspend from the Quick Win to cover these additional costs. The new total for the MATS Broad Street construction cost is now £4,148,387 (includes £3,780,387, £168,000 inflation and £200,000 C4 utility costs).
- 2.15 CCC and the Combined Authority will look to minimise costs and maximise efficiencies wherever possible to reduce the burden on the projects budgets. This will be kept under constant review and reinvested within the programme especially when further information becomes available an update will be provided in a timely manner.

Pedestrian Walking and Cycling Strategy

- 2.16 A Pedestrian and Cycling Strategy was undertaken in 2019, as part of the MATS Study which identified a range of potential schemes to improve walking and cycling provision across the March area. Since its completion, some of the identified scheme recommendations have been completed or superseded as new schemes have been identified via the CCC LCWIP, the 'Gear Change' initiative, the FHSF proposals and through the development of schemes identified in the MATS Quick Wins and the main MATS project. Following a review 28 schemes of the original 90, identified initially to be progressed following the feasibility and assessment process. Please refer to the March Walking and Cycling Report 3 25.08.2022 DRAFT report.
- 2.17 The 28 locations mentioned, are split as follows:
 - Phase 1 these include 7 locations only requiring minimal work, i.e. road markings and non-illuminated signage. Refer to Table 1.1
 - Phase 2(a) these include 10 locations where the project scope only has one option for design, but requires further site surveys and intrusive investigations, 3rd party approvals and additional detailed design. Refer to Table 1.2
 - Phase 2(b) these include the remaining 11 locations, where there are multiple options applicable requiring further surveys, 3rd party approvals and additional design. Refer to Table 1.3

ID	Location	Project Scope		
2	Robin - goodfellows (crossing facilities)	Install 'Look Right' and 'Look Left' reminder carriageway markings for pedestrians crossing Robingoodfellow's Lane junction		
12	Sconce ped/cycle route (shared use)	Repaint cycle symbols on the shared route past March Sconce.		
23	All Saints Close (Safer Routes to School)	Relining of no parking restrictions road markings outside school. Requires zig zags markings from zebra crossing. Currently missing/worn away.		
24	Westwood Primary (Safer Routes to School)	Relining of no parking restrictions road markings outside school.		
26	Burrowmoor Road (Safer Routes to School)	Relining of no parking restrictions road markings outside school.		
27	Town wide ped / cycle way finding	Design and Install wayfinding signage improvements, providing distance to key destinations, including March Railway Station, the town centre, Neale-Wade Academy and other key destinations.		
28	NCN 63 route signage	Design and Install Improved NCN 63 routing signage/markings which are currently inconsistent and fragmented through March		

Table 1.1 – Phase 1

ID	Location	Project Scope
1	Robingoodfellows Lane (footways)	Design and Install footway (2m width) along Robingoodfellow's Lane carriageway and maintain double yellow lines on left hand side, between junction with B1099/Broad Street and Darthill Road car park.
4	Elwyn Road / High Street (crossing facilities)	Improve safety of pedestrian crossing facilities across Elwyn Road junction with High Street with installation of an uncontrolled raised table pedestrian crossing at junction, or similar.
8	High Street / The Causeway / The Avenue (cycling facilities)	Re-line, add cycle symbols and sign shared use footway provision. Assume 4km of carriageway/footway to reline/sign.
11	Elwyn Road (footway)	Install dropped kerb opposite Mortgage Force on river side of Elwyn Road.
14	Chapel Lane (cycle wayfinding)	Add cycle symbol on surface through Chapel Street (the lane outside the police station).
16	Dartford Road (crossing facilities)	Design and Install central refuges pedestrian crossing facilities on Dartford Road, adjacent to Lidl supermarket. In carriageway hatching area before turning lane into access road for Lidl.
17	Dartford Rd / Westwood Av (crossing facilities)	Design and Install widened dropped kerb and tactile paving provision on corner of Westwood Avenue/Dartford Road.
19	Wisbech Road / Elliott Road (crossing facilities)	Design and Install Widened central pedestrian refuge across entrance to Elliot Road at junction with Wisbech Road and dropped kerbs on Elliot Road junction entrance.

Table 1.2 Phase 2a

ID	Location	Project Scope			
3	Nene Parade / Grays Lane (parking)	Review and formalise provision of parking in Nene Parade and Grays Lane. Re-line parking bay and yellow lines.			
5	Market Place / High Street (crossing facilities)	Review provision of pedestrian crossing facilities across Market Place junction with High Street (B1101). This relates to crossing the junction between Market Place car park and The Griffin Public House. Install an uncontrolled raised entry table pedestrian crossing or similar.			
6	High Street (footways)	Investigate Installation of a footway on section of High Street (B1101) across entrance to Chapel Street shared footpath, to join up with the existing pavement on the section of High Street from the entrance to Cromwell Hotel to the premises occupied by Leonardo's Pizza. Install dropped kerb access for cyclists and mobility scooters on the section across the entrance to the Chapel Street foot and cycle path. <i>Linked to scheme 7</i>			
7	High Street / Chapel Street (crossing facilities)	Install pedestrian island refuge on High Street adjacent to Chapel Street ped/cycle entrance (south of Burrowmoor Road junction) with footway build out. Linked to scheme 6, above.			
9	Station Road / Creek Road (crossing facilities)	Improve pedestrian crossing facilities on Station Road by Creek Road. The central refuge should be redesigned to create a direct crossing facility to serve the high footfall of pedestrians accessing Sainsbury's car park at this location.			
10	Station Road (cycle facilities / wayfinding)	Provide a more direct cycle route linking Station Road with Neale Wade Academy and south east March, via St. John's Road, Wigstone's and the footbridge to the south of the River Nene. Involves installation of carriage way cycle symbols.			
13	Cavalry Drive (crossing facilities)	Examine the need for formal crossing facility across Cavalry Drive, by the back entrance to Neale-Wade Academy and installation of 20 mph wig wags (flashing boards) advisory speed limit for start/end of school day.			
15	Wisbech Road / Norwood Road (crossing facilities)	Improve pedestrian crossing facilities at the junction of Wisbech Road and Norwood Road.			
18	Wisbech Road corridor (shared use cycle facilities)	Review provision of Incorporating shared use footway provision for cycling along Wisbech Road, providing cyclists with a safe and direct route to Tesco and the Industrial Park. Installation of advisory cycle lanes, in both directions on existing carriage is feasible instead of shared use on footway.			

ID	Location	Project Scope
22	All Saints Close (Safer Routes to School)	Examine the need for a pedestrian central refuge crossing facilities on County Road, between junction of All Saints Close and Cromwell Road
25	Burrowmoor Road (Safer Routes to School)	Investigate options for installing a pedestrian crossing facility on Burrowmoor Road within proximity to the school. Recommend installation of raised table outside No. 19. This will provide traffic calming and will facilitate safer ped crossing. This facility can then be used as crossing location used by crossing attendant.

Table 1.3 Phase 2b

2.18 The cost and timescales for each pack of measures is shown below in Table 2.4.

Table 2.4 Cost and Dates of Phases

Phase	Phase Start date		Cost
1	25/11/22	24/03/23	£38,084
2(a)	25/11/22	26/04/23	£235,305
2(b)	04/09/22	29/03/23	£252,986
Design	-	-	£36,425
Total	-	-	£562,800

3. Financial Implications

3.1 Drawdown £1,524,800 and reallocate £200,000 of £10,159,000 forecast 2022/23 and 2023/24 TCF budget.

4. Legal Implications

4.1 None.

5. Public Health Implications

- 5.1 The delivery of the scheme will have a positive implication for public health due to the Walking and Cycling work complementing the MATS Improvement schemes. By improving walking and cycling connectivity in March this will help encourage active travel in the area. The FHSF proposals for March town centre will deliver significant public realm improvements to the Broad Street, Riverside and Market Square areas of the town centre, including enhanced provision for pedestrians and cyclists therefore encouraging more active travel.
- 5.2 All the improvements in active travel will help encourage more walking and cycling (exercise) and therefore have a benefit on health and wellbeing.

^{*}Please note in terms of several Phase 2 still require detailed design and several are still classed as 'Option Studies' and therefore requires further work to get them to a position to commence design. Also, there is a low risk of planning issues for the Phase 2 Designed schemes.

6. Environmental and Climate Change Implications

6.1 The delivery of the scheme will have a positive implication on environment and climate change due to the improved active travel infrastructure will encourage residents to travel by foot or bicycle instead of by car.

7. Other Significant Implications

- 7.1 None.
- 8. Appendices
- 8.1 Appendix 1 Draft March Walking & Cycling Report.
- 8.2 Appendix 2 March Walking and Cycling Paper.
- 9. Background Papers
- 9.1 Combined Authority Board reports 22 March 2022



MATS Pedestrian and Cycling Strategy

Feasibility Report

CAPITA



Document Control

Job Number: CS/101991								
Document ref: MATS Pedestrian and Cycling Strategy – Feasibility Report			Authorisation					
Rev	Purpose	Originated	Checked	Reviewed	Capita	Date	Milestone	Date
1.0	Draft Report	EL/TM	18-02-22	18-02-18	EL	23-03-22	TL	19-04-2022
2.0	Draft Report including Indicative Costs and Programme	TL	-					
3.0	Draft Report including Indicative Costs and Programme	TL/BB	25/08/2022					





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1. Introduction

1.1 Background

1.1.1 CAPITA Real Estate and Infrastructure (CAPITA) has been appointed by Milestone Infrastructure Services on behalf of Cambridgeshire County Council (CCC) to undertake a feasibility assessment of the projects that were identified in the March Pedestrian and Cycling Strategy (2019).

1.2 Study Area

1.2.1 Six route corridors in the market town of March, Cambridgeshire, were audited as part of the March Pedestrian and Cycling Strategy (2019) work that was undertaken. These are shown in Figure 1-1, below.





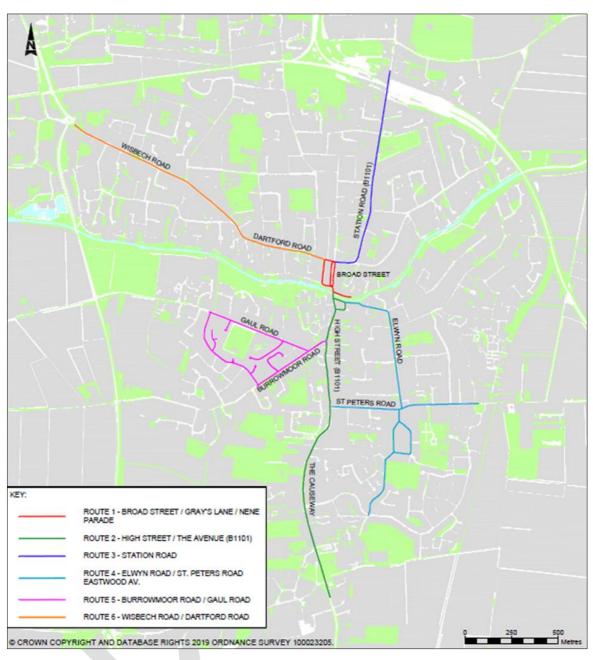


Figure 1-1: Study Area



1.3 Purpose of Project

- 1.3.1 The purpose of this project is to undertake a feasibility assessment of the schemes that were identified in the March Pedestrian and Cycling Strategy (2019). This assessment will need to consider changes to the policy landscape since the 2019 strategy was produced, including the publication of the Cambridgeshire Local Cycling and Walking Infrastructure Plan (LCWIP) (2021) and Gear Change (2020) document, as well as planned changes to the walking and cycling network in March that have been progressed in the town since 2019, to ensure that the schemes identified in the 2019 strategy are still relevant. This includes the development of walking and cycling improvements identified through the detailed design of MATS (March Area Transport Study) schemes, MATS Quick Win schemes and through the design proposals being developed for the Future High Streets Fund (FHSF) package of improvements for Broad Street and the Market Square.
- 1.3.2 This Feasibility Report details the outcome of the feasibility assessment and is structured on the four key tasks undertaken, as follows:
 - Task 1: Document review and site visits to update the original list of pedestrian and cycle schemes identified in the Pedestrian and Cycle Strategy (2019)
 - Task 2: Grouping and prioritisation of schemes
 - Task 3: Project scope for grouped schemes
 - Task 4: Target cost for construction of grouped schemes

1.4 Previous Reports / Relevant Work

March Area Transport Study (Ongoing)

1.4.1 It is anticipated that this work will complement the MATS Improvement schemes proposed by improving walking and cycling connectivity in March.

March Pedestrian and Cycling Strategy (2019)

1.4.2 A Pedestrian and Cycling Strategy, undertaken in 2019, as part of the MATS Study, identified a range of potential schemes to improve walking and cycling provision across March. Since its completion, some of the identified scheme recommendations have been completed or superseded as new schemes have been identified via the CCC LCWIP, the 'Gear Change' initiative, the FHSF proposals and through the development of schemes identified in the MATS Quick Wins and the main MATS project.



Future High Streets Fund

1.4.3 The FHSF proposals for March town centre will deliver significant public realm improvements to the Broad Street, Riverside and Market Square areas of the town centre, including enhanced provision for pedestrians and cyclists. The FHSF design proposals have incorporated pedestrian and cycling schemes identified for the Broad Street and Market Square areas. The pedestrian and cycling schemes identified for progression through this report, which are located outside of the FHSF improvement area boundaries, will enhance connectivity into the FHSF areas.

1.5 **Background / Relevant Documents**

Cambridgeshire Local Cycling and Walking Infrastructure Plan (LCWIP) (2021)

1.5.1 The Cambridgeshire Local Cycling and Walking Infrastructure Plan (LCWIP)1 forms part of the Government's ambition to increase walking and cycling, particularly to school, in the UK by 2025 as outlined in the first Cycling and Walking Investment Strategy (CWIS, 2017). The CWIS sets out the Government's aim to make walking and cycling the natural choice for all short journeys, or as a part of a longer journey.

Cycle Maps

- 1.5.2 LCWIP Appendix 1 - Cycle Maps, A5 Fenland March² shows the existing routes, LCWIP cycle routes, and LCWIP cycle route options in March, as well as those to the north of the town.
- 1.5.3 The LCWIP Appendix 3 - Prioritised Cycle Route Maps include maps that show cycle routes between Chatteris and March³ and March and Wisbech⁴.
- 1.5.4 LCWIP Appendix 25 identifies various schemes located along several routes in March or connecting to it. These include:
 - Reference 1: March Town End March Centre March Station
 - Reference 2: March Town End March Centre March Station via Neale Wade Academy and Wigstone's Road
 - Reference 3: Chatteris Doddington March
 - Reference 5: March Elm Wisbech
 - Reference 6: March SW Town Centre.

Walking Maps

¹ https://consultcambs.uk.engagementhg.com/ccc-local-cycling-and-walking-infrastructure-planconsultation-2021

LCWIP Appendix 1 – Cycle Maps, A5 Fenland March
 Chatteris – March Prioritised Cycle Routes

⁴ March – Wisbech Prioritised Cycle Routes

⁵ Prioritised Cycle Routes – Fenland

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- 1.5.5 The LCWIP Appendix 4 Walking Maps, Walking March⁶ map shows the walking routes and joint walking and cycling routes in March.
- 1.5.6 LCWIP Appendix 6⁷ identifies various schemes located along ten routes in March.

Gear Change (2020)

- 1.5.7 The Department for Transport's (DfT's) Gear Change: A Bold Vision for Cycling and Walking⁸ plan sets out a vision for a travel revolution in England's streets, towns, and communities. The plan describes the vision to make England a great walking and cycling nation. It sets out the actions required at all levels of government to make this a reality, grouped under four themes:
 - Theme One: Better streets for cycling and people
 - Theme Two: Cycling and walking at the heart of decision-making
 - Theme Three: Empowering and encouraging local authorities
 - Theme Four: Enabling people to cycle and protecting them when they do.
- 1.5.8 The review of the original list of pedestrian and cycling recommendations has taken into consideration the schemes ability to deliver the Gear Change themes, specifically delivering 'Better streets for cycling and people' and ensuring 'cycling and walking requirements are considered at the heart of decision making'.
- 1.5.9 In the context of this feasibility assessment, the DfT's commitment to better integrating the railways with cycling seemingly supports the case for improving walking and cycling routes to March Railway Station.

1.6 Report Structure

- 1.6.1 The remainder of this report is structured as follows:
 - Chapter 2 presents the findings from Task 1
 - Chapter 3 presents the findings from Task 2
 - Chapter 4 presents the findings from Task 3
 - Chapter 5 presents the findings from Task 4
 - Chapter 6 presents the Summary

⁶ March Walking Routes

⁷ LCWIP Appendix 6 – Walking Prioritisation Matrices, March

⁸ https://www.gov.uk/government/publications/cycling-and-walking-plan-for-england



Task 1: Document Review and Site Visits to Update the Original List of Pedestrian and Cycling Schemes

2.1 Introduction

- 2.1.1 This chapter comprises the outputs from the following tasks:
 - Undertake a cross referencing and sifting of the original 90 plus schemes which were identified in the March Pedestrian and Cycling Strategy (2019).
 - Utilising the more recent CCC 'LCWIP' and the 'Gear Change' initiative, plus taking into the consideration the main MATS Improvement Schemes and Quick Wins schemes being progressed, to remove duplication or where schemes have already been completed.
 - Site visits undertaken to review and record schemes feasibility and add new schemes identified from outcomes of Task 1.
 - Creation of a revised Pedestrian and Cycle Schemes recommendation list to take forward to detailed design and construction.

2.2 Cross Referencing and Sifting (Methodology)

- 2.2.1 The schemes identified as part of the original March Pedestrian and Cycling Strategy (2019) were cross referenced with the schemes identified in the Cambridgeshire Local Cycling and Walking Infrastructure Plan (LCWIP).9
- 2.2.2 The schemes identified in the March Pedestrian and Cycling Strategy (2019) were also considered in relation to Gear Change: A Bold Vision for Cycling and Walking (as discussed in section 1.4 of this report).

2.3 Site Visits

2.3.1 Site visits were undertaken in 2021 on Friday 24th September, Thursday 30th September, Monday 18th October, and Thursday 11th November to all original pedestrian and cycling scheme locations, to assess and photographically record if the recommendations were still required, or could be addressed through alternatives projects, such as the Future High Streets Fund, the main MATS Improvement Schemes, or resolved via CCC's Asset Management programme.

⁹ https://consultcambs.uk.engagementhq.com/ccc-local-cycling-and-walking-infrastructure-plan-consultation-2021



2.4 Recommendations

2.4.1 The detailed recommendations arising from Task 1 are provided in **Appendix A** of this report, while the list of 28 schemes identified to be progressed following the feasibility and assessment process are shown in Table 2-1, below, for context.

Table 2-1: List of Schemes to Be Progressed

ID No	Location / Issue	Scheme Description			
1	Robin- goodfellows Lane (footways)	Install footway (2m width) along Robingoodfellow's Lane carriageway and maintain double yellow lines on left hand side, between junction with B1099/Broad Street and Darthill Road car park.			
2	Robin- goodfellows (crossing facilities)	Insert 'Look Right' and 'Look Left' reminder carriageway markings for pedestrians crossing Robingoodfellow's Lane at this junction			
3	Nene Parade/ Grays Lane (parking)	Review and formalise provision of parking in Nene Parade and Grays Lane. Re-line parking bay and yellow lines.			
4	Elwyn Road/ High Street (crossing facilities)	Improve safety of pedestrian crossing facilities across Elwyn Road junction with High Street with installation of an uncontrolled raised table pedestrian crossing at junction, or similar.			
5	Market Place /High Street (crossing facilities)	Provide pedestrian crossing facilities across Market Place junction with High Street (B1101). This relates to crossing the junction between Market Place car park and The Griffin Public House. Install an uncontrolled raised entry table pedestrian crossing or similar.			
6	High Street (footways)	Install a footway on section of High Street (B1101) across entrance to Chapel Street shared footpath, to join up with the existing pavement on the section of High Street from the entrance to Cromwell Hotel to the premises occupied by Leonardo's Pizza. Install dropped kerb access for cyclists and mobility scooters on the section across the entrance to the Chapel Street foot and cycle path. <i>Linked to scheme 8, below.</i>			
7	High Street/ Chapel Street (crossing facilities)	Install pedestrian island refuge on High Street adjacent to Chapel Street ped/cycle entrance (south of Burrowmoor Road junction) with footway build out. <i>Linked to scheme 6, above.</i>			
8	High Street/ The Causeway/ The Avenue (cycling facilities)	Re-line, add cycle symbols and sign shared use footway provision Assume 4km of carriageway/footway to reline/sign.			
9	Station Road/ Creek Road (crossing facilities)	Improve pedestrian crossing facilities on Station Road by Creek Road. The central refuge should be redesigned to create a direct crossing facility to serve the high footfall of pedestrians accessing Sainsbury's car park at this location.			
10	Station Road (cycle facilities/ wayfinding)	Provide a more direct cycle route linking Station Road with Neale Wade Academy and south east March, via St. John's Road, Wigstone's and the footbridge to the south of the River Nene. Involves installation of carriage way cycle symbols.			
11	Elwyn Road (footway)	No dropped kerb opposite Mortgage Force on river side of Elwyn Road – install them.			



ID No	Location / Issue	Scheme Description	
12	Sconce ped/cycle route (shared use)	Repaint cycle symbols on the shared route past March Sconce.	
13	Cavalry Drive (crossing facilities)	Examine the need for formal crossing facility across Cavalry Drive, by the back entrance to Neale-Wade Academy and installation of 20 mph wig wags (flashing boards) advisory speed limit for start/end of school day.	
14	Chapel Lane (cycle Wayfinding)	Add cycle symbol on surface through Chapel Street (the lane outside the police station).	
15	Wisbech Road/ Norwood Road (crossing facilities)	Improve pedestrian crossing facilities at the junction of Wisbech Road and Norwood Road.	
16	Dartford Road (crossing facilities)	Install central refuges pedestrian crossing facilities on Dartford Road, adjacent to Lidl supermarket. In carriageway hatching area before turning lane into access road for Lidl.	
17	Dartford Rd/Westwood Av (crossing facilities)	Widen dropped kerb and add tactile paving provision on corner of Westwood Avenue/Dartford Road.	
18	Wisbech Road corridor (shared use cycle facilities)	Incorporate shared use footway provision for cycling along Wisbech Road, providing cyclists with a safe and direct route to Tesco and the Industrial Park. Installation of advisory cycle lanes, in both directions on existing carriage is feasible instead of shared use on footway.	
19	Wisbech Road/ Elliott Road (crossing facilities)	Widen central pedestrian refuge across entrance to Elliot Road at junction with Wisbech Road. Install dropped kerbs on Elliot Road junction entrance.	
20	Wisbech Road (crossing facilities)	Upgrade the signalised pedestrian crossing outside Wisbech Road Post Office to a toucan crossing as part of a shared route scheme, along NCN route. Add shared used markings in cut through, opposite Toucan crossing (adjacent to Wisbech Road Post Office), to formalise this section of NCN route on approach to upgraded Toucan crossing	
21	Path leading from park off Norwood Road to All Saints Close (footway link)	Formalise the muddy track through the field, adjacent to All Saints Inter- Church Academy and County Road, which is used by parents and schoolchildren.	
22	All Saints Close (Safer Routes to School)	Examine the need for a pedestrian central refuge crossing facilities on County Road, between junction of All Saints Close and Cromwell Road	
23	All Saints Close (Safer Routes to School)	Relining of no parking restrictions road markings outside school. Require zig zags markings from zebra crossing. Currently missing/worn away.	
24	Westwood Primary Safer Routes to School	Relining of no parking restrictions road markings outside school.	
25	Burrowmoor Road (Safer Routes to School)	Investigate options for installing a pedestrian crossing facility on Burrowmoor Road within proximity to the school. Recommend installar of raised table outside No. 19. This will provide traffic calming and facilitate safer ped crossing. This facility can then be used as crossing location used by crossing attendant.	



ID No	Location / Issue	Scheme Description			
26	Burrowmoor Road (Safer Routes to School)	Relining of no parking restrictions road markings outside school.			
27	Town wide ped/cycle wayfinding	Identify wayfinding signage improvements, providing distance to key destinations, including March Railway Station, the town centre, Neale-Wade Academy and other key destinations.			
28	NCN 63 route signage	Improve NCN 63 routing signage/markings which are currently inconsistent and fragmented through March.			





3. Task 2: Grouping and Prioritisation of Schemes

3.1 Introduction

- 3.1.1 This task comprises the following outputs:
 - Create Matrix to illustrate impact / benefit of each project based on agreed criteria with CCC
 - Based on outputs from Task 1, schemes to be progressed are grouped into deliverable
 projects based on their safety priority, network accessibility and connectivity, locality
 and design and programme deliverability, taking into consideration any potential
 consultation requirements.

3.2 Matrix

3.2.1 A matrix with the criteria listed in Table 3-1, below, has been developed to provide the prioritisation rationale for the grouping and delivery of the schemes. The definition of these criteria are detailed in Table 3-1, below, and illustrate the anticipated impacts and benefits of each scheme.

Table 3-1: Matrix Criteria

Term	Definition		
Accessibility	A 'Yes' indicates that the scheme will deliver accessibility improvements for pedestrians and/or cyclists. Accessibility improvements include the provision of crossing facilities, dropped kerbs, tactile paving, and wayfinding.		
Active Travel Connectivity	A 'Yes' indicates that the scheme will improve active travel connectivity, by linking pedestrian and cycle routes, delivering improvements to journey time, journey quality and wayfinding.		
Public Transport / Interchange Connectivity	A 'Yes' indicates that the scheme will improve public transport interchange connectivity with active travel modes.		
Safety	A 'Yes' indicates that the scheme seeks to improve road / route user safety and / or personal security.		
Priority Grouping	An indication of the importance of each scheme in terms of delivering pedestrian and cycling infrastructure, safety, and wayfinding improvements.		
Deliverability (1 st or 2 nd Phase)	All schemes listed are considered deliverable, in terms of feasibility and practicability. The deliverability phasing indicates how easily and quickly the scheme can be designed and delivered. Phase 1 schemes are those which are considered to be easier to deliver. Phase 2 schemes will require more detailed design, surveying and consultation, so will take longer to deliver. Phase 1 schemes are those which have been designed and ready for Target Costing.		

3.2.2 The list of schemes in Appendix A also considers legal processes, such as the need for Traffic Regulation Orders (TROs) to facilitate changes to the highways.

3.3 Grouped Schemes and Prioritisation

3.3.1 The schemes identified in Appendix A have been grouped using the criteria in Table 3-1, above.



4. Task 3: Project Scope for Grouped Schemes

4.1 Introduction

- 4.1.1 The spreadsheet within Appendix A provides the project scope of each scheme and provides a status of the following:
 - a) Phase 1 Schemes Complete Incorporated into Package 1 Target Costed.
 - b) Phase 2 Schemes Concept Design Requiring further surveys, 3rd party approvals and additional design
 - c) Phase 2 Schemes Option Study Multiple options applicable requiring further surveys, 3rd party approvals and additional design

4.2 Phase 1 Schemes - Project Scope

4.2.1 Table 2-1, below lists the Phase 1 schemes project scope which have been fully designed to Gateway 5 and have been Target Costed.

Table 4-1: List of Phase 1 Schemes - Target Costed

ID	Location	Project Scope		
2	Robin- goodfellows (crossing facilities)	Install 'Look Right' and 'Look Left' reminder carriageway markings for pedestrians crossing Robingoodfellow's Lane junction		
12	Sconce ped/cycle route (shared use)	Repaint cycle symbols on the shared route past March Sconce.		
23	All Saints Close (Safer Routes to School)	Relining of no parking restrictions road markings outside school. Requires zig zags markings from zebra crossing. Currently missing/worn away.		
24 Westwood Primary Safer Routes to School		Relining of no parking restrictions road markings outside school.		
26	Burrowmoor Road (Safer Routes to School)	Relining of no parking restrictions road markings outside school.		
27	Town wide ped/cycle to key destinations, including March Railway Station, the town ce wayfinding Neale-Wade Academy and other key destinations.			
28	NCN 63 route signage	Design and Install Improved NCN 63 routing signage/markings which are currently inconsistent and fragmented through March		

4.2.2 The Drawings in Appendix B identifies the Phase 1 schemes in Green.



4.3 Phase 2 Schemes - Concept Designs - Project Scope

4.3.1 Table 2-1, below lists the Phase 2 Concept Design schemes project scope that only has one option for design but requiring further site surveys and intrusive investigations, 3rd party approvals and additional detailed design.

Table 4-2: List of Phase 2 Concept Design Schemes

ID	Location	Project Scope			
1	Robin- goodfellows Lane (footways)	Design and Install footway (2m width) along Robingoodfellow's Lane carriageway and maintain double yellow lines on left hand side, between junction with B1099/Broad Street and Darthill Road car park.			
4	Elwyn Road/ High Street (crossing facilities)	Improve safety of pedestrian crossing facilities across Elwyn Road junction with High Street with installation of an uncontrolled raised table pedestrian crossing at junction, or similar.			
8	High Street/ The Causeway/ The Avenue (cycling facilities)	Re-line, add cycle symbols and sign shared use footway provision. Assume 4km of carriageway/footway to reline/sign.			
11	Elwyn Road (footway)	Install dropped kerb opposite Mortgage Force on river side of Elwyn Road.			
14	Chapel Lane (cycle Wayfinding)	Add cycle symbol on surface through Chapel Street (the lane outside the police station).			
16	Dartford Road (crossing facilities)	Design and Install central refuges pedestrian crossing facilities on Dartford Road, adjacent to Lidl supermarket. In carriageway hatching area before turning lane into access road for Lidl.			
17	Dartford Rd/Westwood Av (crossing facilities)	Design and Install widened dropped kerb and tactile paving provision on corner of Westwood Avenue/Dartford Road.			
19	Wisbech Road/ Elliott Road (crossing facilities)	Design and Install Widened central pedestrian refuge across entrance to Elliot Road at junction with Wisbech Road and dropped kerbs on Elliot Road junction entrance.			
20	Wisbech Road (crossing facilities)	Design and Install upgrade the signalised pedestrian crossing outside Wisbech Road Post Office to a toucan crossing as part of a shared route scheme, along NCN route. Add shared used markings in cut through, opposite Toucan crossing (adjacent to Wisbech Road Post Office), to formalise this section of NCN route on approach to upgraded Toucan crossing.			
21	Path leading from park off Norwood Road to All Saints Close (footway link)	Formalise the muddy track through the field, adjacent to All Saints Inter-Church Academy and County Road, which is used by parents and schoolchildren.			

4.3.2 The Drawings in Appendix B identifies the location of the Phase 2 Concept Design schemes in Orange.



4.4 Phase 2 Schemes - Option Study Designs - Project Scope

4.4.1 Table 2-1, below lists the Phase 2 Option Studies project scope where there are multiple options applicable requiring further surveys, 3rd party approvals and additional design.

Table 4-3: List of Phase 2 Option Study Schemes

ID	Location	Project Scope			
3	Nene Parade/ Grays Lane (parking)	Review and formalise provision of parking in Nene Parade and Grays Lane. Re-line parking bay and yellow lines.			
5	Market Place /High Street (crossing facilities)	eview provision of pedestrian crossing facilities across Market Place junction ith High Street (B1101). This relates to crossing the junction between Market lace car park and The Griffin Public House. Install an uncontrolled raised ntry table pedestrian crossing or similar.			
6	High Street (footways)	Investigate Installation of a footway on section of High Street (B1101) across entrance to Chapel Street shared footpath, to join up with the existing pavement on the section of High Street from the entrance to Cromwell Hotel to the premises occupied by Leonardo's Pizza. Install dropped kerb access for cyclists and mobility scooters on the section across the entrance to the Chapel Street foot and cycle path. <i>Linked to scheme 7</i>			
7	High Street/ Chapel Street (crossing facilities)	Install pedestrian island refuge on High Street adjacent to Chapel Street ped/cycle entrance (south of Burrowmoor Road junction) with footway build out. Linked to scheme 6, above.			
9	Station Road/ Creek Road (crossing facilities)	Improve pedestrian crossing facilities on Station Road by Creek Road. The central refuge should be redesigned to create a direct crossing facility to serve the high footfall of pedestrians accessing Sainsbury's car park at this location			
10	Station Road (cycle facilities/ wayfinding)	Provide a more direct cycle route linking Station Road with Neale Wade Academy and south east March, via St. John's Road, Wigstone's and the footbridge to the south of the River Nene. Involves installation of carriage way cycle symbols.			
13	Cavalry Drive (crossing facilities)	Examine the need for formal crossing facility across Cavalry Drive, by the back entrance to Neale-Wade Academy and installation of 20 mph wig wags (flashing boards) advisory speed limit for start/end of school day.			
15	Wisbech Road/ Norwood Road (crossing facilities)	Improve pedestrian crossing facilities at the junction of Wisbech Road and Norwood Road.			
18	Wisbech Road corridor (shared use cycle facilities)	Review provision of Incorporating shared use footway provision for cycling along Wisbech Road, providing cyclists with a safe and direct route to Tesco and the Industrial Park. Installation of advisory cycle lanes, in both directions on existing carriage is feasible instead of shared use on footway.			
22	All Saints Close (Safer Routes to School)	Examine the need for a pedestrian central refuge crossing facilities on County Road, between junction of All Saints Close and Cromwell Road			
25	Burrowmoor Road (Safer Routes to School)	Investigate options for installing a pedestrian crossing facility on Burrowmoor Road within proximity to the school. Recommend installation of raised table outside No. 19. This will provide traffic calming and will facilitate safer ped crossing. This facility can then be used as crossing location used by crossing attendant.			

4.4.2 The Drawings in Appendix B identifies the location of the Phase 2 Option Study Design schemes in Blue.



5. Task 4: Target Cost for Grouped Schemes

5.1 Introduction

5.1.1 Table 2-1, below lists the Phase 1 schemes which have been fully designed to Gateway 5 and Target Costed.

Table 5-1: List of Phase 1 Schemes

ID No	Location / Issue	Scheme Description		
2	Robin- goodfellows (crossing facilities)	Insert 'Look Right' and 'Look Left' reminder carriageway markings for pedestrians crossing Robingoodfellow's Lane at this junction		
12	Sconce ped/cycle route (shared use)	Repaint cycle symbols on the shared route past March Sconce.		
23	All Saints Close (Safer Routes to School)	Relining of no parking restrictions road markings outside school. Requires zig zags markings from zebra crossing. Currently missing/worn away.		
24	Westwood Primary Safer Routes to School	Relining of no parking restrictions road markings outside school.		
26	Burrowmoor Road (Safer Routes to School)	Relining of no parking restrictions road markings outside school.		
27	Town wide ped/cycle key destinations, including March Railway Station, the town centre wayfinding Neale-Wade Academy and other key destinations.			
28	NCN 63 route signage	Installation of Improved NCN 63 routing signage/markings which are currently inconsistent and fragmented through March. Include shared use markings in cut through opposite Wisbech Road Post Office.		

- 5.1.2 The location of the works are shown on the Drawings in Appendix B.
- 5.1.3 The Works Information which was Target Costed in in Appendix C.
- 5.1.4 The Target Cost for the group of projects is £20,362.15 and is included in Appendix D.



6. Summary

- 6.1.1 The lists of schemes to be progressed are included in Appendix A of this report. In total 28 schemes have been identified, grouped and prioritised for delivery in Phase 1 and Phase 2.
- 6.1.2 Phase 1 schemes have been fully designed and have been Target Costed for Construction, the Target Cost is within Appendix D.
- 6.1.3 Phase 2 schemes comprise of Concept Designs and Option Studies that requiring additional design, site investigations, third Party Liaison and statutory process.
- 6.1.4 Additional funding will be required to progress the design for the Phase 2 schemes, the design fee will be produced following confirmation of the schemes to be progressed.





7. Appendices

Appendix A: Confirmed Schemes for Delivery and Removed Schemes





Appendix B: Works Locations Drawings

5020481-MIN-HMK-DR-CH-1235 S2 Rev C02 - Location Plan Phase 1 Works Sheet 1 of 2 5020481-MIN-HMK-DR-CH-1236 S2 Rev C02 - Location Plan Phase 1 Works Sheet 2 of 2 5020481-MIN-HMK-DR-CH-1237 S2 Rev C01 - Location Plan Phase 1 and 2 Overview 5020481-MIN-HMK-DR-CH-1238 S2 Rev C01 - Location Plan Package 2 Works Sheet 1 of 3 5020481-MIN-HMK-DR-CH-1239 S2 Rev C01 - Location Plan Package 2 Works Sheet 2 of 3 5020481-MIN-HMK-DR-CH-1240 S2 Rev C01 - Location Plan Package 2 Works Sheet 3 of 3





Appendix C: Phase 1 Schemes Works Information





Appendix D: Target Cost for Phase 1 Schemes - Dated 19 April 2022

The Target Cost For Package 1 Schemes was undertaken in April 2022.

Target Cost Value £20,362.15

An Uplift for the change in Construction Start Date is required – Addendum to the report required once Estimating Team has reviewed the applicable uplift.





Appendix E: Table - Indicative Programme and Budget for Phase 2 / Package 2

ID	Location	Project Scope	Indicative Design Programme	Indicative Design Budget	Indicative Construction Programme Including 4 No. Week Target Costing and 4 No. Week Mobilisation	Indicative Construction Budget Excludes Stats diversions and Contamination
1	Robin- goodfellows Lane (footways)	Design and Install footway (2m width) along Robingoodfellow's Lane carriageway and maintain double yellow lines on left hand side, between junction with B1099/Broad Street and Darthill Road car park.	12 No. Weeks	£9k Includes: - Design 5.5k - Trial Holes £2k - RSA1/2 £1.5k	11 No. Weeks 3 No. Weeks Construction	£40k - £45k
4	Elwyn Road/ High Street (crossing facilities)	Improve safety of pedestrian crossing facilities across Elwyn Road junction with High Street with installation of an uncontrolled raised table pedestrian crossing at junction, or similar.	12 No. Weeks	£9k Includes: -Design 5.5k -Trial Holes £2k -RSA1/2 £1.5k	10 No. Weeks 2 No. Weeks Construction	£35k-£40k
8	High Street/ The Causeway/ The Avenue (cycling facilities)	Re-line, add cycle symbols and sign shared use footway provision. Assume 4km of carriageway/footway to reline/sign.	4 No. Weeks	£4k Includes: -Design 2.5k -RSA1/2 £1.5k	11 No. Weeks 3 No. Weeks Construction	£40k - £45k
11	Elwyn Road (footway)	Install dropped kerb opposite Mortgage Force on river side of Elwyn Road.	4 No. Weeks	£2.5k	17 No. Weeks Linked with ID 1 and 4 1 No. Week Construction	£8k – 10k
14	Chapel Lane (cycle Wayfinding)	Add cycle symbol on surface through Chapel Street (the lane outside the police station).	4 No. Weeks	£3k Includes: -Design 1.5k -RSA1/2 £1.5k	8 No. Weeks 1 Day Lining	£3-£5k
16	Dartford Road (crossing facilities)	Design and Install central refuges pedestrian crossing facilities on Dartford Road, adjacent to Lidl supermarket. In carriageway hatching area before turning lane into access road for Lidl.	12 No. Weeks	£10.5k Includes: -Design 6k -Trial Holes £3k -RSA1/2 £1.5k	10 No. Week 2 No. Weeks Construction	£45k- £50k



			1 11 /1	1 11 21	1 11 21	1 11 41
ID	Location	Project Scope	Indicative Design Programme	Indicative Design Budget	Indicative Construction Programme Including 4 No. Week Target Costing and 4 No. Week Mobilisation	Indicative Construction Budget Excludes Stats diversions and Contamination
17	Dartford Rd/Westwood Av (crossing facilities)	Design and Install widened dropped kerb and tactile paving provision on corner of Westwood Avenue/Dartford Road.	4 No. Weeks	£4k Includes: -Design 2.5k -RSA1/2 £1.5k	10 No. Week 2 No. Weeks Construction	£20k-£30k
19	Wisbech Road/ Elliott Road (crossing facilities)	Design and Install Widened central pedestrian refuge across entrance to Elliot Road at junction with Wisbech Road and dropped kerbs on Elliot Road junction entrance.	12 No. Weeks	£10.5k Includes: -Design 6k -Trial Holes £3k -RSA1/2 £1.5k	12 No. Weeks 4 No. Weeks Construction	£45k-£50k
20	Wisbech Road (crossing facilities)	Design and Install upgrade the signalised pedestrian crossing outside Wisbech Road Post Office to a toucan crossing as part of a shared route scheme, along NCN route. Add shared used markings in cut through, opposite Toucan crossing (adjacent to Wisbech Road Post Office), to formalise this section of NCN route on approach to upgraded Toucan crossing.	12 No. Weeks	£21k Includes: -Design 17k -Trial Holes £3k -RSA1/2 £1.5k	12 No. Weeks 4 No. Weeks Construction	£80k-£100k
21	Path leading from park off Norwood Road to All Saints Close (footway link)	Formalise the muddy track through the field, adjacent to All Saints Inter-Church Academy and County Road, which is used by parents and schoolchildren.	12 No. Weeks	£11k Includes: -Design £6k -Trial Holes £5k	12 No. Weeks 4 No. Weeks Construction	£85k-95k
3	Nene Parade/ Grays Lane (parking)	Review and formalise provision of parking in Nene Parade and Grays Lane. Re-line parking bay and yellow lines.	Atkins Design	Atkins Design	9 No. Weeks 1 No. Week Construction	£6k-10k



Project Management	£7.5k	
Design	£84k	
Ecology and Environment (In Design Phase)	£10k	
Topographical Surveys	£20k	
Contingency – 20%	£24	
Total Indicative Design Budget	£145.5k	
Total Indicative Construction Budget including 45% Contingency	£696k	

Notes:

- The Design and Construction Indicative costs have been prepared from information within this table, there is no indicative design and site visits and take offs have not been undertaken to prepare the indicative costs.
- Indicative Design Costs and Construction Costs have been based on all Designs being prepared in a maximum of 2 No. Work Packages. Target Costing and Construction also being undertaken as a maximum of 2 No. Work Packages.
- There is likely to be cost savings for combining RSA1/2's.
- Site Investigation Costs are also indicative and may be higher or lower dependent on site conditions / presence of Statuary Undertakers Plant and Design i.e requirement for GPRS and Drainage Surveys.
- An indicative cost of £20k has been allowed for a topographical surveys to be undertaken in a programme of works.
- An indicative cost of £10k has been allowed for Ecology and Environment to be undertaken in a programme of works within the Design Phase.
- Diversionary Works and Contamination are unknown and could impact on the Indicative Design and Construction budget
- Construction Constraints impacting working hours and programming are unknown and could impact on the Indicative Construction Budget
- Ecological and Environmental Impacts are unknown and could impact on the Indicative design and construction budget



Appendix F: Table - Indicative Programme and Budget for Phase 2 / Package 3 - Option Studies

ID	Location	Project Scope	Indicative Design Programme	Indicative Design Budget
5	Market Place /High Street (crossing facilities)	Review provision of pedestrian crossing facilities across Market Place junction with High Street (B1101). This relates to crossing the junction between Market Place car park and The Griffin Public House. Install an uncontrolled raised entry table pedestrian crossing or similar.	8 No. Weeks	£15k
6	High Street (footways)	Investigate Installation of a footway on section of High Street (B1101) across entrance to Chapel Street shared footpath, to join up with the existing pavement on the section of High Street from the entrance to Cromwell Hotel to the premises occupied by Leonardo's Pizza. Install dropped kerb access for cyclists and mobility scooters on the section across the entrance to the Chapel Street foot and cycle path. Linked to scheme 7	8 No. Weeks	£10k
7	High Street/ Chapel Street (crossing facilities)	Install pedestrian island refuge on High Street adjacent to Chapel Street ped/cycle entrance (south of Burrowmoor Road junction) with footway build out. Linked to scheme 6, above.	8 No. Weeks	£10k
9	Station Road/ Creek Road (crossing facilities)	Improve pedestrian crossing facilities on Station Road by Creek Road. The central refuge should be redesigned to create a direct crossing facility to serve the high footfall of pedestrians accessing Sainsbury's car park at this location.	8 No. Weeks	£15k
10	Station Road (cycle facilities/ wayfinding)	Provide a more direct cycle route linking Station Road with Neale Wade Academy and south east March, via St. John's Road, Wigstone's and the footbridge to the south of the River Nene. Involves installation of carriage way cycle symbols.	8 No. Weeks	£15k
13	Cavalry Drive (crossing facilities)	Examine the need for formal crossing facility across Cavalry Drive, by the back entrance to Neale-Wade Academy and installation of 20 mph wig wags (flashing boards) advisory speed limit for start/end of school day.	8 No. Weeks	£15k
15	Wisbech Road/ Norwood Road (crossing facilities)	Improve pedestrian crossing facilities at the junction of Wisbech Road and Norwood Road.	12 No. Weeks	£25k



ID	Location	Project Scope	Indicative Design Programme	Indicative Design Budget
18	Wisbech Road corridor (shared use cycle facilities)	Review provision of Incorporating shared use footway provision for cycling along Wisbech Road, providing cyclists with a safe and direct route to Tesco and the Industrial Park. Installation of advisory cycle lanes, in both directions on existing carriage is feasible instead of shared use on footway.	12 No. Weeks	£20k
22	All Saints Close (Safer Routes to School)	Examine the need for a pedestrian central refuge crossing facilities on County Road, between junction of All Saints Close and Cromwell Road	8 No. Weeks	£10k
25	Burrowmoor Road (Safer Routes to School)	Investigate options for installing a pedestrian crossing facility on Burrowmoor Road within proximity to the school. Recommend installation of raised table outside No. 19. This will provide traffic calming and will facilitate safer ped crossing. This facility can then be used as crossing location used by crossing attendant.	12 No. Weeks	£20k
Total India	cative Budget for Op	33 No. Weeks	£155k	
Total Indic	cative Budget for Ph	ase 2 Design (As Above)	29 No. Weeks	£145k
Total Indic	cative Design Budge	41 No. Weeks	£300k	



Appendix G: Indicative Programme

Programme Dated 11.08.2022

Note:

Programme buildup shows previous rates, the 20% Design Cost Contingency is sufficient to cover the new rates.



Appendix A

Confirmed Schemes for Delivery 15/03/2022

						F	Rationale				
ID N o	Location / Issue	Scheme Description	Delivered by Ped/Cycle Feasibilit y Study (Yes/No)	Accessibility	Active Travel Connectivity	Public Transport Interchange Connectivity	Safety	Priority Grouping for Design/Delivery	Deliverability (1st or 2nd Phase)	Reasoning / Design + Delivery notes	Status
1	Robin- goodfellows Lane (footways)	Revised scheme: Install footway (2m width) along Robingoodfellow's Lane carriageway and maintain double yellow lines on left hand side, between junction with B1099/Broad Street and Darthill Road car park	Yes	Yes			Yes	2 nd	2 nd phase	Improve pedestrian accessibility and safety when walking between Darthill Car Park and Broad Street, via Robingoodfellow's Lane. There is sufficient space to install a footway adjacent to the wall on the w/b side of Robingoodfellow's Lane. This will create a continuous footway to the car park. This will require an RSA, topographic and stats surveys.	Concept Design Topographical Survey and Stats review will be required
2	Robin- goodfellows (crossing facilities)	Insert 'Look Right' and 'Look Left' reminder carriageway markings for pedestrians crossing Robingoodfellow's Lane at this junction	Yes	Yes			Yes	1 st	1 st phase	Inserting carriageway markings improves safety awareness for pedestrians crossing Robingoodfellow's Lane at interchange with Station Road and Broad Street. This needs to be done as a priority. Longer term, the FHSF/MATS Broad St scheme will improve the entry to the Robingoodfellow's Lane, as part of scheme design for the mini roundabout.	Incorporated in Package 1
3	Nene Parade/ Grays Lane (parking)	Review and formalise provision of parking in Nene Parade and Grays Lane. Re-line parking bay and yellow lines.	Yes	Yes			Yes	2 nd	2 nd phase	Nene Parade and Grays Lane existing parking provision remarking/formalisation to be addressed by Ped/Cycle Feasibility Study. Broad Street carriageway realignment and accompanying carriageway marking requirements to be addressed by FHSF and MATS Broad Street schemes. Re-line disabled bays. Review provision of double yellow lines down Nene Parade to identify extent of	Option Study Scope dependent on the wider Broad Street scheme. PTO's to be reviewed.
4	Elwyn Road/ High Street (crossing facilities)	Improve safety of pedestrian crossing facilities across Elwyn Road junction with High Street with installation of an uncontrolled raised table pedestrian crossing at junction, or similar.	Yes	Yes	Yes		Yes	1 st	2 nd phase	Pedestrian crossing facilities need improving at the uncontrolled junction of Elwyn Road junction with High Street, for accessing Market Place. Will be addressed by Ped/Cycle Feasibility Study as out of the scope of the FHSF Market Place proposal. The radii of the junction could be tightened and tactile paving could be installed here.	Concept Design Access to Market Place needs consideration with proposed Market Place Design
5	Market Place /High Street (crossing facilities)	Provide pedestrian crossing facilities across Market Place junction with High Street (B1101). This relates to crossing the junction between Market Place car park and The Griffin Public House. Install an uncontrolled raised entry table pedestrian crossing or similar.	Yes	Yes			Yes	2 nd	2 nd phase	Pedestrian crossing facilities need improving at the uncontrolled junction of Market Place and High Street (adjacent to the Griffin pub). Will be addressed by Ped/Cycle Feasibility Study as out of the scope of the FHSF Market Place proposal. Check whether Market Place route is used to turn round buses for service operations at Broad Street. Could lose a lane and have just one as it is already one way. Do we need to retain the dedicated left and right lanes at the end of the road? A zebra crossing could also be installed here. Suggested that we check the junction modelling.	Option Study Required Access to Market Place needs consideration with proposed Market Place Design
6	High Street (footways)	Install a footway on section of High Street (B1101) across entrance to Chapel Street shared footpath, to join up with the existing pavement on the section of High Street from the entrance to Cromwell Hotel to the premises occupied by Leonardo's Pizza. Install dropped kerb access for cyclists and mobility scooters on the section across the entrance to the Chapel Street foot and cycle path. Linked to scheme 7, below.	Yes	Yes	Yes		Yes	2 nd	2 nd phase	Delivery with scheme 7. Install facility to help cyclists join the carriageway. Check whether the provision of a footway would obstruct an access point. Check drainage, as it falls away from the carriageway. Also check for stats.	Option Study Topographical Survey and Stats review will be required
7	High Street/ Chapel Street (crossing facilities)	Install pedestrian island refuge on High Street adjacent to Chapel Street ped/cycle entrance (south of Burrowmoor Road junction) with footway build out. Linked to scheme 6, above.	Yes	Yes	Yes		Yes	2 nd	2 nd phase	There are no ped crossing facilities on this stretch of road Linked to scheme 8, should be delivered in same phase. As with scheme 6, check whether the provision of a footway would obstruct an access point. A crossing would intersect the shared route. Would have to suspend parking to implement this. Potential to remove a parking bay adjacent Cassanos to install a build out to help pedestrians cross the road.	Option Study Topographical Survey and Stats review will be required
8	High Street/ The Causeway/ The Avenue (cycling facilities)	Re-line, add cycle symbols and sign shared use footway provision. Assume 4km of carriageway/footway to reline/sign.	Yes		Yes		Yes	2 nd	2 nd phase	Will require RSA	Concept Design RSA Required – Not Progressed in Package 1
9	Station Road/ Creek Road (crossing facilities)	Improve pedestrian crossing facilities on Station Road by Creek Road. The central refuge should be redesigned to create a direct crossing facility to serve the high footfall of pedestrians accessing Sainsbury's car park at this location.	Yes	Yes	Yes	Yes	Yes	1 st	2 nd phase	Addressed by Ped/Cycle Feasibility Study as out of the scope of the FHSF and MATS Broad Street scheme proposals	Option Study

						R	tationale				
ID N o	Location / Issue	Scheme Description	Delivered by Ped/Cycle Feasibilit y Study (Yes/No)	Accessibility	Active Travel Connectivity	Public Transport Interchange Connectivity	Safety	Priority Grouping for Design/Delivery	Deliverability (1st or 2nd Phase)	Reasoning / Design + Delivery notes	Status
10	Station Road (cycle facilities/ wayfinding)	Provide a more direct cycle route linking Station Road with Neale Wade Academy and south east March, via St. John's Road, Wigstone's and the footbridge to the south of the River Nene. Involves installation of carriage way cycle symbols.	Yes		Yes	Yes	Yes	2 nd	2 nd phase	High priority as connected to school travel. Requires improved cycle signage and cycle symbol road markings. Requires a RSA.	Option Study
11	Elwyn Road (footway)	No dropped kerb opposite Mortgage Force on river side of Elwyn Road – install them.	Yes	Yes			Yes	2 nd	2 nd phase	Requires Stats check.	Concept Design
12	Sconce ped/cycle route (shared use)	Repaint cycle symbols on the shared route past March Sconce.	Yes		Yes		Yes	1 st	1 st phase	A dropped kerb should be installed on the other side. High priority as key off road route to Neale Wade Academy.	Stats review will be required Incorporated in Package 1
13	Cavalry Drive (crossing facilities)	Examine the need for formal crossing facility across Cavalry Drive, by the back entrance to Neale-Wade Academy and installation of 20 mph wig wags (flashing boards) advisory speed limit for start/end of school day.	Yes	Yes			Yes	1 st	2 nd phase	School safety related. High priority. An option study required to consider: A zebra crossing installation (on the existing raised table). Tactile paving would need to be installed on both sides. Wigwag signs and markings required, to be added to existing 'hump' signs. The presence of a fence limits visibility here. The speed table requires maintenance. Traffic calming features could be considered, such as one way priority for traffic. The lanes could be narrowed. A parallel crossing could be installed. Is on bus route.	Option Study Topographical Survey and Stats review will be required
14	Chapel Lane (cycle Wayfinding)	Add cycle symbol on surface through Chapel Street (the lane outside the police station).	Yes		Yes		Yes	1 st	2 nd phase	Requires improved cycle symbol road markings to reduce cycle/pedestrian conflict along Chapel Lane shared route.	Concept RSA Required – Not Progressed in Package 1
15	Wisbech Road/ Norwood Road (crossing facilities)	Improve pedestrian crossing facilities at the junction of Wisbech Road and Norwood Road.	Yes	Yes	Yes		Yes	1 st	2 nd phase	No dropped kerbs at junction, outside the Men of March pub and no other ped crossing provision in the vicinity. High priority An options study. Could install a build out for cyclists so that they can avoid / bypass the roundabout. There are lots of options available here Remove columns to facilitate the installation of a zebra crossing or "cyclists dismount" style crossing.	Option Study Topographical Survey and Stats review will be required
16	Dartford Road (crossing facilities)	Install central refuges pedestrian crossing facilities on Dartford Road, adjacent to Lidl supermarket. In carriageway hatching area before turning lane into access road for Lidl.	Yes	Yes	Yes		Yes	1 st	2 nd phase	No other ped provision in the vicinity. High priority. Scope to install a refuge where the hatching is outside Lidl. Would connect West End Park with developments.	Concept Design Topographical Survey and Stats review will be required
17	Dartford Rd/Westwood Av (crossing facilities)	Widen dropped kerb and add tactile paving provision on corner of Westwood Avenue/Dartford Road.	Yes	Yes			Yes	1 st	2 nd phase	High priority as on route to Westwood Primary School	Concept Design Stats review will be required
18	Wisbech Road corridor (shared use cycle facilities)	Incorporate shared use footway provision for cycling along Wisbech Road, providing cyclists with a safe and direct route to Tesco and the Industrial Park. Installation of advisory cycle lanes, in both directions on existing carriage is feasible instead of shared use on footway.	Yes		Yes		Yes	2 nd	2 nd phase	This is relevant for the Wisbech Road section. Adequate carriageway width to accommodate advisory cycle lane on both sides of Wisbech Road. Provision of share use footway ruled out due to conflict with parked vehicles, trees and grass verges. Consider advisory cycle lanes.	Option Study Topographical Survey and Stats review will be required
19	Wisbech Road/ Elliott Road (crossing facilities)	Widen central pedestrian refuge across entrance to Elliot Road at junction with Wisbech Road. Install dropped kerbs on Elliot Road junction entrance.	Yes	Yes			Yes	1 st	2 nd phase	The junction could be 'tightened up'. Install dropped kerbs. Widen the island. If the junction was tightened up an island might not be required. The island should be 3m wide.	Concept Design Topographical Survey and Stats review will be required
20	Wisbech Road (crossing facilities)	Upgrade the signalised pedestrian crossing outside Wisbech Road Post Office to a toucan crossing as part of a shared route scheme, along NCN route. Add shared used markings in cut through, opposite Toucan crossing (adjacent to Wisbech Road Post Office), to formalise this section of NCN route on approach to upgraded Toucan crossing	Yes		Yes		Yes	1 st	2 nd phase	This crossing should have tramlines / corduroys either side of the crossing as cycles use it and it is part of the NCN. This is feasible.	Concept Design Topographical Survey and Stats review will be required
21	Path leading from park off Norwood Road to All Saints Close (footway link)	Formalise the muddy track through the field, adjacent to All Saints Inter-Church Academy and County Road, which is used by parents and schoolchildren.	Yes	Yes	Yes			2 nd	2 nd phase	Formalised informal path through field as well used link for route to school, park, and cut through between County Road and Robingoodfellow's Lane. Norwood Road and station. Consider solar floor lighting, like has been installed in other section of path between Robingoodfellow's Lane and March Railway Station.	Concept Design Topographical Survey and Stats review will be required

							F	Rationale				
IE N o	Loca	cation / Issue	Scheme Description	Delivered by Ped/Cycle Feasibilit y Study (Yes/No)	Accessibility	Active Travel Connectivity	Public Transport Interchange Connectivity	Safety	Priority Grouping for Design/Delivery	Deliverability (1st or 2nd Phase)	Reasoning / Design + Delivery notes	Status
22	Cl (Safer	I Saints Close er Routes School)	Examine the need for a pedestrian central refuge crossing facilities on County Road, between junction of All Saints Close and Cromwell Road	Yes	Yes	Yes		Yes	1 st	2 nd phase	High priority since connected to school travel. Requires site visit with Highways Engineer to establish if suitable carriageway space. Option study. RSA needed for traffic calming. A 'bolt down' / raised table could be installed here. It would need to be six metres. Noted that it is on a bus route.	Option Study Topographical Survey and Stats review will be required
23	CI (Safer	I Saints Close er Routes School)	Relining of no parking restrictions road markings outside school. Requires zig zags markings from zebra crossing. Currently missing/worn away.	Yes	Yes			Yes	1 st	1 st phase	High priority since connected to school travel safety. Zig zags at the zebra crossing need to be re-lined.	Incorporated in Package 1
24	Wes Prii Safer	estwood Primary er Routes School	Relining of no parking restrictions road markings outside school.	Yes	Yes			Yes	1 st	1 st phase	High priority as connected to school travel and still enforcement need	Incorporated in Package 1
25	Road Rou	ad (Safer outes to school)	Investigate options for installing a pedestrian crossing facility on Burrowmoor Road within proximity to the school. Recommend installation of raised table outside No. 19. This will provide traffic calming and will facilitate safer ped crossing. This facility can then be used as crossing location used by crossing attendant.	Yes	Yes			Yes	1 st	2 nd phase	High priority since connected to school travel safety. Liaised with school's crossing attendant (during PM pick up on 11th Nov) who confirmed need for traffic calming to improve safety of crossing facilities as children/parent face daily safety issues crossing Burrowmoor Rd outside school due to parents illegal parking, which is daily issue, and worse during PM pick up. Recommend raised table adjacent to no/and associated markings to slow traffic outside school, which can be used by crossing attendant.	Option Study Topographical Survey and Stats review will be required
26	Road Rou	rowmoor ad (Safer outes to school)	Relining of no parking restrictions road markings outside school.	Yes	Yes			Yes	1 st	1 st phase	High priority since connected to school travel.	Incorporated in Package 1
27	ped/	wn wide ed/cycle yfinding	Identify wayfinding signage improvements, providing distance to key destinations, including March Railway Station, the town centre, Neale-Wade Academy and other key destinations.	Yes	Yes	Yes	Yes		1 st	1 st phase	Wayfinding to be considered as part of March wide signage strategy based on key decision points.	Incorporated in Package 1
28)	I 63 route ignage	Improve NCN 63 routing signage/markings which are currently inconsistent and fragmented through March. Include shared use markings in cut through opposite Wisbech Road Post Office. This section of NCN route should be formalised.	Yes		Yes	Yes		1 st	1 st phase	NCN 63 route signage/markings are identified separately to ped/cycle wayfinding improvements as requires consultation with Sustrans.	Incorporated in Package 1

The rationale definitions for scheme priority and deliverability phasing are provided below:

Term	Definition			
Accessibility	A 'Yes' indicates that the scheme will deliver accessibility improvements for pedestrians and/or cyclists. Accessibility improvements include the provision of			
Accessibility	crossing facilities, dropped kerbs, tactile paving and wayfinding.			
Active Travel Connectivity	A 'Yes' indicates that the scheme will improve active travel connectivity, by linking pedestrian and cycle routes, delivering improvements to journey time,			
Active Travel Conflectivity	journey quality and wayfinding.			
Public Transport / Interchange A 'Yes' indicates that the scheme will improve public transport interchange connectivity with active travel modes.				
Connectivity				
Safety	A 'Yes' indicates that the scheme seeks to improve road/route user safety and / or personal security.			
Priority Grouping	An indication of the importance of each scheme in terms of delivering pedestrian and cycling infrastructure, safety and wayfinding improvements.			
Deliverability (1st or 2nd Phase)	Phase 1 schemes are those which have been designed and have been Target Costed. Phase 2 schemes requires more detailed design, surveys and			
Deliverability (1 of 2 Priase)	consultation.			

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Agenda Item No: 2.7

Transforming Cities Fund

To: Cambridgeshire and Peterborough Combined Authority Transport and

Infrastructure Committee

Meeting Date: 14th September 2022

Public report: Yes

Lead Member: Mayor Dr Nik Johnson

From: Tim Bellamy, CPCA Interim Head of Transport

Key decision: No

Forward Plan ref: N/A

Recommendations: The Transport and Infrastructure Committee is recommended to:

a) Note the content of this paper and progress on the development of the Combined Authority's Transforming Cities Fund projects.

Voting arrangements: No vote required

1. Purpose

1.1 This paper is to update the Transport and Infrastructure Committee on how the Combined Authority will be progressing Transforming Cities Fund (TCF) projects. It considers the March 2022 Board paper, discussions with the Department for Transport (DfT) and previous engagement with Leaders.

2. Background

- 2.1 The TCF is a capital grant transport fund aimed at driving up productivity through investments in public and sustainable transport infrastructure in some of England's largest city regions. Unlike the large city regions where the application was expected to focus on urban areas, the funding allocated in this region was to improve the quality of life for those within the whole of Cambridgeshire and Peterborough. (i.e., across the urban and rural area).
- 2.2 The aims of the TCF are to:
 - Improve access to good jobs;
 - Encouraging an increase in journeys made by low-carbon and sustainable modes;
 - Tackling air pollution;
 - Access to good jobs;
 - · Delivering more homes;
 - · Delivering apprenticeships and improving skills investments; and
 - Encouraging the use of new mobility systems and technology as part of the Future of Mobility Grand Challenge established in the Industrial Strategy.
- 2.3 The Grant Determination of March 2018 stated that the purpose of the TCF was to boost productivity, transform intra-city connectivity and reduce congestion through investment in public and sustainable transport in Cambridgeshire and Peterborough. It is therefore imperative that all TCF projects meet at least one or more of these objectives.
- 2.4 Around half of the TCF (£1.08 billion) was allocated to six Mayoral Combined Authorities (MCAs) on a per capita and devolved basis. Cambridgeshire and Peterborough Combined Authority area received £95 million.
- 2.5 In Cambridgeshire and Peterborough, the TCF has been devolved to the Combined Authority. Decisions about how to invest the fund are taken by the Combined Authority Board in accordance with the aims for the Fund set out in the devolution agreement, the Authority's Constitution, Assurance Framework, and strategic policy framework.
- 2.6 Within the TCF guidance, government outlined that it recognises Local Authorities were best placed to identify the types of projects to deliver and seeks to partner to develop packages of proposals that deliver transformative improvements in connectivity

Key Issues

- 2.7 In the March Combined Authority Board Paper, it was stated that projects included within the original Delivery (Implementation) Plan have been delayed for a number of factors including:
 - Significant policy changes both nationally and regionally;
 - Upgrading LTN 120 / Gearchange compliance within stage design;

- Environmental design additions due to climate change policy changes; and
- Road space clashes with Strategic Road Network schemes.
- 2.8 Due to a number of concerns around the deliverability of the initial TCF schemes in the timescales, and corresponding potential for a significant underspend, the Combined Authority with partners (Cambridgeshire County Council, Peterborough City Council, and the Greater Cambridge Partnership) have been, and will continue to, identify potential alternative projects which are deliverable in the short term.
- 2.9 Any proposed replacement schemes would need to demonstrate a good strategic fit with the goals, aims and objectives of the TCF itself, the emerging Local Transport and Connectivity Plan and the six capitals of the Sustainable Growth Ambition Statement. These schemes will be categorised by themes that align closely with the LTCP, namely road safety; active travel; supporting growth; public transport and active travel; footway improvements; and public rights of way.
- 2.10 The process will be developed by the Combined Authority transport team in collaboration with constituent council officers. The recommended (prioritised) capital replacement schemes will seek approval at the next Transport and Infrastructure Committee and subsequent Combined Authority Board meeting. It is essential that the revised programme, including replacement schemes, are approved then to allow for the delivery in a timely manner.

Building confidence with government

2.11 Combined Authority officers continue to liaise with the Department for Transport (DfT) to build confidence around the deliverability of the overarching programme. As part of this process, officers will be demonstrating the appropriate governance and programme management measures that are in place to ensure the effective management of the revised TCF programme.

Significant Implications

3. Financial Implications

3.1 Any changes in the TCF programme will need to be reflected in a revised budget. Any specifics will be reported in due course, when seeking approval at the next meeting of the Transport and Infrastructure Committee and Combined Authority Board.

4. Legal Implications

4.1 None.

5. Public Health Implications

- 5.1 As part of the overarching assessment of the revised transport programme due consideration will be given to the objectives of the TCF and the emerging Local Transport and Connectivity Plan (LTCP), including impacts on health.
- 6. Environmental and Climate Change Implications

6.1 In addition, to the health assessment of the TCF replacement schemes, due consideration will be given to the impacts on the environment and climate change. All transport projects are carefully assessed for Environmental and Climate Change considerations as part of Government Policy and Regulations.

7. Other Significant Implications

- 7.1 There are no other known significant implications other than the details held with this paper.
- 8. Appendices
- 8.1 None.

9. Background Papers

The progress of TCF projects was reported to CPCA Board on 30th March 2022 and the paper and appendix can be found via the following links;

- Board report 30th March 2022 <u>Agenda Item No (cmis.uk.com)</u> and;
- Appendix <u>Document.ashx (cmis.uk.com)</u>



Agenda Item No: 2.8

Wisbech Rail Next Steps

To: Transport and Infrastructure Committee

Meeting Date: 14 September 2022

Public report: This report contains appendices which are exempt from publication

under Part 1 of schedule 12A of the Local Government Act 1972, as amended, in that it would not be in the public interest for this information to be disclosed (information relating to the financial or business affairs of any particular person (including the authority holding that information). The public interest in maintaining the exemption outweighs the public

interest in publishing the appendices.

Lead Member: Mayor Dr Nik Johnson

From: Anna Graham, Transport Programme Manager

Key decision: No

Forward Plan ref: N/A

Recommendations: The Transport and Infrastructure Committee is asked to decide the

approach for Wisbech Rail, either:

a) Continue to promote and lobby for heavy rail based on the information provided by the 2020 business case and GRIP 3b and recognise that potential delivery of Wisbech to Cambridge timeframe is linked to the delivery of Ely Area Capacity Enhancements (EACE) or,

b) Undertake an Options Assessment Report to provide the economic analysis on mode options, including existing information on heavy rail, based on a service operating between Wisbech and March which removes the current dependency on EACE whilst still being mindful of the future strategy to link into Cambridge.

c) If option b) is selected recommend to the Combined Authority Board to approve the drawdown of £450,000 from the Medium-Term Financial Plan for the development of an Options Assessment Report and to seek delegated authority to the Interim Head of Transport to enter into a Development Services agreement with Network Rail following consultation with the Monitoring Officer and Chief Financial Officer.

Voting arrangements:

For items a) and b) A simple majority of all Members present and voting

For item c) A vote in favour by at least two thirds of all Members (or their Substitute Members) appointed by the Constituent Councils, to include the Members appointed by Cambridgeshire County Council or Peterborough City Council, or their Substitute Members

To be carried, the vote must include the vote of the Mayor, or the Deputy Mayor when acting in place of the Mayor.

1. Purpose

1.1 The paper seeks Members views on the next steps for Wisbech Rail and subject to approval of option b) seek Combined Authority approval for the drawdown of funding to enable an options assessment report to be carried out.

2. Background

- 2.1 A Business Case and Governance in Railway Investment Projects (GRIP) 3b was completed in the summer of 2020 and identified that a heavy rail, with a two trains per hour service direct to Cambridge from Wisbech, and a centrally located station, would be a viable option.
- 2.2 Following engagement with Department for Transport (DfT), Office of Rail and Road (ORR) and Network Rail, the March 2021 Combined Authority Board agreed that Network Rail would undertake a review of the existing work and assess options for the Wisbech to March line. It was intended the outcome of this work would coincide with the results of the Ely Area Capacity Enhancements (EACE) Outline Business Case.
- 2.3 Network Rail undertook.
 - Business Case review;
 - o PACE (Project Acceleration in a Controlled Environment) review of documentation;
 - Engineering review; and
 - High Level Light Rail.

3. Network Rail Review

- 3.1 Network Rail's review concluded that there was a strong strategic focus within the 2020 business case, which supported the need for public transport links from Wisbech and the potential benefits of connecting to Cambridge.
- 3.2 Significantly, however, Network Rail recommended removing assumptions about EACE. The Wisbech to Cambridge 2020 business case assumed that EACE would provide the necessary infrastructure upgrades to enable increased services to Cambridge and as a result these costs were not included within the Wisbech to Cambridge Business Case. In Network Rail's view this assumption should not have been included and therefore all costs required for Wisbech to Cambridge should be part of the business case as a standalone project.
- 3.3 It was also assumed that one train path may be available at Ely North Junction and a further train path could be sought through EACE. Network Rail's work has shown that there is currently no capacity at Ely and securing future train paths is highly competitive and there is no guarantee the Wisbech to Cambridge would be successful.
- 3.4 Whilst the EACE Outline Business case demonstrates decarbonisation and connectivity benefits, it does, however, require a significant funding, with a total cost of over £450 million. Government have not yet announced the next steps for EACE.
- 3.5 Network Rail's review of the 2020 Wisbech Rail Business Case also noted that:
 - the passenger demand figures are different higher to those that have been prepared for the Ely Area Capacity Enhancement Business Case;
 - o the assessment of cost for each mode option needed greater detail; and,
 - o further detail around timetabling at Cambridge would be needed.

- 3.6 In addition to the review of the existing work, Network Rail also produced a high-level feasibility study for light rail, this was produced following engagement with DfT and ORR whose view was that further options needed to be considered. The report concluded that there is potential for a light rail passenger operation between March and Wisbech highlighting Tram-Train or Very Light Rail could be used. However, an economic assessment of each light rail mode was not provided within the report and would require further development to understand Benefit Cost Ratios.
- 3.7 The Network Rail review concluded that lower cost light rail may offer a more credible transport solution and recommended further work be undertaken to examine light rail options.
- 3.8 An initial proposal for Wisbech Rail next steps outlined an approach which included the development of a business case for a service between Wisbech and March and sought to develop light rail to an outline business case standard. Engagement with Fenland District Council and Members it was agreed that transport connectivity for Wisbech was a priority, however, heavy rail continued to be supported.
- 3.9 Following this initial engagement two options are presented for consideration, the first is to continue to press for heavy rail recognising that potential delivery of Wisbech to Cambridge timeframe is linked to the delivery of EACE. Secondly, an Option Assessment Report is developed rather than a complete business case to provide the economic analysis on mode options, including existing information on heavy rail, based on a service operating between Wisbech and March which removes the current dependency on EACE whilst still being mindful of the future strategy to link into Cambridge.

4. Financial Implications

4.1 Subject to the approval of the Options Assessment Report option £450,000 to be drawn down from the Medium-Term Financial Plan (subject to ratification).

5. Legal Implications

5.1 Subject to the approval of recommendation b) the Combined Authority will enter into a Development Services agreement with Network Rail to undertake the Option Assessment Report.

6. Public Health Implications

- 6.1 The objectives of increasing connectivity to Wisbech are to improve access to employment and educational opportunities, and to support economic growth in a sustainable manner which enables improved health.
- 6.2 In addition, the existing preliminary designs include a cycleway to encourage active travel supporting both health and improved wellbeing.

7. Environmental and Climate Change Implications

7.1 Wisbech Rail seeks to provide an alternative to car use – supporting economic growth in a sustainable way.

- 8. Other Significant Implications
- 8.1 None.
- 9. Appendices
- 9.1 Appendix 1 Wisbech Rail Project Review
- 9.2 Appendix 2 Report to follow
- 10. Background Papers
- 10.1 None.



Eastern Region



Wisbech Rail Review

Date: May 2022







	Name	Date	Signature
Prepared by:			
Development Manager	Mark Chettle	09/05/2022	
Approved by:			
Sponsor	Robert Russell	09/05/2022	

Issue record

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1. Overview



The purpose of this document is to capture Network Rail's view on the Wisbech Rail GRIP 3 documentation produced by Cambridgeshire and Peterborough Combined Authority (CPCA) in response to a request from CPCA. The report will broadly cover four areas:

- Business Case review
- PACE / GRIP review including PM review of documentation
- Engineering review
- Light Rail feasibility

The review of these four areas will identify any gaps in the existing documentation and will provide a list of recommendations/requirements to address them.



2. Executive Summary



This document summarises Network Rail's assessment of the development work completed to date by CPCA on reconnecting Wisbech and March by rail.

The document provides analysis and commentary on the areas listed in section 1 and below:

- Business Case review
- PACE / GRIP review including PM review of documentation
- · Engineering review
- Light Rail feasibility

From assessing the work done to date the report recommends the further activities required to complete PACE 1 (broadly equivalent to GRIP 3) should the project continue as a rail scheme.

It is acknowledged that the project has been developed to this point with minimal input from Network Rail and has, necessarily, not been subject to Network Rail's internal governance processes. Thus, while it may appear there are gaps in areas such as GRIP documentation this can be explained by the fact Network Rail have not been heavily involved to date and did not formally remit the earlier work. It does not imply that the work produced to date is of a poor standard, in fact much of it is of a very good standard.

It should also be noted that, as per the introduction to the Mott MacDonald GRIP 3 Heavy Rail Multi-Disciplinary Option Selection Report (398128-009-C), a "slimmed down" version of the GRIP 3 design process has been used, with the focus on developing designs for those elements which significantly impact capital cost. This is a very reasonable approach for CPCA to adopt.

It is also acknowledged in the conclusion of the same report that there are a number of deliverables required to achieve GRIP 3 stage gate approval and it is stated that a full list would need to be developed in conjunction with Network Rail.

The Full Business Case executive summary also states that further work is required prior to completion of GRIP 3, partly due to the limited input to date from Network Rail or the DfT. This report should be read with that context in mind.

Business Case

The business case produced by Mott MacDonald is overall a well-presented document, with a strong strategic focus, highlighting the need for public transport links from Wisbech and the perceived benefits of this link extending to Cambridge. However, the level of information and detail is not at an appropriate level of maturity for Full Business Case (FBC) level. There are assumptions throughout, particularly around infrastructure and timetabling, that would not be expected or accepted at this stage of work. These assumptions would need to be verified and further explored to allow the project to progress to an FBC stage.



The key issues that have been identified sit in 10 broad categories which are explored in more detail in section 4:

- Timetabling and train path availability, particularly from March to Cambridge
- Performance impacts on timetable
- Cost assumptions, particularly for infrastructure from March to Cambridge
- Level Crossing approach
- Expected passenger numbers and demand
- Do Minimum scenarios
- Proposed contract structures
- Options development assumptions
- Approvals and deliverability
- COVID assumptions and impact

The biggest risk sits with any integration onto the main line. Removing assumptions around what the Ely Area Capacity Enhancement (EACE) project will provide and understanding what this scheme itself will need to provide is key. This also applies to the capital cost assumptions and patronage, both of which are vital components of a successful business case.

Engineering Status

The reports produced by Mott MacDonald are wide-ranging with well thought out options and conclusions. However, there are some gaps in the reports which would need to be addressed before the project is able to pass through the PACE 1 phase gate. Some of the gaps that need to be addressed include:

- The strategic approach towards level crossings. This needs to consider the safety, financial, project and performance risks and issues associated with closure, upgrade, highway diversion and grade separated crossings
- There is limited consideration of the requirements of the Common Safety Method Risk Evaluation and Assessment (EU 402/2013) now enshrined in UK law
- The demand modelling is limited and there is insufficient evidence to support a heavy rail solution. The reports demonstrate a desire to facilitate freight services, without providing any clarity on the services required or that the potential market for freight services exists

Decisions need to be made to reduce the number of options and permutations in relation to modal choice, station location and passenger/freight demand. This decision making will help define the future direction of the project.

Uninterrupted connectivity onto the wider rail network is dependent on the availability of train paths. Currently these are constrained and there are competing demands from train operators for these train paths. Future



demand and economic valuation of train paths together with forthcoming changes to the industry structure will introduce a greater strategic focus on network capacity utilisation and may affect the availability of train paths beyond the Wisbech to March route.

While the review concludes that heavy rail is a viable option, lower cost light rail may offer a more credible solution. It is recommended that further work be undertaken to examine the light rail option.

The full NRDD engineering study can be found in Appendix A.

Light Rail Feasibility

The light rail feasibility study concludes that there is potential for a light rail passenger operation between March and Wisbech. The assessment of suitable rolling stock types concludes that Tram; Tram-Train or Very Light Rail (VLR) vehicles could be used. The choice of rolling stock being subject to the specification of the short and long term service aspirations.

The study further concludes that in consideration of the client's specification a tram-train solution appears the best credible light rail option. Tram-train would enable future operation on both the national rail network and any on-street operation into Wisbech town centre or to the Garden Town.

On the basis that light rail is considered a credible and feasible option further work is recommended to examine the options in more detail and to develop cost estimates to assist the business case for reopening the line.

The full light rail feasibility study can be found in Appendix B.

GRIP/PACE Status

The work produced to date by Mott MacDonald on behalf of CPCA is of a good standard. However, there are a large number of GRIP/PACE deliverables missing that would normally be expected to have been completed by the conclusion of GRIP 3/PACE 1. In order to pass through the PACE 1 phase gate these missing deliverables should be produced, reviewed and signed off. Section 6 covers these products in more detail.

A number of the key documents produced by the project to support the GRIP 3 work have issues that should be addressed with input from Network Rail. There are wide ranging assumptions that need to be worked through and validated that will have a significant impact on the viability of some areas of the proposals, e.g., the impact of the Ely Area Capacity Enhancement (EACE) project.

Overall, from a GRIP/PACE product perspective, the project is not mature enough to pass through the PACE 1 phase gate.



3. The Project



The following sections provide an overview of the project and a summary of the project's objectives and outputs.

3.1. Project Overview

The key project aim is to improve transport access to Wisbech, which is not well-served by existing public transport provision. In particular, improving access to Cambridge as a key regional centre for employment. The current proposal is to reopen the mothballed Wisbech branch and connect it to the Ely-Peterborough line at March.

3.2. Boundaries

Boundaries are not yet formally fixed as this is dependent on the final service provision selected. However, the engineering review undertaken by Network Rail Design Delivery (NRDD)/Capital Delivery Eastern is limited to the existing mothballed Wisbech branch and connections at March.

The remitted stage also includes work to evaluate the business case and the possibility of non-heavy rail options. This required consideration of areas beyond the boundaries identified above at a strategic level only. These elements of work have been delivered by NRDD, the Network Rail Light Rail team, Eastern Investment Directorate, Anglia Sponsorship and System Operator as appropriate.

3.3. Interfaces

This project interfaces with the emerging North Anglia portfolio of railway projects. In particular, ambitions to run services beyond March to Cambridge are subject to sufficient capacity being created along the line of route. This is likely to have a particular dependency on Ely Area Capacity Enhancement (EACE) and the signalling renewal on the Ely-Peterborough line anticipated in CP7 (2024-2029).



4. Business Case Review



4.1. Overview

The purpose of this section is to capture Network Rail's view on the Full Business Case (FBC) submitted by CPCA in June 2020. The section provides thoughts on the key areas covered within a proposed business case of this level, citing areas that require revision or deeper examination.

4.2. High Level Summary

It is a consensus among all who have reviewed the business case that the level of information and detail throughout is not at an appropriate level of maturity for FBC level. There are assumptions throughout, particularly around infrastructure and timetabling that would need to be verified and further explored to allow the project to progress to a Full Business case stage.

The key issues that have been identified sit in 10 broad categories:

- Timetabling and train path availability
 - The timetable analysis to date is not at an adequate level of detail to give us confidence that the paths the CPCA seek (2 trains per hour (tph) Wisbech-Cambridge) are currently achievable.
 - The Ely Area Capacity Enhancement (EACE) scheme provides no commitment to additional capacity being made available for services serving Wisbech-March-Cambridge.
- Performance impacts
 - Should the proposed paths be made available there is little/no evidence that these new paths will avoid any negative impact on the current timetable
- Cost Assumptions
 - Business case assumes capital costs for infrastructure from March to Cambridge is included in the overall capital costs for March to Cambridge in the EACE scheme. Works between Wisbech and March are not included in the EACE scope at this time
- Level Crossing Approach
 - Although the approach and perceived costs of closing and adapting/diverting level crossings has been included, there is no evidence showing increased capital costs for increased level crossing risks along the March to Wisbech route
- Expected Passenger Numbers and Demand
 - Variance between the patronage showed in the business case for additional trips up to 2039 and that EACE have identified, with this scheme being in excess of that predicted by EACE
 - Almost all of the forecast patronage comes from the resulting increase in services from March-Cambridge (approximately 90%). This is not dependent on the Wisbech branch reopening (which is the only part the business case proposal assumes as its cost base, costing circa £200m).
- Do Minimum scenarios
 - Lack of evidence that all committed schemes being delivered in the region are included within the Do Minimum scenario of the economic case. This may have led to double counting of benefits
- Proposed Contract Structures



- Proposition within the Commercial case suggests CPCA sit as the single lead entity. A single delegated delivery body could be used for the scheme, potentially sitting under a client group led by CPCA.
- Options Development Assumptions
 - Treating this scheme as a standalone shuttle service between Wisbech and March initially could be a useful method to determine and show demand and removes the schemes reliance on EACE
 - o Dismissal of a light rail solution may need some additional thought as this could provide a viable option for the above.
- Approvals and Deliverability
 - Various assumptions and omissions around deliverability, programme and risks require further examination. Further exploration of these would add robustness to the case
- COVID assumptions and impact
 - The effects of COVID-19 have not been considered. Now that the railway is recovering and there is a better understanding of how the railway will look moving forward, this should be included in forecasting and demand modelling.

4.3. Detailed Findings

The business case produced by Mott MacDonald for CPCA is overall a well-presented document, with a strong strategic focus, highlighting the need for public transport links from Wisbech and the perceived benefits of this link extending to Cambridge.

Although well researched, the overall findings of the document lack a certain level of maturity that would be expected from an FBC. These gaps reduce the validity of certain statements in the case and increase the risks associated with the project greatly should the scheme progress.

From the review undertaken by Network Rail, the table below provides a review of the key areas that would require further detail and examination to improve any business case submitted:

Theme	Comments
Timetabling analysis & train path availability	 The timetable analysis to date is not at an adequate level of detail to give us confidence that the paths the CPCA seek (2 trains per hour (tph) Wisbech-Cambridge) are currently achievable. The analysis is not sufficiently detailed for a scheme that is at FBC or in late GRIP 3; as such the risk remains that the paths are unachievable or additional scope (both between March – Cambridge and March – Wisbech) is required to deliver the business case output. The CPCA's analysis suggest that there may be retiming of other services required (but little indication as to which services) in order to make 2tph Wisbech-Cambridge work in full. The implications of this could be substantial on the extent of recast required of the timetable; the worst case, for example, could be that the proposal impacts Great Northern (Thameslink) services.
	• The Ely Area Capacity Enhancement (EACE) does not include the Wisbech path/s within its scope however, the business case is wholly dependent on a path/s being available following completion of the EACE scheme. Please can you clarify how the train service would be operated without an Ely path?
Performance	Should the 2tph Wisbech-Cambridge path/s be achievable no evidence is provided
impacts	to demonstrate that the performance of the network would not be significantly affected. The reliability of the network is based on the usage of the infrastructure as well as the interactions of services with other services using the same track This is particularly pertinent noting the majority of the March – Wisbech reopening





proposal is predicated on single line running. Elements of the work show very high
utilisation factors which is a very early way of understanding the likely performance
of a proposal.

We support the position within the business case that train performance is a Critical Success Factor. However, at this stage the risk remains that additional infrastructure (both between March – Cambridge and March – Wisbech) is required to deliver this requirement.

Cost Assumptions

- The business case assumes that the EACE scheme provides all the infrastructure necessary from March-Cambridge to run these services. This includes potential level crossing upgrades. EACE has commissioned a study to see if an additional service between Peterborough and Cambridge would trigger a need for further level crossing infrastructure. It should be noted that infrastructure on the route between Peterborough and Ely is not currently in EACE's scope.
- EACE is currently remitted to provide a total capacity of 11train paths per hour. Based on the current assumptions in the EACE proposal, there are not enough paths to provide the 2tph assumed in the Wisbech-Cambridge proposal.
 - Should a decision be taken to commission work to add additional paths beyond the 11th path currently assumed in the EACE proposal, it is likely that the proposed Wisbech – Cambridge service would be in direct competition with other proposals for paths through Ely. These may include future propositions such as Cambridge – Norwich (which could be in the form of an EWR eastern extension), Cross-country – Cambridge (potentially Stansted)/Norwich or freight. If an 11th path is created by the EACE programme, it should not be assumed that this would be an Ely to Wisbech service.
- End to end journey infrastructure costs do not appear to have been fully taken into account. Could you clarify what out of the following BCR costs does CPCA have and what needs further work?
 - All level crossing costs that would require upgrade to run the service (including those around Cambridge)
 - Any costs for signalling changes to operate the service
 - Power upgrade costs
 - Additional rolling stock costs (only the operational expenditure of rolling stock seems to have been accounted for)
 - Depot and stabling costs
 - Any infrastructure costs for upgrades required at Cambridge or other stations to allow the service to run
 - o Full operating costs (from discussions with potential operator)
- The scheme should not assume EACE will be delivered and full costs should be included with no dependence on final approval of other schemes. EACE is at Develop stage within RNEP with no guarantee of scheme delivery.
- Costs need to be benchmarked against the actual outturn costs of recent comparable projects.
- In turn the elements building up the project need to be carefully considered to ensure that they are appropriate for a line of this type for example it appeared that the S&C work being proposed for March station to connect to the new branch was a type suited to quite high-speed operation, probably over specified for this application, and in that context it also appeared to be somewhat more expensive than expected.
- The Wisbech-March line proposed will be relatively low speed so assumptions around the purchase of brand new material may also be inflating costs unnecessarily. With Whitemoor Yard adjacent there is opportunity to source material recently removed from high speed mainlines which is still perfectly





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	adequate for lower speed line use. Sourcing from Whitemoor will also ensure that material is 'local' and reduces overall transport distances.
Level Crossing Approach	• We note that a substantial element of the capital cost is related to the closure and diversion of existing level crossings along the route between March and Wisbech, but that the business case does not include any costs for addressing increased level crossing risk between March and Cambridge (see above). We note that the CPCA may wish to seek a decision which would allow a number of the existing level crossings to be re-instated on the March to Wisbech section in order to consider reducing cost. Given NR obligations to mitigate or remove level crossing risks and the proposal we will be the asset owner of the resulting reopening, NR and ORR would clearly wish to be involved in any consideration of proposals in this regard.
	 ORR's policy on the creation or reinstatement of level crossings on rail lines is clear that these are only to be considered when there is no other reasonably practicable option available. The proposals that CPCA have already generated indicate that there are 'practicable' options for grade separation for the road/rail interfaces, and that including for these costs the overall scheme BCR is above 1. Arguments therefore about the 'reasonableness' of any particular site to be proposed as a crossing will need to be extremely robust if it is to be shown that the costs of closure, diversion or basic grade separation at a particular location are grossly disproportionate to the costs of a suitable at-grade crossing. While ORR does not have a role to approve or agree the decision making around this level crossing question it is important that it is approached in a way that is clear and defensible. ORR may wish to discuss this further with CPCA to ensure that
	there is clarity on the evidence and process necessary. ORR is a statutory consultee to Transport and Works Act Inquiries and will be expected to make a Statement of Case offering an opinion on the safety of the proposals and this would of course include any level crossings. If ORR are not of the opinion that a proposed level crossing is the only reasonably practicable option then ORR will have to make that point to the Inquiry.
Expected passenger numbers and demand	• The patronage in the business case appears to show that circa 6.6m additional trips will be generated per annum by the proposal by 2039. These numbers appear to be in excess of growth that EACE has been able to identify within the same catchment area.
	The case must be aligned with WebTAG growth rates as per DfT guidance.
	 https://www.gov.uk/guidance/transport-analysis-guidance-webtag . Almost all of the forecast patronage appears to come from the resulting increase in services from March-Cambridge (approximately 90%). This is not dependent on the Wisbech branch reopening (which is the only part the business case proposal assumes as its cost base, costing circa £200m) as in theory all that would be needed is turnaround capability at March. As the scheme does not propose to fund any of the required improvements for the March-Cambridge stretch, and instead assumes EACE does, these benefits could be argued to be required to be attributed to EACE. This could make the March to Wisbech economic case weaker.
Do Minimum scenarios	 Could you confirm whether all committed schemes being delivered in the region are included within the Do Minimum scenario of the economic case, most notably the Kings Lynn – Cambridge 8-car scheme. If this hasn't been included this could result in the double counting of benefits. In addition, although the 2tph Wisbech-Cambridge paths are presumed predicated on the EACE infrastructure, no indication is within the Do Minimum scenario that all the passenger services EACE enables has also been included.
Proposed Contract Structures	• Experience suggests that in rail projects with their many separate technical and operational disciplines, with the related differing sub-contractors, there is great benefit in having a single body responsible for delivery. This places responsibility



	for integration in a single place. Structures with different delivery bodies carry much greater integration risks. There is no reason that CPCA and others should not form some type of joint client board, but then place a single body below this with the responsibility and delegated authority to deliver.
	We note the examples of major road schemes and the Cambridge guided bus as projects delivered, but consider that the degree of technical complexity in a rail scheme, particularly one integrating into existing rail infrastructure, is of a significantly different scale and the previous experience may not be comparable.
Option Development Assumptions	 Have all delivery modes been adequately considered? The option development should consider the RNEP stage and the dependency on a non-committed scheme. Should the CPCA not wish to include the costs of EACE in the business case for the Wisbech-Cambridge proposal, the CPCA concept around beginning services with some form of shuttle between March and Wisbech appears to be a sensible choice. This could be linked to a proportionate level of connection to the existing network to support stock transfer etc.
	• Establishing early demand with a shuttle connection could be a sensible first step.
	• In the context of a stand-alone shuttle, there are concerns around the rejection of light rail modes on the basis of technical risk. Light rail does not imply overhead electrification; a diesel tram-train could be an option though it is acknowledged that there is a limited supply market compared to other rolling stock types.
	The use of tram type rolling stock and operational concepts could in turn lead to different decisions about some of the intersections of roads and rail alignment, and the approach to signalling needs on the line.
	• The weighted assessment in table 2 is very close between National Rail and the two tram-train options. This seems to be mainly influenced by "no existing client knowledge and experience of delivering tram-train schemes, plus the technology and delivery mechanisms are less proven" (2.15.4). This may be correct, but as the scores are so close some further sensitivity analysis might be beneficial to confirm the approach.
Approvals and deliverability	Based on other schemes, the schedule presented in Table 12 looks potentially achievable, but also very optimistic. For example, the case references Cambridge South station, which is probably much lower complexity as a scheme being approved in March 2020 and opening in 2025 (section 2.9.1).
	The risk identification in table 13 correctly references approvals as a risk, but is limited to NR design approval. Approvals and authorisations are more complex than this and the risk may be underestimated.
	• The strategic case and the management case both reference a QRA is yet to be done. This would significantly help inform the robustness of assumptions made in the case.
	• Table 3.19 risk ID 8 refers to a tight radius at March station. If this affects platform curvature this could be a significant issue. Managing the step gap between track and train is a key issue for the industry with almost half the total harm for passengers arising from this gap. Curved platforms mean bigger steps. If the Class 755 is used this does have design features that help, but it's easy to underestimate the risk and impact.
COVID impact	Covid-19 is likely to impact the strategic case at least; without more detailed work it is difficult to assess the magnitude of impact, or indeed whether it is positive or negative.
Consents	• For a project at FBC level a consenting strategy would be expected. Beyond a high-level mention within the management case, there doesn't appear to be a defined consent strategy. The lack of one adds considerable risk to any proposed programme as there is no confidence in the ability to obtain land or permissions.



4.4. Conclusion

The case for change within the Business Case is apparent. Wisbech is an area of deprivation that suffers from not having a reliable form of public transport beyond that of buses trying to operate on already congested roads. The use of the mothballed March-Wisbech line presents an opportunity to connect this Town onto the wider rail network, connecting the people of Wisbech to a greater array of employment, healthcare and education.

Although compelling from a strategic perspective, the FBC submitted relies on a lot of assumptions which would not be expected or accepted at this level. The biggest risk sits with any integration onto the mainline – removing assumptions around what EACE will provide and understanding what this scheme itself will need to provide is key. This is also relevant for capital cost assumptions and patronage – both of which are vital components of a successful Business case.

Based on the size, maturity and the number of uncertainties, the project may in fact benefit from readdressing the above and look to submit an Outline Business case. This may also be of benefit if a light rail solution is investigated further.



5. Project Reports Review



This section of the report covers the key documents produced by the project and provides commentary and suggestions for future work from a Project Management perspective.

5.1. GRIP 3 Heavy Rail Multi-Disciplinary Option Selection Report (398128-009-C)

There are a number of assumptions documented in the report that should be validated. For example, railway asset condition and highways/level crossings condition.

Interfaces with other Network Rail projects, e.g., Ely Area Capacity Enhancement (EACE) and re-signalling projects need to be checked and reconsidered in light of industry changes since production of the report.

The report mentions engagement with the likely Train Operating Company (TOC), Greater Anglia (GA), but does not detail what discussions have been held. The TOC will need to be consulted on operations, proposals for the stations, staffing requirements etc. These discussions may influence the requirements and the designs for the project.

There is a lack of evidence of scoring of options in the report and justification for selecting particular options. For example, section 5.6.2.2 in the report includes a paragraph covering platform construction type. A preferred option is chosen but without any specific evidence to show why.

Designs have been produced for March Station, including platform modifications, car parks etc. Work is currently taking place to redevelop March station, including a new ticket hall and waiting area, as well as an expansion to the current car park to the south of the station. This is likely to mean that the works proposed at March Station as part of this study will need to be reconsidered.

The environment section of the option selection report appears quite light, and it is difficult to see how it is weighted relevant to other considerations during option selection. This should be reviewed.

A Carbon Assessment is provided in Appendix T of the report. Some of the assumptions/exclusions within the assessment would benefit from some clarification – for example, track foundations already being in place, temporary works for drainage not being considered, P-Way fittings not being included etc. Some of the graphs are quite difficult to interpret and there is little explanatory text. This is not of a standard that would be suitable for a NR project and would likely need to be revisited. Evidence of carbon being integrated into the option selection process and general design process should also be provided.

5.2. Options Assessment Report (398128-005-D)

The cost estimate for the tram-train scheme does not appear to have been built up using the same methodology as the estimate for the heavy rail scheme, which may have led to unfair comparisons being made. The guided busway option (DS3) includes vehicle costs, but other options do not, again meaning that estimates are difficult to compare on a like for like basis.

As per the GRIP 3 heavy rail report, assumptions need to be validated, particularly around Ely Area Capacity.



5.3. Delivery Strategy (398128-009-E)

The high level programme shown in table 5 has GRIP 5 detailed design starting well before completion of TWAO process. This would present a risk and should be understood and assessed by the project.

5.4. Assessment of Rail Operations (398128-007-C)

The report acknowledges that the Ely area is unable to accommodate any additional services without compromising performance and adversely affecting the existing level crossing risk. It is also stated that the EACE scheme aims to provide up to 11tph through Ely North Junction, and that to accommodate 2tph from Wisbech – Cambridge, capacity for 13tph would be required. This is beyond the current scope of the EACE project.

Platforms 5/6 at Cambridge are identified for services running to/from Wisbech. It is not clear whether any assessment of platform availability at Cambridge has been carried out.

The report also acknowledges that running additional services between Wisbech and Cambridge could change level crossing risk profiles, triggering the need for upgrades on the mainline between March and Cambridge. This does not appear to have been factored into cost estimates.

Section 5.3.4 summarises the modelling carried out to date and concludes that finding a path for 2tph from Wisbech to Cambridge is not possible with the current timetable and would only be possible if Ely North Junction is remodelled to accommodate these services. This therefore creates a dependency on the Ely Area Capacity Enhancement project, or a similar scheme, neither of which are confirmed or have the paths for Wisbech services built into their output requirements.

5.5. Environmental Report (398128- MMD-00-XX-RP-EN-0001-B)

The purpose of the Environment Report is slightly unclear and there are a number of omissions, though some of these have been covered by the Preliminary Ecological Appraisal (PEA) and elements of the option selection report.

One area that does not appear to have been considered is Social Value. The Socio-Economic impacts from this scheme will be significant, both during construction and operation. It is recommended that an assessment is completed to strengthen any business case for the development. Additionally, this project could be a good candidate for the newly released NR Social Value Profit Calculator.

5.6. Preliminary Ecological Appraisal (PEA) (398128-MMD-00-XX-RP-EN-0003-B)

The PEA is a thoroughly written document and provides a good starting point for developing an approach to ecology management. A lot of constraints have been identified, as anticipated, and there will need to be extensive statutory stakeholder engagement. The number of additional surveys required is considerable, and these will need to be appropriately programmed as the project proceeds. Habitat creation normally requires quite significant land acquisition, so this needs to be factored into the consents strategy as well as the project cost estimate.

5.7. Estimating

Capital cost estimates have been produced for both tram-train and heavy rail options and are contained in the respective reports covering these options. There are a number of exclusions in these estimates that could have a significant bearing on the overall project costs, including, but not limited to:

• Land purchase or rental (added in the business case for the heavy rail option)



- Utilities diversions, relocation and protection (for tram-train scheme)
- Re-location of affected businesses
- Planning and consents costs
- Inflation (added in the business case for the heavy rail option)
- All costs associated with Insurance Top Up Fund, the Network Rail Fee Fund or the Industry Risk Fund (only mentioned for tram-train scheme)
- Project risk allowance (added in business case and options assessment report)

5.8. Heavy Rail Estimate

The estimate appears to cover the relevant elements of the scheme (exclusions aside) and the unit rates used for the rail elements seem appropriate.

As stated in the Railway Control Systems section of the exclusions table, the cost of interlocking is assumed to be borne by another project. It may be more prudent to include the cost of interlocking in this project estimate and present the potential for it to be funded by another scheme as an opportunity, rather than treating it as an exclusion.

The allowance for environmental mitigation measures (2.5%) appears low, particularly given the findings of the Preliminary Ecological Appraisal. The cost and schedule impacts of environmental mitigation can be significant and had a considerable influence on a recent similar project to bring the Dartmoor line back into National Rail service.

The allowance for civils/drainage works on the Heavy Rail Option 4C (and other options) appears low considering the relatively unknown ground conditions in the area. Further ground investigations will be required to more accurately inform these allowances.

5.9. Light Rail Estimate

The indirect costs presented for the light rail scheme appear high, constituting more than 50% of the total cost for both options DS1 and DS5.

Estimates produced by the project for light rail and heavy rail are difficult to compare. For example, the light rail estimate includes an allowance of circa £14.5m for signalling works, including re-signalling of March East area. The heavy rail estimate for the selected option (option 4C) assumes this cost is borne by another project (as mentioned above) and has a total allowance for signalling of circa £4m. Another example is Contractor's preliminaries. These have been calculated differently for the light and heavy rail schemes, resulting in very different figures being produced. The estimates should be produced using the same methodology and assumptions (as far as possible) to enable informed comparison and decision making.

As identified in the GRIP/PACE review (section 6 of this report), a cost planning report should be provided alongside any estimate. This should contain explanation of the estimate produced, as well as benchmarks to provide confidence that the estimated cost is realistic.



6. GRIP/PACE Review



6.1. Overview

At the time the documentation to be reviewed was produced by CPCA, Network Rail operated under the Governance for Railway Investment Projects (GRIP) project and programme delivery framework. This approach was developed to manage and control infrastructure investment projects in order to minimise and mitigate the risks associated with delivering projects and programmes.

In response to the government's challenge to the rail industry to pioneer new ways of working that will reduce the time and cost of delivering infrastructure projects, project SPEED (Swift, Pragmatic and Efficient Enhancement Delivery) was jointly developed by the Department for Transport (DfT) and Network Rail in the summer of 2020. This led to a number of key themes being identified, including Governance and Assurance.

This in turn led to the creation of PACE (Project Acceleration in a Controlled Environment). The PACE framework replaces GRIP and is designed with an increased level of flexibility and delegated authority for decision making to Network Rail's regions including individual projects and programmes.

All PACE deliverables have been assigned a RAG rating in accordance with where the requirement for their completion originates. The RAG rating supports the Sponsor and Project Manager in selecting the right products for the project and understanding what level of approval may be required to follow a different approach where that is in the best interests of successful project delivery.

Due to this change in project delivery framework, the documentation produced to date has been reviewed against both GRIP and PACE, with recommendations for addressing any gaps assessed only against PACE.



6.2. GRIP Product Analysis

Below is the list of GRIP products that would typically have been expected to be produced by a project that has reached GRIP stage 3 alongside Network Rail's assessment of whether these products have been created or not. As stated earlier in the document, due to the works not being undertaken by NR at that stage, it is envisaged that there will naturally be gaps in the GRIP products produced.

		GRIP Stage				
Ref	Product Name	1	2	3	Produced by Project	Comments
G1	Stage Gate Checklist				Χ	
G2	Stage Gate Certificate				Χ	
G3	LoC Assessment (Management Level of Control)				Χ	
CS1	Client Remit				Χ	
CS2	Sponsors Instruction				Χ	
CS3	Feasibility Report				√	GRIP 2 Heavy Rail Feasibility Report Low Cost Alternative Tram-Train Feasibility
CS4	Option Selection Report				√	GRIP 3 Heavy Rail Multi-Disciplinary Option Selection Report
CS5	Asset Management Plan (AMP Process)				Χ	
CS6	Diversity Impact Assessment				Χ	
PM1	Project Management Plan				Χ	
PM2	Stakeholder & Customer Management Plan				Χ	
RO	Requirements Management Plan (RMP)				Χ	
CA1	Land and Consents Strategy				Χ	Outlined in business case and delivery strategy
CA2	Land and Consents Commitments Register				Χ	
CA3	Network Change				Χ	Informal consultation only at GRIP 2 & 3.
CA4	Station and Depot Change				Χ	
CP2	Formal Cost Planning Report				Χ	Estimate produced but without accompanying report

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CP5	Lifecycle Cost GRIP 3 Report		X	Specifically excluded from business case - see section 5.3.2
RV1	Strategic Risk Assessment		Х	
RV2	Risk Register		√	Contained within business case
RV4	Quantitative Cost Risk Assessment (QCRA)		X	Risk based on percentages
RV5	Programme Quantitative Schedule Risk Assessment (QSRA)		X	
RV6	VM Output Definition		Х	
RV7	VM Option Selection		Х	
RV9	VM Lessons Learnt		Х	
EG0	Preliminary System Definition and Safety Verification Categorisation Application		Х	Acknowledged by Mott MacDonald in GRIP 3 report that CSM has not yet been considered - see section 14.2
EG5	Project Hazard Record		√	Hazard record in appendix C of GRIP 3 report - HAZID has been held
EG4	System Definition		X	
EG6	System Safety Plan		X	
EG7	Safety Justification Report		X	
EG2	Project Authorisation Strategy		X	
EG10	Engineering Compliance Certificate		X	
EN1	Environmental & Social Performance Appraisal		X	Environmental Report and Preliminary Ecological Appraisal have been produced
HS1	Safety Risk & Mitigation Log		X	
HS2	Project Safety Strategy		Х	
HS3	Health and Safety File		X	
CDM1	CDM Plan		X	



6.3. PACE Product Analysis

Below is the list of PACE products that would typically have been expected to be produced by a project that has reached the end of PACE 1, alongside Network Rail's assessment of whether these products have been produced or not. A narrative on each product has also been provided to explain its purpose as well as Network Rail's assessment on what would need to be done in order for the project to complete PACE 1.

		Produced	
Ref	Product Name	by Project	Comments/Recommendations
P.CR1	Client Remit	X	To be produced in order to complete PACE 1
P.CR2	Sponsors Instruction	X	To be produced in order to complete PACE 1
P.CR3	Asset Management Plan (AMP Process)	X	AMP001-003 forms to be produced in order to complete PACE 1
P.CR4	Diversity Impact Assessment	Х	To be produced in order to complete PACE 1
P.CR6	Option Selection Report	✓	
P.MP1	Phase Plan	X	To be produced in order to complete PACE 1
P.MP2	Phase Gate Certificate	X	To be produced in order to complete PACE 1
P.MP3	LoC Assessment	X	To be produced in order to complete PACE 1
P.MP4	↓ Project Management Plan	X	To be produced in order to complete PACE 1
P.MP4/1	→ Risk Management Plan	Х	Arrangements for risk management detailed within business case. Strategy to be produced in order to complete PACE 1 - this can form part of the PMP
P.MP4/2	→ Stakeholder & Customer Management Plan	X	Brief section within business case discussing communications and stakeholder management. Plan to be produced in order to complete PACE 1 - this can form part of the PMP
P.MP4/3	→ Scope Management Plan	X	To be produced in order to complete PACE 1 - this can form part of the PMP
P.MP4/4	→ Land & Consents Strategy	X	Outlined in business case - should be either a standalone document or form part of PMP
P.MP4/5	→ Project Safety Strategy	X	To be produced in order to complete PACE 1 - this can form part of the PMP

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P.MP4/6	→ Integrated Assurance & Approvals Plan	Х	Not required/appropriate at this stage. To be produced at next stage when there is more clarity over project direction.
P.MP5	Risk Register	√	Risks listed within business case and option selection report - do not appear to be quantified. These should be collated and quantified in terms of cost, time and probability (with appropriate mitigations defined) before the end of PACE 1.
P.RM1	Quantitative Cost Risk Assessment (QCRA)	Х	To be produced in order to complete PACE 1 for LoC 1 & 2 projects
P.RM2	Project Quantitative Schedule Risk Assessment (QSRA)	Х	To be produced in order to complete PACE 1 for LoC 1 & 2 projects
P.HS1	Health & Safety File	X	To be produced and updated as far as possible in order to complete PACE 1 - QF703 to be in place
P.HS2	CDM Plan	X	To be produced in order to complete PACE 1
P.HS3	Pre-Construction Information	Х	To be produced in order to complete PACE 1
P.HS6	Safety Risk & Mitigation Log	X	To be produced in order to complete PACE 1 - this can be combined into a single log with the Project Hazard Record (EG5) if preferred
P.CA2	Land and Consents Commitments Register	Х	To be produced in order to complete PACE 1
P.CA3	Network Change	Х	Not required at this stage - can be produced in PACE 2
P.CA4	Station and Depot Change	Х	Not required at this stage - can be produced in PACE 2
P.EN1	Environmental & Social Appraisal	Х	Some environmental deliverables produced but this is still required in order to complete PACE 1
P.CP1	Formal Cost Planning Report	Х	Summarised in business case - full report required in order to complete PACE 1
P.CP5	Lifecycle Cost Report	Х	Specifically excluded from business case - see section 5.3.2. It is recommended that this is produced before the end of PACE 1.

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P.RV6	VM Output Definition	X	Best Practice to complete this for complex projects in order to complete PACE 1
P.RV7	VM Option Selection	Х	Best Practice to complete this for complex projects in order to complete PACE 1
P.RV9	VM Lessons Learnt	X	Recommended that lessons learnt session is held prior to completion of PACE 1
EG0	Preliminary System Definition and Safety Verification Categorisation Application	Х	Acknowledged by Mott MacDonald in GRIP 3 report that CSM has not yet been considered - see section 14.2 of GRIP 3 report. This needs to be produced in order to complete PACE 1.
EG2	Project Authorisation Strategy	Х	Acknowledged by Mott MacDonald in GRIP 3 report that CSM has not yet been considered - see section 14.2 of GRIP 3 report. This needs to be produced in order to complete PACE 1.
EG4	System Definition	X	Acknowledged by Mott MacDonald in GRIP 3 report that CSM has not yet been considered - see section 14.2 of GRIP 3 report. This needs to be produced in order to complete PACE 1.
EG5	Project Hazard Record	√	Hazard record in appendix C of GRIP 3 report - HAZID has been held
EG6	System Safety Plan	Х	Acknowledged by Mott MacDonald in GRIP 3 report that CSM has not yet been considered - see section 14.2 of GRIP 3 report. This needs to be produced in order to complete PACE 1.
EG7	Safety Justification Report	Х	Acknowledged by Mott MacDonald in GRIP 3 report that CSM has not yet been considered - see section 14.2 of GRIP 3 report. This needs to be produced in order to complete PACE 1.
EG10	Engineering Compliance Certificate	X	To be produced in order to complete PACE 1



6.4. PACE Products Narrative

P.CR1 Client Remit

The purpose of the Client Remit product is to provide an overview of the scheme, including boundaries, interfaces, and known exclusions. It is also used to define the project requirements which will be developed through the lifecycle of the project. This document should be created at the point of project inception and helps to provide requirements traceability to ensure that all project requirements are delivered. This document should be produced in order to complete PACE 1.

P.CR2 Sponsors Instruction

The Sponsors Instruction acts as the project requirements document through the lifecycle of the project. It should be updated at regular intervals through the project lifecycle to track requirements at a level of detail appropriate to the stage the project is at. This document should be produced in order to complete PACE 1.

P.CR3 Asset Management Plan (AMP Process)

The Asset Management Plan (AMP Process) provides a mechanism for introducing new assets or affecting existing assets on NR's infrastructure through the development and implementation of an AMP which defines:

- a) The responsibilities for the various elements of inspection and maintenance before, during and after project works.
- b) The relationships and the exchanges of information between the Maintainer, Asset Owner and the Project Manager; and
- c) The required AMP deliverables in support of project works.

This supports:

- a) The arrangements for the management of assets undergoing change:
- b) Assurance of the continued safe and effective maintenance of all assets through the project lifecycle; and
- c) Network Rail in discharging its duties under the Construction, Design and Management Regulations, in accordance with NR/L2/OHS/0047, through the provision of pre-construction information.

In order to complete PACE 1 AMP forms 001-003 should be completed and agreed with the relevant Network Rail Project Interface Coordinator (PIC). The purpose of these forms is primarily to provide the asset maintainers with information regarding the project including scope and key contacts, and to agree a draft list of AMP products to be produced later in the project lifecycle.

P.CR4 Diversity Impact Assessment

The Diversity Impact Assessment (DIA) is a tool that helps the industry make sure that our programmes, policies, projects and the way we design, build and operate services works well for our staff and customers and ensures we are compliant with the Equality Act 2010. All projects should produce a DIA as early as possible during PACE 1, this can then be updated as the project progresses. A DIA should be produced in order to complete PACE 1.

P.CR6 Option Selection Report

A report containing evidence of a robust option selection process should be completed by all projects. This should include details of areas including (but not limited to): scope, requirements, selected option, compliance with requirements, constructability, access & possessions, programme, risks and assumptions.



An Option Selection Report has been produced for the project. Comments on this are provided in section 5 and Appendix A.

P.MP1 Phase Plan

The phase plan is a document that records the agreement between the Sponsor and the Project Manager regarding which PACE products are required, what stage of the project they are to be produced at and who is responsible for producing them. This should be populated by the project and used as the basis for the P.MP2 Phase Gate Certificate required below in order to complete PACE 1.

P.MP2 Phase Gate Certificate

The phase gate certificate is a version of the Phase Plan that contains a record of the project status at the end of each PACE phase. It details which products have been completed and provides a link to where they are stored on an appropriate document management system. This document should be signed by the Sponsor and Project Manager. This should be completed by the project as a formal record of the PACE 1 phase gate review.

P.MP3 LoC Assessment

The Level of Control (LoC) Assessment is a tool to determine how complex a project is, and in turn the controls and checks that must be placed around it. Projects are categorised from LoC 1 - 4, with LoC 1 being the most complex and LoC 4 the least complex. Projects are assessed against 6 categories:

- 1) Novelty
- 2) Technology & Design
- 3) Delivery Complexity
- 4) Pace
- 5) Operational Impact
- 6) Stakeholder Complexity/Reputational Risk

This assessment should be carried out by the project in order to complete PACE 1. Due to the proposed size and complexity of the project, it is likely to be assessed as a LoC 1 or LoC 2 project.

P.MP4 Project Management Plan

The Project Management Plan (PMP) describes how the project will be managed. This should include details of areas including (but not limited to): Scope, roles and responsibilities, stakeholder management, reporting, governance, risk management, planning, procurement and commercial management, environment and sustainability. Due the proposed size and complexity of the project it is recommended that a PMP be produced by the project in order to complete PACE 1.

P.MP4/1 Risk Management Plan

This document describes how risk is to be managed on a project. It is permissible for this to form a section of the PMP or to be a standalone document. Within Network Rail, a regional Risk Management Plan can be referred to if appropriate. Due the proposed size and complexity of the project it is recommended that a Risk Management Plan be produced by the project in order to complete PACE 1.

P.MP4/2 Stakeholder Management Plan

This document describes the project's approach to stakeholder management. It is permissible for this to form a section of the PMP or to be a standalone document. Due the proposed size and complexity of the project it is recommended that a Stakeholder Management Plan be produced by the project in order to complete PACE 1.



P.MP4/3 Scope Management Plan

The purpose of this document is to describe the processes and roles & responsibilities associated with the development, management and validation of the scope. It is permissible for this to form a section of the PMP or to be a standalone document. Due the proposed size and complexity of the project it is recommended that a Scope Management Plan be produced by the project in order to complete PACE 1.

P.MP4/4 Land & Consents Strategy

The purpose of this document is to identify the broad scope of land and consents requirements for the project and set out how these will be obtained/satisfied and supported through the project. The strategy should be produced as early as possible in PACE 1 and reviewed/updated throughout the project lifecycle.

It is noted that an outline Land & Consents Strategy has been included in both the business case and delivery strategy for the project. These documents have identified a Transport and Works Act Order (TWAO) as the preferred consenting route. Network Rail concur that this is appropriate for the currently proposed scheme.

It is recommended that a Land & Consents Strategy, either standalone or as part of a Project Management Plan, be produced by the project in order to complete PACE 1.

P.MP4/5 Project Safety Strategy

The Project Safety Strategy outlines the health and safety principles that apply to the project. It describes the safety policy, organisation and overall project safety arrangement applicable to design and delivery phases of the project. Due the proposed size and complexity of the project it is recommended that a Project Safety Strategy be produced by the project in order to complete PACE 1.

P.MP4/6 Integrated Assurance & Approvals Plan (IAAP)

This document enables the project to capture all assurance and approval activities in one place to provide an oversight of governance and assists in co-ordinating assurance activities and approval points to avoid overlaps or gaps. It is not necessary for the project to produce an IAAP in order to complete PACE 1, though it is recommended that one is produced at the start of the next stage of development.

P.MP5 Risk Register

The risk register exists to track and monitor any risks that might impact on a project. Risks are quantified in terms of time, cost and probability and feed into the QCRA (P.RM1) and QSRA (P.RM2) processes. A risk register has been created by the project and currently forms part of the business case document. These risks should be quantified in terms of time and cost to provide a view on the level of risk exposure to the project. These values will also feed into the QCRA and QSRA processes described below.

P.RM1 Quantitative Cost Risk Assessment (QCRA)

The QCRA is undertaken to provide a range of risk exposures (recommend appropriate contingency value) for an investment decision and/or to inform the adequacy of the current contingency (compare remaining exposure against the remaining contingency). A QCRA should be undertaken by the project in order to complete PACE 1.

P.RM2 Quantitative Schedule Risk Assessment (QSRA)

The QSRA is used to assess the likelihood of completing a programme of works to planned timescales and/or to provide a range of potential completion dates. The QSRA report captures the assumptions, risks and uncertainty to the delivery of the programme of works, together with any action plans required to ensure successful delivery. A QSRA should be undertaken by the project in order to complete PACE 1.



P.HS1 Health and Safety File

The Health and Safety File is a repository of health and safety information that serves as a legal record, benefitting both clients and end users – from initial construction through use, cleaning, maintenance, alterations and refurbishment, and demolition. By the end of PACE 1, the Principal Designer representative for the project should have:

- a) Contacted the NR National Records Group to obtain the QF703; H&S File Memorandum of Agreement and Deliverable Document Matrix;
- b) Completed the QF703, H&S File Memorandum of Agreement and Deliverable Document Matrix; and
- c) Agreed the format of records in the H&S file with the Client Representative and the National Records Group.

P.HS2 CDM Plan

The CDM plan provides detail and assurance on how the duties of the CDM regulations 2015 will be discharged and met by the project. The project should compile a CDM plan prior to completing PACE 1.

P.HS3 Pre-Construction Information

The purpose of this document is to draw together information in the client's possession (or which is reasonably obtainable by or on behalf of the client), which is relevant to the construction work and is of an appropriate level of detail and proportionate to the risks involved, including:

- a) Information about:
 - i. The project
 - ii. Planning and management of the project
 - iii. Health and safety hazards, including design and construction hazards and how they will be addressed; and
- b) Information in any existing health and safety file.

The project should compile a Pre-Construction Information pack prior to completing PACE 1.

P.HS6 Safety Risk & Mitigation Log

This document is used to identify and record any health and safety risks on the project, as well as actions to address them. It is permissible for this product to be standalone, or to be combined with EG5 Project Hazard Record. A Safety Risk & Mitigation Log should be produced prior to completing PACE 1.

P.CA2 Land and Consents Commitments Register

The purpose of this document is to record any consents that are required for the project based on the information known at the time. This document is a live register that is updated throughout the lifecycle of the project. A Land & Consents Commitment Register should be produced in order to complete PACE 1.

P.CA3 Network Change

Network Change is the process that projects must comply with if they are proposing anything that constitutes a physical change to the network, or a change to the operation of trains on the network. The process is in place to ensure that train operators are made aware of any changes to the network so that they can assess any impact this may have on their services and can plan accordingly. The project should begin informal consultation during PACE 1 and begin the formal process at the start of PACE 2.

P.CA4 Station and Depot Change

Stations alter throughout their life as things are added and taken away from them, and their use within the rail network changes. When stations are updated, either by projects or changing use, the contractual elements that guide the relationship between Network Rail and the Station Facility Owner will also change. These contractual elements are defined in the Station Access Conditions (SACs) for each station.



Station Change is the regulatory process used to facilitate these changes. The procedures are set out in the SACs and ensure that all users of stations are properly consulted about changes and that changes are formally registered with the ORR, so that the various parties can understand their obligations. The project should begin this process at the start of PACE 2.

P.EN1 Environmental and Social Appraisal (ESA)

This is a tool used to help identify and manage the environmental and social risks and opportunities associated with the project. The output of the tool is an action plan which allows projects to be developed in accordance with compliance obligations and industry best practice. Completing the ESA provides the project with a holistic assessment of the environmental and social risks and opportunities that must be managed for the successful delivery of the project. An Environmental and Social Appraisal should be produced in order to complete PACE 1.

It is noted that the project has produced a number of environmental deliverables, primarily an Environmental Report and a Preliminary Ecological Appraisal (PEA). Comment on these reports is provided in section 5.

P.CP1 Formal Cost Planning Report

The purpose of the Cost Planning Report is to provide a cost estimate for the project as well as a narrative explaining the makeup of costs and applicable benchmarks. Estimates are built using the Rail Method of Measurement (RMM) format. It is noted that an estimate has been produced as part of the GRIP 3 work for input into the business case. A Formal Cost Planning Report including benchmarking should be produced in order to complete PACE 1.

P.CP5 Lifecycle Cost Report

The purpose of the lifecycle cost report is to quantify the long-term costs of maintenance, operation and disposal to ensure that major capital projects balance the cost of acquisition with these ongoing whole life costs. It is recommended that a Lifecycle Cost Report is produced by the project prior to completion of PACE 1.

R.RV6 VM Output Definition

This is part of the NR Value Management process and comprises a facilitated workshop to determine the project purpose and functional requirements. A report is then produced to record the outputs of the workshop. It is recommended that a VM Output Definition workshop is held at the earliest available opportunity in order to help define the Minimum Viable Product (MVP) for the project.

R.RV7 VM Option Selection

This is the next part of the NR Value Management Process. It provides confirmation of the preferred option(s) for progression and is usually the result of a facilitated workshop but may also consist of a summary of option appraisals undertaken by the project and design teams. A VM Option Selection Workshop should also be held prior to the completion of PACE 1 in order to validate the work to date with reference to the VM Output Definition Workshop and MVP process.

R.RV9 VM Lessons Learnt

Another part of the NR Value Management Process. Lessons Learnt workshops should be held at the end of each PACE phase as minimum. The purpose of this is to support NR's strategic vision to become a learning organisation, improving business through better understanding of systemic issues. It is recommended that the project holds a Lessons Learnt workshop prior to the completion of PACE 1.

EGO Preliminary System Definition and Safety Verification Categorisation Application

This document should be produced during the feasibility stage of the project (GRIP 2/PACE 1 ES2) at the latest. It provides details of the project scope, novelty and complexity amongst other things, which help to provide a project position on Common Safety Method (CSM) significance and Interoperability. This position



then needs to be verified by Network Rail Assurance Panel (NRAP) and influences the level of application of CSM and Railways (Interoperability) Regulations (RiR) required on the project. The Preliminary System Definition and Safety Verification Categorisation Application should be produced by the project as soon as possible as the outcome of these processes will influence the level of CSM-RA application required on the project.

EG2 Project Authorisation Strategy

The Project Authorisation Strategy sets out which elements of the project will require authorisation for placing into service under the RiR and also whether the project delivers significant change to the railway system as defined by the CSM regulations. The document should set out the proposed scope, structure and timescales for:

- The authorisations to be obtained from the safety authority;
- Any derogations from the requirements of applicable technical specifications for interoperability (TSIs) to be obtained from the competent authority; and
- The safety assessments and associated safety acceptances required to bring the project into use.

This document needs to be produced to enable the project to complete PACE 1.

EG4 System Definition

The System Definition is one of the key CSM documents to be produced by projects. The purpose of the document is to complement the hazard record by bounding the scope of the hazard identification and risk assessment process and provide sufficient context to facilitate an assessment of the correct application of the process by an independent body. This is a live document that should be updated through the project lifecycle as details of the project emerge.

This document needs to be produced to enable the project to complete PACE 1.

EG5 Project Hazard Record

A hazard record should be started from the beginning of the project to record safety hazards for the various options being considered and be used to inform feasibility work and subsequent option selection. The hazard record should be updated (including identification of any new hazards) and maintained throughout the project lifecycle. It is noted that a HAZID workshop has been held and a hazard record produced and provided in appendix C of the GRIP 3 multi-disciplinary report, though the format of this hazard record does not meet all the mandated requirements of CSM-RA.

EG6 System Safety Plan

The System Safety Plan is another key part of the CSM suite of documents. The main purpose of the document is, as part of the risk management process, to identify the different 'actors' tasks, and their risk management activities through the lifecycle of the project. It should be updated at regular intervals as the project develops.

This document needs to be produced to enable the project to complete PACE 1.

EG7 Safety Justification Report

A further key part of the CSM process, the purpose of the Safety Justification Report is to present the hazards identified as a result of the significant change and demonstrate that these are controlled to be tolerable and As Low as Reasonably Practicable (ALARP) through a means of safety measures. It should show that the system is suitably safe by demonstrating compliance with all safety requirements set in the System Definition, or, where Safety Requirements have not been met, the safety impact has been judged to be tolerable and ALARP.



This document needs to be produced to enable the project to complete PACE 1.

EG10 Engineering Compliance Certificate

The purpose of the Engineering Compliance Certificate is to formally accept evidence of compliance to the technical scope and requirements documentation, identify any formalised changes or variations to this scope as well as present any non-compliance to Network Rail standards. This can be utilised at any point in the project lifecycle to check compliance but is typically used at the end of GRIP stages/PACE phases. An Engineering Compliance Certificate should be produced in order to complete PACE 1.

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7. Next Steps



Before the project proceeds any further, it is recommended that discussions are held between NR, CPCA and DfT to determine the future direction of the project. As well as heavy rail, other options such as tram-train and light rail should be further considered as per the recommendations of the NR engineering report and NR light rail feasibility study.

Next steps from the NR engineering and light rail feasibility studies are collated below.

NR Engineering Report

- 1. The multiple options and permutations for providing a service between March and Wisbech need to be reduced and refined to enable the project to move forward.
 - The continued consideration of multiple options and permutations impedes cost and time efficient development.
- 2. The development of a more detailed strategic approach to level crossings is required that considers the safety, financial, project and performance risks and issues associated with closure, upgrade, highway diversion and grade separation.
 - There will be an increase in the level crossing risk profiles due to an increase in road traffic since the line last operated. Closure of any level crossing will be subject to agreement with any users and financial settlements may be required. Where level crossings are to remain open risks will need to be mitigated in the context of different modal options and how rail vehicles operate along the line.
- 3. Further work is required to explore the light rail tram-train solution
 - Network Rail's Light Rail and Knowledge team's report (Source Document 11) concludes that there is potential for a light rail passenger operation between March and Wisbech. The assessment of suitable rolling stock types concludes that Tram; Tram Train, or Very Light Rail vehicles could be used. The operating costs of light rail are likely to be significantly lower than comparable heavy rail services.
- 4. Further work is required to confirm the passenger and freight demand, particularly post COVID-19 pandemic, to determine the most appropriate solution that meets this demand.
 - The reports do not adequately evidence a thorough Transport Study and therefore do not provide a solid base on which to make an informed decision. Both heavy and light rail tram-train facilitate freight services. A light rail tram-train option offers a potentially more credible solution based on overall cost, an optimised level crossing strategy, connectivity to the National Rail network and direct access into Wisbech Town and Wisbech Garden Town.
- 5. Develop a System Definition and System Safety Plan in line with the proposer's legal obligations set out in Common Safety Method for Risk Evaluation and Assessment Regulation (EU) 402/2013.
 - The starting point for anyone proposing any change in relation to the mainline railway system is the Common Safety Method RA, and this applies when any technical, operational or organisational change is being proposed to the railway system. The proposer in this instance is deemed to the combined local authority or their agent.
- 6. A detailed asset condition survey is required for the entire route. This will assist in confirming the rail infrastructure work required for the option selected.

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The condition of the former railway infrastructure is not known and it has not been fully maintained since the line was mothballed. A full asset condition survey will enable greater clarity on the scale and costs of any railway infrastructure works required.

Light Rail Feasibility Report

- The legal status of all the former level crossings on the March to Wisbech line should be confirmed.
 Confirmation is required if the legal status needs to change if the route is to be used by light rail vehicles.
 Establishing the existing rights and liabilities at each crossing will help inform the appropriate solution for each vehicle option.
- 2. Options for the ownership, operations and maintenance responsibility for the route need to be identified and resolved prior to further development. This includes any on street system into Wisbech town centre or the extension to serve the Garden Town.
 - While Network Rail retains the freehold of the former railway alignment and associated land there are various options for the long term reinstatement of the route and service. Any extensions beyond the existing Network Rail land boundary create options for the delivery, operation and ownership of any assets.
- 3. A detailed asset condition survey is required of the entire route. This will assist to confirm the level of remedial work required to reinstate any form of rail infrastructure. This survey to include March Station and the required alterations to create a fully accessible route to the Wisbech platforms.
 - The former railway infrastructure has not been fully maintained since the line was mothballed. A full asset condition survey will enable greater clarity on the scale and costs of any reinstatement of railway infrastructure.
- 4. Continued analysis of the light rail rolling stock market and the opportunity for further development in areas such as stored energy and very light rail.
 - There are continuing technological developments in light rail that may provide further opportunities for the Wisbech to March route. The very light rail market is still emergent and the full capability (and limitations) of this mode are not yet fully understood.
- 5. Consider the requirements of providing a double track route between Wisbech and March.
 - The ability to provide a full double track route will confirm the maximum capacity of the route and determine the degree to which any future-proofing works are required should the initial phase of reopening be less than double track.

Development Group



Appendix A. NRDD Engineering Review





March to Wisbech Engineering Assessment Report

Project Name:	March to Wisbech	
Project Number:	OP: 176291	Task: 1.3.1
Development Manager:	Mark Chettle	

Prepared by: Christopher Ruddy	Signature:
Date: 22-0-2022	Job Title: Senior Project Engineer
Peer Reviewed by: Peter Harman	Signature:
Date: 22-02-2022	Job Title: Principal Engineer
Approved by: Amanda Mumford-Rudd	Signature:
Date: 22-02-2022	Job Title: Scheme Design Team Lead and Principal Engineer

Document version control				
Date	Version	Editor	Approver	Description / Change reason
24.01.22	1.0	Christopher Ruddy	Amanda Mumford-Rudd	Draft for comment
22.02.22	2.0	Christopher Ruddy	Amanda Mumford- Rudd	Final document for issue





Executive Summary

The railway from March to Wisbech was opened by the Eastern Counties Railway in 1847 and became part of the Great Eastern Railway in 1862. Originally built as a double track railway to serve the Port of Wisbech, it was later extended to Watlington Junction on the Ely to King's Lynn route.

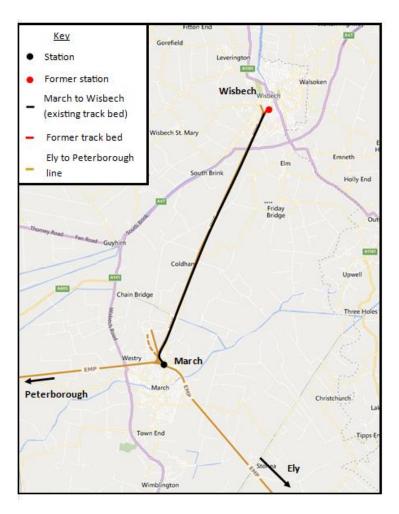


Figure 1 March to Wisbech Line

Passenger service ceased in the 1960s. Until 2000 it was used for freight-only operations as far as the Metal Box and Purina sites, located south of Wisbech. The line has not been formally closed, nor has it been subject to Network Change. It remains part of the existing railway network.

Cambridgeshire and Peterborough Combined Authority propose a transport link from Wisbech to Cambridge based on the previous rail connection between March and Wisbech. Mott MacDonald have investigated the feasibility of heavy rail and light rail alternatives and concluded the preferred transport mode is heavy rail.

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Network Rail's Scheme Design Team have been asked by Network Rail's Capital Delivery Eastern Region to undertake a feasibility review of the proposals developed by Mott MacDonald on behalf of the Cambridgeshire and Peterborough Combined Authority based on 9 key documents and other supporting information produced by Mott MacDonald. This report summarises the findings of that review.

The purpose of the Scheme Design Team's review is:

- a) to consider any identified gaps in the scope of the study or recommendations as to areas to investigate further
- b) to review the risks of undertaking the work identified in the study to Network Rail and advise on the completeness of the hazards detailed within the material presented for review
- c) to recommend what actions will be required to develop the study to achieve the end of GRIP 3 (PACE Phase 1)
- d) to advise on the appropriateness of the rail solution proposed and consider this relative to light rail options
- e) to consider the impact of freight services running on a new line to Wisbech

This feasibility review concludes:

- The reports produced by Mott MacDonald are wide ranging with options and conclusions which are considered in this report.
- There are gaps in the reports including:
 - The assumptions relating to level crossings require further examination and the development of a more detailed strategic approach that considers the safety, financial, project and performance risks and issues associated with closure, upgrade, highway diversion and grade separation
 - There is limited consideration of the requirements of the Common Safety Method - Risk Evaluation and Assessment (EU 402/2013), now enshrined in UK law
 - The demand modelling is limited, and the reports do not provide sufficient evidence on which to make an informed decision to reinstate conventional heavy rail services. The reports demonstrate a desire to facilitate freight services, without providing any clarity on the services required or that the potential market for freight services exist.
- The risks identified are wide ranging and appropriate for this stage of development. Looking forward:
 - As the project progresses all new and existing risks will need to be considered on an iterative basis for the transport solution progressed
 - The lack of a clear level crossing strategy is currently the biggest risk to the project
 - The qualifications and assumptions documented including those relating to level crossings will need to be validated

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- Given the current number of options and permutations including those relating to modal choice, station location and passenger/freight demand, progression to GRIP 3 (now PACE Stage A/1) is challenging. To successfully progress requires:
 - The client to make informed decisions limiting the options and permutations
 - A detailed geotechnical survey of the trackbed, embankments and major structures is required along the entire route to confirm their suitability for use and to identify any remedial works required
- A heavy rail solution facilitates the introduction of conventional freight and passenger services and uninterrupted connectivity to the National Rail network. However, a lower cost Tram Train/light rail solution may be more appropriate based on:
 - A Tram Train solution facilitates uninterrupted connectivity for passenger services to the National Rail network with the added advantage of including a service to Wisbech town centre and to the proposed Wisbech Garden Town
 - A light rail solution, whilst not facilitating uninterrupted connectivity for passenger services to the National Rail network, is a credible solution for point-to-point transport and services to Wisbech town centre and to the proposed Wisbech Garden Town
 - The overall strategy for addressing the issues associated with level crossings is simplified by a Tram Train/light rail solution, which would permit application of lower cost minimum intervention installations
 - There is an opportunity to consider light freight trams/Tram Train as has been utilised in Europe
- Conventional freight services are only accommodated by a heavy rail
 infrastructure solution. The reports demonstrate a desire to facilitate freight
 services, without providing any clarity on the services required or that the
 potential market for freight services exist. The impacts of facilitating freight
 services on the line include:
 - Potential interruption to passenger train paths by freight services
 - An increase in the rate of degradation of the asset
 - Increased capital and maintenance costs associated with heavy rail
- Uninterrupted connectivity onto the wider rail network is dependent on the
 availability of train paths. Currently these are constrained and there are
 competing demands from train operators for these train paths. Future demand
 and economic valuation of train paths together with forthcoming changes to
 industry structure will introduce a greater strategic focus on network capacity
 utilisation and may affect the availability of train paths beyond the Wisbech
 route

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In conclusion, the Scheme Design team's feasibility review considers that whilst heavy rail is a viable option, light rail may offer a more appropriate solution. We recommend further work to examine the lower cost light rail Tram Train option. This is reinforced by Network Rail's Light Rail team's study which concludes that light rail is a credible and feasible option.

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1. Introduction

Network Rail Design Delivery's Scheme Design Team have been instructed by Network Rail's Capital Delivery Eastern Region to undertake a feasibility review of the proposals developed by Mott MacDonald on behalf of the Cambridgeshire and Peterborough Combined Authority, who propose a transport link from Wisbech to Cambridge based on the previous rail connection between March and Wisbech.

The work undertaken by Mott MacDonald began in 2015 and a significant number of documents were produced to inform the development of the proposed transport link. Key documents were updated and re-issued in 2020 and the feasibility review by Scheme Design Team is based on a desktop review of these updated documents.

2. Background

The railway from March to Wisbech was opened by the Eastern Counties Railway in 1847 and became part of the Great Eastern Railway in 1862. Originally built as a double track railway to serve the Port of Wisbech, it was later extended to Watlington Junction on the Ely to King's Lynn route. The line from March to Wisbech; the Wisbech Goods Branch, Engineer's Line Reference (ELR) WIG, runs from March East Junction at 85 miles 78 chains to the nominal end of the line at 93 miles 49 chains at Wisbech. Passenger service ceased in 1968. The track has been substantially removed beyond Weasenham Lane level crossing at 93 miles 15 chains. The remaining rail corridor remains in Network Rail ownership.

The line was constructed as a twin track railway but was single lined in 1972. From 1972 to 2000 it was used for freight only operations as far as the Metal Box and Purina sites, located south of Wisbech. The March end of the line continues to be used to access Whitemoor Yard in conjunction with the chord line from March West Junction and to support shunting movements, but only as far as 86 miles 18 chains.

The line was operated on the "One Train" principle with a Train Staff (OTS), and therefore facilitated only one train operating on the line at any one time.

Since 2000, the line has been officially described in the Network Rail Sectional Appendix as "Out of Use" (temporarily), from 86 miles 18 chains to Wisbech". The line has not been formally closed, nor has it been subject to Network Change, taking it out of the existing National Rail railway network.

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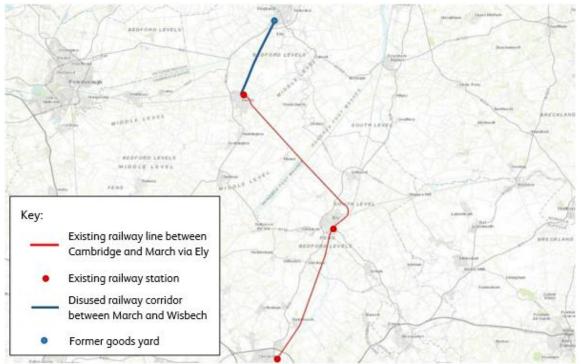


Figure 2 Cambridge to Wisbech via March.

Source: Mott MacDonald/GIS Mapping Low cost alternative Tram Train feasibility report 2019

When in freight only use, the line had a nominal permissible speed of 25mph, but lower restrictions applied over some of the numerous level crossings to manage level crossing risks associated with the line of route, which is largely straight and virtually level throughout.

The line has not received any recent maintenance nor renewal of track and other discipline apparatus.

3. Scope of the study

The scope of this study is to undertake a feasibility review of the proposals developed by Mott MacDonald on behalf of the Cambridgeshire and Peterborough Combined Authority, who propose a transport link from Cambridge to Wisbech based on the previous rail connection between March and Wisbech.

The purpose of the review is:

- a) to consider any identified gaps in the scope of the (Mott MacDonald) study or recommendations as to areas to investigate further
- b) to review the risks of undertaking the work identified in the study to Network Rail and advise on the completeness of the hazards detailed within the material presented for review
- c) to recommend what actions will be required to develop the (Mott MacDonald) study to achieve the end of GRIP 3 (PACE Phase 1)

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- d) to advise on the appropriateness of the rail solution proposed (by Mott MacDonald) and consider this relative to light rail options
- e) to consider the impact of freight services running on a new line to Wisbech

The report structure reflects these five subject areas.

This is a desktop review informed by nine key documents commissioned by Cambridgeshire and Peterborough Combined Authority and written by Mott MacDonald. These documents are:

1. Heavy rail feasibility report:

March to Wisbech Transport Corridor: GRIP2 Heavy Rail Feasibility Report 05 August 2019 398128 | 002 | B

This report investigates the feasibility and cost of re-opening the railway line between March Station and Wisbech to heavy rail services.

2. Heavy rail multi-disciplinary option selection report

March to Wisbech Transport Corridor: GRIP 3 Heavy Rail Multi-Disciplinary Option Selection Report

26 June 2020 398128 | 009 | C

This report documents the optioneering and engineering employed, to develop a single preferred heavy rail solution, for the March to Wisbech transport corridor, to the level of detail required to support Full Business Case (FBC) cost estimation.

3. Assessment of rail operations report:

March to Wisbech Transport Corridor: Assessment of Rail Operations 17 March 2020 398128 007 C

This report describes the operational analysis that has been undertaken to examine possible timetable patterns, service constraints and capacity for introducing a two train per hour (2tph) service between Wisbech and March.

4. Low-cost alternative - Tram -Train feasibility report:

March to Wisbech Transport Corridor: Low-Cost Alternative – Tram Train 16 August 2019 398128 | 004 | B

This report describes the proposed Tram Train solution and set out the rationale for selecting this mode as the low-cost alternative to heavy rail.

5. Delivery strategy:

March to Wisbech Transport Corridor: Delivery strategy 20 July 2020 398128 | 009 | E

The purpose of the Delivery Strategy is to identify and assess potential approaches to deliver the preferred scheme option that was identified earlier in the project lifecycle in the Options Assessment Report (OAR).

6. Environmental report:

March to Wisbech Transport Corridor: Environmental Report July 2020 398128IMMD-00-XX-RP-EN-001IB

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This report presents the environmental constraints and opportunities for the reinstatement and refurbishment of the March to Wisbech rail corridor and March Station as well as the creation of a new railway station at Wisbech.

7. Alternative highway schemes report:

March to Wisbech Transport Corridor: Environmental Report 10 July 2020

This report summarises alternative options for highways Schemes 1 and 2 and recommends a preferred option for each scheme.

8. Comments register:

This spreadsheet captures inputs from industry and the requirement to actively involve and consult with industry providing their advice on potential delivery structures and mechanisms to support the business case submission.

9. Full business case:

March to Wisbech Transport Corridor: Full Business Case 26 June 2020 398128-011-E

This report identifies a single option design in accordance with Transport Appraisal Guidance requirements for the March to Wisbech Transport Corridor.

- 10. Other related documents have been considered including:
- 11. Network Rail's Light Rail Knowledge & Development team's Report

Wisbech to March: Potential for Light Rail December 2021

Network Rail's Light Rail Knowledge & Development team assess the potential for reopening rail passenger services on the former March to Wisbech line using light rail technology. This report summarises the findings of that assessment.

No topographic surveys, site investigations, structural condition assessments or site visits were required or undertaken as part of this review.

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4. Supporting background information

In this section of the report, we provide additional background on factors affecting the introduction of heavy rail passenger and freight services between March and Wisbech and onward to Cambridge. This is intended to provide additional context relating to project risks, opportunities, barriers, dependencies and constraints relating to the introduction of train services and summarises the known capacity and journey time constraints on the existing rail network.

Operational constraints including connectivity to wider network

As custodians of the existing rail network, Network Rail is responsible for maintaining and developing the current operational railway alongside enhancements. This is an agreed industry process which engages TOC, FOC, Local Authorities and other appropriate partners and stakeholders.

There are several possible schemes being considered on the routes from March which have the potential to impact on any proposed March to Wisbech service.

Current and proposed infrastructure allows for maximum of 2 trains per hour from Wisbech to March. There is limited expansion capability to improve upon this with current proposals. There is an aspiration for trains to continue onward to Cambridge. Currently there are no onward paths to Cambridge.

At the time of writing, no major renewals or enhancements are known to be confirmed, although various works streams have been proposed, most notably a project at Ely North Junction, known as the Ely Area Capacity Enhancement (EACE). This project aims to increase the trains paths through Ely North Junction to 11 trains per hour, but crucially this does not appear to include any provision for additional services for Wisbech to Cambridge, which would require 13 trains per hour through Ely North Junction. To fully understand the performance/resilience impact, operational modelling is required, and should be carried out as part of the March to Wisbech project and the Ely Area Capacity Enhancement project.

Further constraints include the existing platform and track layout arrangement at March station which would require some alteration to allow for the additional train movements required to run trains to/from Wisbech. The track layout at March is already very restrictive as trains have to use the bi-directional Platform 2 to reach Whitemoor Junction and Whitemoor Yard. The proposed infrastructure includes reinstatement of a Platform 3 at March.

The main constraint on train services is the fact that this is a single line route, with no capacity for trains to pass. This facilitates a maximum of two trains per hour in each direction. The introduction of a passing loop is required to enable a 30 minute service interval to be achieved, enable service reliability, and allow for any potential increase in service. However, there will be limitations subject to timetable recast to provide any service further than March.

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Infrastructure assets

The existing asset condition and the need for major renewal of track bed, rails, sleepers and fastenings is required, as well as heavy maintenance or renewal/upgrade of several bridge structures on the route.

Level crossings

There will be an increase in the level crossing risk profiles due to an increase in road traffic since the line last operated. Re-introducing conventional heavy rail services will require an assessment of ALCRM level crossing risk scores. It is assumed it will be possible to close the majority of level crossings. However, where this is not possible, such as the A47 trunk road, significant highway redirection or a grade separated crossing would be required, at significant cost. Where level crossings are proposed for closure, there is a need for a full consultation with users on the future of the crossings. Although most are minor roads, they do serve communities which may be severely inconvenienced by closure. Closure of any level crossing will be subject to agreement with any users and financial settlements may be required. Where level crossings are to remain open, all level crossing apparatus would require to be completely renewed and upgraded to meet current legislation and regulatory requirements.

A light rail Tram Train operation would permit application of lower cost minimum intervention installations and could cut the cost of project implementation and operation by a considerable factor.

Should train services continue to Ely or Cambridge, there are 38 level crossings of various types between March and Cambridge. Each one of these would be subjected to risk assessments associated with the introduction of additional rail services. This is a significant issue for the Wisbech - Cambridge 2 trains per hour (tph) service pattern, if implemented. The introduction of a 2 tph service would increase the number of trains across these level crossings by four services within a one - hour period. Network Rail would need to demonstrate that risk factors such as barrier down time (affecting road traffic) have been considered and increased risk of interaction between trains and road/pedestrian users is mitigated. As additional services running through the existing level crossings between March and Cambridge would increase level crossing risk, they may also trigger a requirement to upgrade these level crossings or replace with bridges.

Environmental including land acquisition

The original line of route is no longer complete, with conurbation and industrial building developments over the original line. Any new railway operating would be significantly shorter than the original without considerable new green field railway line being built or property acquisition to regain the original route lost to development.

For a heavy rail solution the only realistic option for the town would be a brownfield site next to the Nestle Factory. The factory is located at the northern end of the discussed railway corridor, the existing factory occupies the site of the former Wisbech Goods Yard. The site prevents a direct link from the corridor to Wisbech town centre.

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For a light rail Tram Train solution, a street running agreement with the council would be required to limit/avoid property demolition.

Rolling stock

Any rail solution will be dependent on the availability or procurement of additional rolling stock irrespective of level of service or modal choice.

This needs to be in line with current decarbonisation and elimination of dependence on fossil fuel strategies. This means rolling stock needs to be powered by battery, OLE, hydrogen, diesel/battery. Self-powered, bi-mode and hybrid are all potential considerations.

The availability of heavy rail rolling stock for cascading is limited and unlikely to deliver against a decarbonisation strategy. Adapted or new rolling stock would be required.

Light rail Tram Train vehicles support a low carbon traction power solution. Light rail vehicle suppliers routinely design rolling stock to meet individual system requirements on which they will operate.

A light rail solution does not preclude freight. A Tram Train or light rail solution offers a possible alternative freight potential using freight tram trains similar to those used in Europe.

Heavy rail freight and Train are suited to and support different types of freight movement. A light rail freight solution can have the advantage of facilitating the transport of materials and goods that are uneconomic to move using heavy rail.

The freight capability of rolling stock is dependent on both the rolling stock and the infrastructure provided.

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5. Study gaps and further investigation

The reports explore the feasibility of heavy and light rail options and are wide ranging with options and conclusions that are considered in this report. This report identifies a number of areas which would benefit from further investigation.

Level crossings

Level crossings have been considered for all potential solutions. However, the level crossing portfolio would benefit from further consideration as the safety, financial, performance and project risks remain a significant liability for the project.

The Mott Macdonald report identifies 23 level crossings which includes the Wisbech Bypass AOCL crossing the A47 trunk road. This is informed by Network Rail's 2016 Level Crossing Closure report and a 2015 Mott MacDonald site walkout. Network Rail Light Rail and Knowledge team's report (*Source Document 11*) identifies 7 active and 12 passive crossings. This is informed by analysis of mapping imagery/data to identify physical evidence of level crossings in situ supported by evidence obtained from a site visit. The number of level crossings and the project requirements at these locations; closure, upgrade, highway diversion and grade separation, need to be clarified.

It is entirely possible that where level crossings are present, these could not be brought back into use in today's environment; grade separated crossing would be required, such as road bridges or re-routed highway. The potential costs associated with grade separation and re-routing of highways are included in the report costs estimates.

The GRIP 3 Heavy Rail Multi-Disciplinary Option Selection Report (*Source Document 4*) assumes that several level crossings could be closed, either by Compulsory Purchase Order or negotiation, and others can be bought from landowners. No alternatives are given, and further work is required to identify alternatives should this not be the case and there are challenges associated with closure.

The GRIP 3 Heavy Rail Multi-Disciplinary Option Selection Report (*Source Document 4*) also assumes that a number of more complex highway level crossings will be replaced with bridges. Work needs to be done to confirm that these assumptions can be realised. Again, no alternatives are given should this not be the case.

Depending on the modal choice, rolling stock and traction type eventually decided upon, level crossing closure or renewal will be a major consideration, and safety and financial risk. This is further exacerbated by the potential need for grade separated crossings between rail and road traffic which potentially requires major road redirection or grade separated structures to be built.

A light rail option would permit application of lower cost minimum intervention installations, or retention of automatic installations. A full Tram Train option would offer the opportunity to remove standard railway crossing controls completely with the

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installation of signalised traffic light junctions at light rail/road interfaces. This would be subject to suitable risk assessment at each location.

Common Safety Method

None of the documents reviewed mention Regulation 402/2013 on the Common Safety Method for Risk Evaluation and Assessment (CSM - RA) to any great extent, other than the financial cost of carrying out this process. CSM - RA is a legal requirement mandated by EU, and now UK law. It is essential that the process to identify existing hazards (as well as known and potential future hazards) is started as early as possible, and how the risks these present are, or may, be mitigated.

A simple, initial Hazard Record is included in Appendix C of the GRIP 3 Heavy Rail Multi-Disciplinary Option Selection Report – Page 193 (Source Document 4). However, the format of the hazard record does not meet all the mandated requirements of CSM - RA.

Determine the need for freight

The demand modelling is limited. The reports demonstrate a desire to facilitate freight services, without providing any clarity on the services required or that the potential market for freight services exist. A specialist transportation demand assessment for both potential passenger and freight traffic would inform the decision of modal choice and potential current and future freight opportunities. The need for freight capability and the type of capability on the line needs to be further understood and confirmed, as this impacts on the appropriate solution to be taken forward, and whether or not the line continues to be suitable for freight traffic including gross tonnage and frequency.

Heavy rail/Tram Train/light rail solution

A study by Network Rail's Light Rail Knowledge team (Source Document 11). commissioned by Cambridgeshire and Peterborough Combined Authority, has considered the suitability of light rail technology for the provision of a passenger rail service between March and Wisbech. The study concludes that a light rail operation appears feasible with several options of vehicle type available. These include the potential for the introduction of light rail freight vehicles. The report further concludes:

- a Tram Train would be an optimum light rail solution
- the number of level crossings on the route may make a full or hybrid light rail operation cheaper than a comparable heavy rail solution

Further work is recommended to examine the light rail and in particular the Tram Train option in more detail.

Signalling

The method of new signalling is not fully detailed; the line was One Train Staff working previously. If a passing loop is required, then Track Circuit Block with new colour light signals is stated as being the only option for signalling. The number and location of signals is entirely dependent on the headways required, number of level crossings and

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what type of level crossings are implemented. There is no confirmation that the existing electro-mechanical signalling is suitable for additional locking that may be required at March East Signal Box, especially if layout alterations at March East Junction and/or station layout are required. The reports reviewed only suggests a new NX (eNtry – eXit) panel or Visual Display Unit (VDU) solution may be needed at March Signal Box for any new signalling option.

There is no mention as to what means of signalling would be employed if Tram Train or other light rail were to be chosen as the solution. This is perhaps not needed at this early stage.

Traction power

There is currently no traction power supply on the existing railway between Ely and Peterborough via March. The various reports reviewed provide limited information on traction power solutions.

There is some commentary on the difficulty of providing OHLE apparatus for a light rail solution in Wisbech town centre due to the nature of the streets and buildings, coupled with their listed status. The reports do not comment on the feasibility or difficulties that may be encountered by electrifying the March to Wisbech branch other than it would be expensive. There is no commentary on the feasibility of providing the necessary infrastructure to cater for OHLE, and if this would be achieved using conventional piles, or screw/helical piles, or if the topography of the landscape is suitable for these types of structures. There is no mention if geotechnical surveys have been carried out for this purpose, however, the GRIP 3 heavy rail report does state that these may be required at a later stage; GRIP 4.

Traction power based on low carbon alternatives are not considered. There are similar low carbon traction power systems for heavy and light rail options. There are opportunities to introduce self-powered vehicles using new and existing technology including battery, hydrogen, diesel/battery/bi-mode/hybrid and ground based fast charging systems. Battery/bi-mode technology is used in Europe and is currently being introduced onto the UK national rail network. A ground based fast charging system is currently being trialled in the UK.

Approaches to traction power need to be explored in more detail.

Geotechnical and ground condition for overhead line

Geotechnical and ground topographical surveys for any OHLE apparatus structure may be required to assess the ground suitability for these structures, and for any grade separated crossing solutions.

Future work bank

The full business case report (*Source Document 9*) provides minimal commentary on Network Rail Eastern's current workbank, and any opportunities to combine any works

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required with planned workbank to take advantage of any line of route or major renewals, and to provide economy of scale. Projects mooted include resignalling of Ely and Cambridge areas (CP7) and the Ely Area Capacity Enhancement (EACE) Scheme (no indicative Control Period date given, CP7 earliest)

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6. Risk review of work identified

As a general principle, the original reports have considered the potential hazards and subsequent risks but may have not fully accounted for all the hazards and risks that may be introduced by some of the options presented.

The Full Business Case (*Source Document 9*) document has a comprehensive risk section, detailing risk in a hierarchy with three categories:

- 1. Strategic risk
- 2. Programme risk
- 3. Scheme risk

Mitigating factors for these risks are provide in tabular form in the report.

These are further broken down into 19 key project risks, along with uncertainties and sensitivity analysis coupled with assumptions. No mitigating factors are proposed.

The Heavy Rail Feasibility Report (*Source Document 4*) has 10 principal risks identified for that option:

Risk 1. The timetabling assessment work has been based on the existing timetable. There is a risk that a re-cast of the timetable will affect the assumptions made.

Risk 2. Network Rail have previously stated that the timetable alterations for a service from Wisbech to Cambridge are not deemed possible at this time. 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 a key dependency for any proposed Wisbech to Cambridge rail service.

Risk 3. The introduction of a new double junction at March is unlikely to be welcomed by Network Rail Asset Management and an alternative layout might be required – this may not be readily achieved.

Risk 4. The layout is constrained by March East Signal Box; its listed status may mean relocating it.

Risk 5. The introduction of a new fixed diamond crossing for the Peterborough turnback layout is unlikely to be accepted by Network Rail Asset Management. An alternative layout might be required, and this may not be readily achieved.

Risk 6. The provision of a diverse "B-leg" for safety critical signalling and telecommunications circuits has not been explored but will be required.

Risk 7. Re-decking WIG/2314 Chain Bridge may not be possible without alterations to the levels of the adjacent highway.

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Risk 8. The effect on pedestrian flow and fire evacuation arrangements resulting from the proposals for March Station have not been investigated.

Risk 9. The effect of the March Station proposals on the Operation of Whitemoor Yard has not been investigated in detail.

Risk 10. For services from Wisbech to Cambridge and Wisbech to Peterborough, additional rail traffic on the network will alter level crossing risk profiles between March and Cambridge/Peterborough Stations. This may trigger requirements for additional level crossing upgrade or closure schemes.

Completeness of hazards

At this early stage, the hazards encountered by constructing and operating the chosen solution have not yet been fully investigated and would need to be considered via a Quantified Risk Assessment (QRA) and/or hazard workshop(s) once the final solution has been chosen. This process should already have been started and documented, driven by CSM - RA obligations. This process should be started as early as possible. CSM - RA legislation dictates the risks should be reduced so far as is reasonably practicable. CSM - RA legislation also states that a project should list the existing hazards, prior to any work commencing or changes implemented.

Hazards regarding the numerous level crossings on the route are not fully complete, given that it may not be possible to re-open some level crossing, landowners may reject the opportunity to sell or give up access, and if others cannot be closed by Network Rail.

For the level crossings that remain, there is little commentary on the difference between level crossing operation when used by heavy rail (including freight) versus Tram Train/light rail. As a general principle, heavy rail requires more onerous controls and limitations on speed, sighting and time of road closure, versus light rail which has less onerous requirements and a simpler interface.

Hazards relating to new electrification have not been considered, nor have hazards around mixed traffic if Tram Train is utilised on the National Rail network. For light rail services, point to point changing at March station has not been considered, with regard to items such as differing platform heights and passenger movements.

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Operational risk

The Assessment of Rail Operation Report (*Source Document 3*) describes the operational analysis undertaken to examine possible timetable patterns, service constraints and 2 trains per hour capability between March and Wisbech.

The report highlights that operating rail services over the level crossings between March and Wisbech would introduce a level of risk. The report also states that any service that continued to Cambridge would increase the trains per hour crossing the numerous level crossings on that route, leading to an increase of barrier down time. This raises the potential for a need to mitigate the risks associated with level crossings (closure, upgrade, bridge, grade separation) between Ely and Cambridge.

The Full Business Case report (Source Document 9) assumes that Network Rail will be the Infrastructure Manager and Owner for the railway infrastructure delivered by this Scheme, which also leads to the assumption that Network Rail will operate, maintain and renew the infrastructure following its handover. This would seem a reasonable assumption for a conventional heavy rail solution, but one that would have to be agreed by the promotor and Network Rail.

It is possible that Network Rail could divest itself of all these risk by allowing the combined local authority to take on the operation of the railway, especially if a Tram Train or Very Light Rail option is taken forward.

With a light rail solution, Network Rail staff operating and maintaining the railway would require appropriate training and competence. This approach has been successfully implemented on the Tram Train Pilot Operation in South Yorkshire.

However, allowing a third party to operate a rail system which could interface or run alongside Network Rail infrastructure introduces its own set of risks, and the combined authority may not be best placed to operate a transport system they have no experience or knowledge of.

It is noted that lineside fencing is incomplete throughout the existing line and would most likely need to be completely renewed to deter trespass and vandalism, and animal incursion.

Level crossings

There is a financial and project risk if landowners do not want to sell or readily agree to their accommodation or user worked level crossings being closed, especially if compulsory purchase orders are needed.

The local authorities will require extensive consultation where roads are required to be diverted or where the level and frequency of road traffic prohibit level crossings being reopened.

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The GRIP 3 report (*Source Document 4*) concludes that level crossing risk assessments should be carried out at a later GRIP stage to determine whether lower cost alternatives to the NR level crossing closure schemes can be shown to align with legislative and regulatory requirements for level crossing safety.

Depending on the modal choice, rolling stock and traction type eventually decided upon, level crossing closure or renewal will be a major consideration with associated safety and financial risk.

Asset condition

Some of the existing assets appear to be in various states of disrepair, there is no guarantee these can be repaired or are suitable for reuse. Full renewal is anticipated.

This is particularly true for permanent way, where it is concluded that all of the rail, sleepers and fastenings would need to be completely renewed. Some of the existing components are now obsolete. Although photographic evidence suggests that parts of the line might have been re-laid in modern flat bottom rail on concrete sleepers, the track has not been maintained for an extended period of time, it is overgrown by lineside vegetation, suffers major ballast contamination and the current geometric condition is unknown. It is assumed that the line must be completely re-laid, from formation level upward including substantial ballast renewal before the re-introduction of a passenger service. The site walk out by Network Rail's Light Rail and Knowledge Development team supports this approach.

The adoption of light rail Tram Train would permit a lighter form of track construction to be used and therefore a marginal reduction in track costs, however this may preclude the running of any conventional heavy rail freight.

The clearance of substantial amounts of trackside vegetation will also be required. It is also be assumed that all lineside fencing will need to be replaced and upgraded where appropriate, due to recent lineside residential, and other, developments.

Most of the route is carried on a low embankment 2.0 - 3.0m high above the surrounding fens. Although the condition of these embankments will need to be formally assessed, they would appear to be in generally good condition and in need of only minimal remedial works prior to the re-introduction of a passenger service. An earlier site visit identified a potentially unstable embankment between 89 - 90m. Further assessment of earthworks and track bed along the entire route is recommended.

Overhead line

There is little or no commentary as whether local ground conditions (topography, geotechnical survey) are suitable for installation of overhead line apparatus if this option were to be chosen for Tram Train or light rail electric traction.

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7. Progress to end of GRIP 3 (PACE Phase 1)

Mott MacDonald list several recommendations relating to required infrastructure in section 14.1 of the GRIP 3 heavy rail report (*Source Document 4*), which then goes on to recommend a comprehensive list of further actions relating to:

- Surveys
- Stakeholder consultation
- Assurance
- Engineering management
- Track
- Signalling
- Highways
- Geotech
- Telecoms
- And others.

Network Rail Design Delivery's Scheme Design Team recommended actions required to achieve GRIP 3 are summarised below.

Options and permutations

To allow the project to move forward to GRIP 3/PACE ES3, it is advised that some of the many options and permutations still to be decided upon are narrowed down or eliminated. These include, but are not limited to:

- Freight requirements
- Station location at Wisbech (Parkway, or Town centre Garden Town)
- Route of any new line
- Point to point or through service to Ely/Cambridge
- Rolling stock and traction type

Tram Train or light rail solution

The Scheme Design Team recommends consideration of Tram Train solution and identification of hazards for a mixed traffic solution, and further investigation into realistic level crossing solutions where light rail is used.

Further, the location of any new station also needs to be narrowed down or confirmed, as this also impacts on the solution taken forward.

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The budget available for the project would need to be ascertained, a heavy rail solution is quoted as being more expensive, due to the need to address the level crossing issues and potentially the need to build grade separated crossings in some cases.

Freight

The need or desire for freight to operate on the line needs to be confirmed, as this greatly affects the solution taken forward. It should be noted that the option assessment report (Appendix A) of the Full Business Case report (Source Document 9) concluded that freight is not deemed financially viable. Whilst 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 has proceeded on the working assumption that rail freight services will not be delivered on the March to Wisbech corridor.

Common Safety Method

New mainline railways within Great Britain and Northern Ireland are subject to the provisions of both the Railway (Interoperability) Regulations 2011 and the Common Safety Method on Risk Evaluation and Assessment (CSM - RA) Regulation. If the project were to be treated as the opening of a new section of the mainline railway network the design of its infrastructure would also need to comply with National Technical Specification Notices (NTSN) and current National Technical Rules (NTR). However, there is potential to apply for exemption from the Railway Interoperability Regulations particularly if a Tram Train solution is utilised. Tram Train vehicles and infrastructure required for Tram Train operation is exempt from the Railway (Interoperability) Regulations 2011. Where the line is proposed as Tram Train or light rail consideration should be given to excluding the route from the main line railway requirements of the Railway and Other Guided Transport Systems (Safety) Regulations 2006 (ROGS). This would make the March to Wisbech line and vehicles subject to urban rail standards currently under development by RSSB. The CSM – RA applies to the railway irrespective of interoperability.

The Common Safety Method for Risk Assessment (CSM - RA) process does not appear to have been formally started, as mandated by the legislation. A Preliminary System Definition and System Safety Plan should be completed at the earliest opportunity by the proposer, together with a Project Hazard Record compliant with the requirements of the CSM - RA legislation.

The project should start the process of CSM - RA as early as possible and in due course identify an independent assessment body.

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8. Consideration of an alternative light rail solution

Network Rail Design Delivery's Scheme Design Team have not been specifically asked to propose a solution based on the material provided for review. However, we have been asked to advise on the appropriateness of the recommended heavy rail versus a light rail solution. A Tram Train or light rail solution appears to be valid lower cost solution worthy of serious consideration.

Heavy rail solution

A heavy rail solution as proposed as one of the main conclusions and recommendations of the Mott MacDonald reports utilising National Rail infrastructure potentially allows for services to continue to Ely, Cambridge and beyond. This solution also has the potential to support any freight running.

However, the potential can only be realised if the significant risks associated with the level crossings between March and Wisbech can be mitigated. The increase in level crossing risk between Ely and Cambridge will also need to be mitigated.

A conventional heavy rail solution supports a Wisbech Parkway type station as the line could only extend as far as the out-of-town station propositions, whereas Tram Train or light rail would be able to extend into Wisbech town centre and/or to the proposed Garden Town if this was desired.

Tram Train/light rail solution

This section should be read in conjunction with the November 2021 report produced by Network Rail's Light Rail Knowledge & Development team; Wisbech to March: Potential for Light Rail (November 2021) report (*Source Document 11*)

One of the Mott Macdonald documents provided for review was a light rail feasibility option dated 16 August 2019. The light rail feasibility report recommends a diesel - electric hybrid vehicle Tram Train option as the likely outcome, after a modal and route sifting workshop. This is a credible solution which is worthy of serious consideration. The document stops short however, of recommending Tram Train or light rail as a final solution, rather lists some of the major hurdles of construction needing overcome to utilise this solution.

A consideration with a Tram Train solution is the provision of electric traction power. Electrifying the route with for example 750V d.c or 25kV OHLE is not considered in the Mott Macdonald documents. However, battery technology has advanced significantly in the last 10+ years with the potential for electric rail vehicles to travel up to 40 miles between charges with further developments anticipated extending this to 60 miles. Light rail/Tram Train traction power options also include onboard energy storage systems, diesel/battery, and battery hybrid options. A Tram Train solution using dedicated hybrid rolling stock would appear to be a cost effective, feasible solution worth exploring further.

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Light rail/Tram Train rail vehicle opportunities are explored more fully in the report by Network Rail's Light Rail and Knowledge Development team's report (*Source Document 11*) dated December 2021

Light Rail/Tram Train vehicles operating on tramways are designed for highway interfaces. For level crossings along the route, that remain open, the level of infrastructure can be substantially reduced compared to heavy rail options based on "line of sight" operation with a Tram Train or other light rail vehicle able to stop much quicker and within a shorter distance. This would make the road - rail interfaces at level crossing less costly, simpler and safer.

Movement of freight is not precluded by a Tram Train solution but would potentially limit the million gross tonnage per annum (MGTPA) of freight.

Several options for line of route and station locations are included in the light rail feasibility report (*Source Document 2*) produced by Mott MacDonald. The report also lists several benefits, including improved connectivity to the town centre, the ability to serve the new Garden Town, and negates the need for grade separated highway crossings (reducing costs and risk). This also retains the ability to connect to the National Rail network. However, there are also significant challenges presented, including access to Wisbech town centre particularly around accommodating a tram in the town environment.

The historic town of Wisbech is a highly constrained urban environment. Any new infrastructure to be built next to, or in, the town is potentially constrained by:

- Numerous listed buildings and structures
- Narrow streets, particularly Cromwell Road (B198), which is currently a two-way carriageway bound by terraced housing to the east and the River Nene to the west. There is therefore no potential to widen the street without significant infrastructure impacts
- The River Nene which separates the proposed Garden Town from the existing Wisbech town centre

The Network Rail Light Rail Knowledge and Development team report (*Source Document 11*) considers and identifies routes into Wisbech Town Centre which minimise any impact from these constraints seeking full penetration into the town centre and limiting any demolition required. A traction power stored energy solution limits any infrastructure requirements that might affect the setting of historic buildings or areas of conservation.

The studies to date generally focus on the technical and engineering aspects of introducing rail services on the route and thus lead to a discussion on modal options. The operating cost of each mode may be a factor in the overall case. In this case the operating cost of light rail options are likely to be significantly lower than comparable heavy rail services.

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9. Freight services between March and Wisbech

A solution that accommodates freight services running on a new line to Wisbech needs to be set in the context of opportunities, risks and dependencies. These considerations include:

- Conventional heavy rail freight would normally be catered for by a heavy rail infrastructure solution
- The asset condition of the four main underbridges on the route and works that
 may be needed to make them suitable for freight, depending on the gross tonnage
 and Route Availability (RA)
- Freight services would impact on train running, line speed and level crossing provision with a heavy rail solution
- Locomotive, wagon type and gross annual tonnage expected would need to be confirmed
- It is possible that Tram Train rolling stock could be used for light weight palletised type freight, but with limited gross tonnage with the benefit that lighter freight volumes become economically viable.
- The operation of freight services on light rail is possible with suitable light rail controls and with track infrastructure suitable for freight vehicle axle loads.

A heavy rail solution accommodates traditional passenger and freight services. A Tram Train solution has the potential to accommodate passenger and freight services dependent on the infrastructure provided suitable controls. The level and type of control is dependent on risk assessment, the type of freight and frequency of movements.

The Mott Macdonald light rail feasibility report (*Source Document 2*) does not provide any commentary on freight opportunities as to what, if any, freight could be employed when using a Tram Train solution. Network Rail's Light Rail Knowledge and Development team's report (*Source Document 11*) provides further information on light rail solution freight opportunities.

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10. Conclusions

This Engineering Assessment Report is the output of a feasibility review of March to Wisbech Transport Corridor Options, developed by Mott MacDonald on behalf of Cambridgeshire and Peterborough Combined Authority.

The modal choices considered in this report include:

- Heavy rail Conventional heavy rail that has the potential to facilitate passenger and freight services
- Light rail Light Rail Tram Train which has the potential to facilitate passenger and freight services with direct access into Wisbech Town and Wisbech Garden Town
- Very Light Rail This has not been considered to any great extent in the context of this report

Light Rail (Tram Train and tram) and Very Light Rail options are considered in a study completed by Network Rail's Light Rail Knowledge team (*Source Document 11*).

This feasibility review concludes that heavy rail is a viable solution, which has the potential to provide uninterrupted connectivity onto the National Rail network together with a freight capability. However, there are significant hurdles with regards to level crossings that would need to be overcome.

In comparison, light rail in the form of Tram Train offers a potentially more credible solution based on overall capital and operating costs, an optimised level crossing strategy and connectivity into Wisbech town centre and Wisbech Garden Town.

In addition, there is lack of available train paths onto the wider Network Rail network, which combined with an unproven need for freight means a Tram Train option should be considered. This is reinforced in the report (Source Document 11) by Network Rail's Light Rail team that concludes "light rail is considered a credible and feasible option and recommends further work to examine the light rail options in more detail, and to develop cost estimates to assist the business case for reopening the line."

Table 1 provides a summary analysis comparing heavy and light rail (Tram Train) options informed by this feasibility review.

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Modal solution	Heavy rail	Light rail Tram Train
Connectivity for passengers	Potential for uninterrupted connectivity onto National Rail network.	Potential for uninterrupted connectivity onto National Rail network.
	No direct access to Wisbech Town and Wisbech Garden Town.	Potential for direct access into Wisbech Town and Wisbech Garden Town.
Level Crossings	Complex conventional level crossing infrastructure and highway interfaces.	Designed for highway interfaces. Level crossing design can be
	Risks associated with ability to close level crossings and divert highways.	optimised, and the level of infrastructure required substantially reduced.
Rolling Stock	Finite availability of rolling stock nationally and potential acquisition of new rolling stock required.	New Tram Train vehicles required. The premise of Tram Train is that vehicle designs are adaptable and able to be tailored to meet system specific infrastructure requirements routinely.
	Operation and maintenance costs are known and similar to existing heavy rail.	Operation and maintenance costs dependent on system specific requirements.
Signalling control	Complex conventional signalling including level crossing infrastructure and interfaces.	Opportunity for a simplified control system and substantially reduced level crossing infrastructure for Tram Train only operation.
Station	Location of station limited to out of town/brown/greenfield site.	Opportunity for direct access into Wisbech town centre and new
	Conventional heavy rail station infrastructure.	Garden Town. Opportunity for simplified light rail station infrastructure.
Freight operations	Accommodates freight movements on conventional infrastructure.	Potential to facilitate freight but requires heavy rail infrastructure with associated increase in infrastructure costs.
Traction Power Supply	Diesel traction requires no additional infrastructure. Missed opportunity for decarbonisation.	Potential for diesel/electric or hybrid traction requiring no additional infrastructure.
	Electric traction requires 25kV OLE infrastructure.	Opportunity for electric traction supporting decarbonisation using

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	There is currently no OLE infrastructure between March and Ely.	light weight 750V dc infrastructure.
	Self-powered; battery, hydrogen, diesel/battery, hybrid requiring limited infrastructure to recharge rail vehicles	Self-powered; battery, hydrogen, diesel/battery, hybrid requiring limited infrastructure to recharge rail vehicles
Estimated capital costs of proposed infrastructure	March to Wisbech circa £178m.	Option 1: March to Wisbech Parkway circa £126m.
		Option 2: March to Wisbech Town circa. £178m.
	Reference: GRIP 3 Heavy Rail Report Q2 2019 prices excluding	Reference: Low cost alternative tram train feasibility report Q2
	risk allowances and optimism bias.	2019 prices excluding risk allowances and optimism bias.

Table 1 Heavy and light rail option considerations

A heavy rail solution facilitates the introduction of conventional freight and passenger services and uninterrupted connectivity to the National Rail network. However, a lower cost light rail Tram Train solution may be more appropriate based on:

- A Tram Train solution facilitates uninterrupted connectivity for passenger services to the National Rail network with the added possible advantage of including a service to Wisbech town centre and to the proposed Wisbech Garden Town
- The overall strategy for addressing the issues associated with level crossings is simplified by a Tram Train/light rail solution, which would permit application of lower cost minimum intervention installations
- A light rail or Very Light Rail solution does not facilitate uninterrupted connectivity for passenger services to the National Rail network. It is a credible solution for point-to-point transport and services to Wisbech town centre and to the proposed Wisbech Garden Town

We now consider gaps in the reports, risks to Network Rail, progression to GRIP 3/PACE1 and freight considerations.

There are gaps in the reports produced by Mott MacDonald relating to:

- The lack of a strategic approach in respect of level crossings that considers the safety, financial, project and performance risks and issues associated with closure, upgrade, highway diversion and grade separated crossings
- There is limited consideration of the requirements of the Common Safety Method - Risk Evaluation and Assessment (EU 402/2013) now enshrined in UK law

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The demand modelling is limited and there is insufficient evidence to support a
heavy rail solution. The reports demonstrate a desire to facilitate freight
services, without providing any clarity on the services required or that the
potential market for freight services exist

The risks considered up to this point are deemed applicable for the current stage of development. As the project progresses all new and existing risks will need to be considered on an iterative basis for the transport solution progressed. As a key stakeholder, Network Rail need to be part of this hazard identification and risk assessment process to ensure risks to Network Rail are managed. The lack of a robust level crossing strategy is currently the biggest risk to the project.

To allow the project to move forward to GRIP 3/PACE 1 some of the many options and multiple permutations need to be discounted. Limiting the number of options allows for the cost effective development of a credible solution. Key elements that need to be considered are:

- Confirming the freight demand and the implications of providing this facility on the project including any impact on the business case
- Confirming the anticipated passenger numbers by completing a thorough transportation study
- Reducing the number of station locations currently being considered to a manageable and realistic number of sites
- Reducing the number of line of route options for any new service provision
- Developing an option based on a point to point service provision given the current and future lack of train paths beyond March
- Undertaking asset condition surveys to identify the work required to support heavy or light rail options

Facilitating freight services is one of the clients desired outcomes. The reports demonstrate a desire to facilitate freight services, without providing any clarity on the services required or that the potential market for freight services exist. A transport study would identify that the local and regional transport demand, for freight (and passengers), exists. Outputs could then be used to inform modal choice decisions.

Conventional freight services are only accommodated by a heavy rail infrastructure solution. Operationally, light rail Tram Train could co-exist on the route without any restricted working. Other light rail or Very Light Rail solutions and freight could potentially co-exist if the freight requirement were relatively limited and could be timed outside light rail and Very Light Rail operating times. The reports focus on a heavy rail solution, but do not explore the nuances of freight, light rail and Very Light Rail operation and demonstrate a desire to facilitate freight services, but do not provide any clarity on the services required or that the potential market for freight services exist.

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The impacts of facilitating freight services on the line include:

- Potential interruption to passenger train paths by freight services
- An increase in the rate of degradation of the asset
- Increased capital and operating costs associated with heavy rail

Based on all the parameters considered, heavy rail is a valid solution. However, light rail in the form of Tram Train offers a potentially more credible solution based on overall cost, an optimised level crossing strategy and connectivity to the national rail network. Light rail Tram Train additionally offers the opportunity for direct access into Wisbech town centre and Wisbech Garden town, whilst not discounting the introduction of freight services now, or at a point in the future.

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Next steps

This report has identified a number of next steps. These are summarised below and should be read in conjunction with the five next steps identified in the Network Rail Light Rail team report "Wisbech to March: Potential for Light Rail November 2021", Appendix 3:

Next step 1

The multiple options and permutations for providing a service between March and Wisbech need to be reduced and refined to enable the project to move forward.

The continued consideration of multiple options and permutations impedes cost and time efficient development.

Next step 2

The development of a more detailed strategic approach to level crossings is required that considers the safety, financial, project and performance risks and issues associated with closure, upgrade, highway diversion and grade separation

There will be an increase in the level crossing risk profiles due to an increase in road traffic since the line last operated. Closure of any level crossing will be subject to agreement with any users and financial settlements may be required. Where level crossings are to remain open risks will need to be mitigated in the context of different modal options and how rail vehicles operate along the line.

Next step 3

Further work is required to explore the light rail Tram Train solution

Network Rail's Light Rail and Knowledge team's report (Source Document 11) concludes that there is potential for a light rail passenger operation between March and Wisbech. The assessment of suitable rolling stock types concludes that Tram; Tram Train; or Very Light Rail vehicles could be used. The operating cost of light rail are likely to be significantly lower than comparable heavy rail services.

Next step 4

Further work is required to confirm the passenger and freight demand, particularly post Covid-19 pandemic, to determine the most appropriate solution that meets this demand

The reports do not adequately evidence a thorough Transport Study and therefore do not provide a solid basis on which to make an informed decision. Both heavy and light rail Tram Train facilitate freight services. A light rail Tram Train option offers a potentially more credible solution based on overall cost, an optimised level crossing strategy, connectivity to the National Rail network and direct access into Wisbech Town and Wisbech Garden Town.

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Next step 5

Develop a System Definition and System Safety Plan in line with the proposer's legal obligations set out in Common Safety Method for Risk Evaluation and Assessment Regulation (EU) 402/2013.

The starting point for anyone proposing any change in relation the mainline railway system is the Common Safety Method – RA, and this applies when any technical, operational or organisational change is being proposed to the railway system. The proposer in this instance is deemed to be the combined local authority or their agent.

Next step 6

A detailed asset condition survey is required for the entire route. This will assist in confirming the rail infrastructure work required for the option selected.

The condition of the former railway infrastructure is not known, and it has not been fully maintained since the line was mothballed. A full asset condition survey will enable greater clarity on the scale and costs of any railway infrastructure works required

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Appendices

Please see below a list of the appendices referenced in this document.

Appendix A – Glossary

Appendix B – Reference source documents

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Appendix A: Glossary

Acronym	Meaning
0m 00ch	miles and chains
ac	Alternating Current
AWS	Advanced Warning System
dc	Direct Current
DfT	Department for Transport
DMU	Diesel Multiple Unit
DNO	Distribution Network Operator
EaWR	Electricity at Work Regulations
EMU	Electric Multiple Unit
ETCS	European Train Control System
GRIP	Governance of Rail Investment Projects
GSM-R	Global Standard for Mobile communications - Railway
FOC	Freight Operating Company
FTN	Fixed Telecoms Network
LRSSB	Light Rail Safety and Standards Board
NTSN	National Technical Specification Notices
OLE	Overhead Line Equipment
ORR	Office of Rail and Road
PACE	Project Acceleration in a Controlled Environment
RIR	Railway (Interoperability) Regulations
ROC	Railway Operating Centre
ROGS	Railway and Other Guided transport Systems (Safety) Regulations
RSSB	Rail Safety and Standards Board
S&C	Switches & Crossings

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ТОС	Train Operating Company
tph	Trains per hour
TPWS	Train Protection Warning System
TSI	Technical Specifications for Interoperability

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Appendix B: Source Documents

Documents commissioned by combined authority produced by Mott MacDonald

1. Heavy rail feasibility report:

March to Wisbech Transport Corridor: GRIP2 Heavy Rail Feasibility Report 05 August 2019 by Mott MacDonald 398128 | 002 | B

The primary objectives of this report commissioned by Cambridgeshire and Peterborough Combined Authority are to investigate the feasibility and cost of re-opening the railway line between March Station and Wisbech to heavy rail services. This report was originally developed by Mott McDonald in 2015 as part of a wider Cambridgeshire County Council commissioned study, which included DfT Business Cases. In 2018 Mott McDonald were commissioned to update and further develop design and DfT Business Cases for the March to Wisbech Transport Corridor. This report has been updated as part of the 2018 commission.

2. Low-cost alternative - Tram - Train feasibility report:

March to Wisbech Transport Corridor: Low-Cost Alternative – Tram Train 16 August 2019 by Mott MacDonald 398128 | 004 | B

The aim of this report commissioned by Cambridgeshire and Peterborough Combined Authority is to describe the proposed Tram Train solution and set out the rationale for selecting this mode as the low-cost alternative to heavy rail. Key challenges in delivering tram train are also set out, together with indicative journey times and capital costs for the scheme.

3. Assessment of rail operations report:

March to Wisbech Transport Corridor: Assessment of Rail Operations 17 March 2020 398128| 007| C

This report describes the operational analysis that has been undertaken to examine possible timetable patterns, service constraints and capacity for introducing a two train per hour (2tph) service between Wisbech and March, and ideally running through to Cambridge.

4. Heavy rail multi-disciplinary option selection report

March to Wisbech Transport Corridor: GRIP 3 Heavy Rail Multi-Disciplinary Option Selection Report

26 June 2020 398128 | 009 | C

The purpose of this GRIP 3 Heavy Rail Multi-Disciplinary Option Selection Report commissioned by Cambridgeshire and Peterborough Combined Authority is to document the optioneering and engineering employed, to develop a single preferred heavy rail solution, for the March to Wisbech transport corridor, to the level of detail required to support Full Business Case (FBC) cost estimation. A slimmed down version of the GRIP 3 design process has been used, with the focus on developing designs for those elements which significantly impact capital cost.

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5. Delivery strategy

March to Wisbech Transport Corridor: Delivery strategy 20 July 2020 398128 | 009 | E

The purpose of the Delivery Strategy is to identify and assess potential approaches to deliver the preferred scheme option that was identified earlier in the project lifecycle in the Options Assessment Report (OAR).

6. Environmental report

March to Wisbech Transport Corridor: Environmental Report July 2020 398128|MMD-00-XX-RP-EN-001|B

The Environmental Report presents the environmental constraints and opportunities for the reinstatement and refurbishment of the March to Wisbech rail corridor and March Station as well as the creation of a new railway station at Wisbech. A high-level qualitative assessment of the constraints identified is also provided. The report focuses on the proposed rail corridor, March Station, potential locations for a Wisbech Heavy Rail station and stops in Wisbech for a Tram Train Option.

7. Alternative highway schemes report

March to Wisbech Transport Corridor: Environmental Report 10 July 2020

The purpose of this report is to summarise alternative options for highways Schemes 1 and 2 and recommend a preferred option for each scheme. The report is intended to be read with the March to Wisbech Transport Corridor GRIP 3 Heavy Rail Multi-Disciplinary Option Selection Report 398128-009-C.

8. Comments register

Updated draft 6 May 2020

This document captures inputs from industry and the requirement to actively involve and consult with industry (including NR and ORR) as well as potential infrastructure investors providing their advice on potential delivery structures and mechanisms to support the business case submission.

Full business case

March to Wisbech Transport Corridor: Full Business Case 26 June 2020 398128-011-E

The purpose of this Full Business Case (FBC) is to identify a single option design in accordance with Transport Appraisal Guidance requirements for the March to Wisbech Transport Corridor.

10. Other related documents have been considered

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Documents commissioned by combined authority produced by Network Rail

11. Network Rail's Light Rail Knowledge & Development team's Report

Wisbech to March: Potential for Light Rail December 2021

Network Rail's Light Rail Knowledge & Development team assess the potential for reopening rail passenger services on the former March to Wisbech line using light rail technology. This report summarises the findings of that assessment.

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Development Group



Appendix B. Light Rail Feasibility Study



Report

Wisbech to March: Potential for Light Rail December 2021

Authorisation

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Document	Document version control						
Date	Version	Editor	Approver	Description / Change Reason			
12/11/21	1.0	Alex Dodds	sc	Initial draft for client review			
13/12/21	1.1	Alex Dodds	sc	Final document for issue			



Executive Summary

The seven-mile March to Wisbech railway, located in North Cambridgeshire, England (see Figures 1A to D below) was opened in 1847 with passenger services operating until 1968. Freight services continued to run until 2000. Since 2000 the line has remained in a mothballed, non-operational condition. Network Rail's Light Rail Knowledge & Development team has been requested to assess the potential for reopening rail passenger services on the line using light rail technology.

This report summarises the findings of that assessment.

Network Rail's light rail team considered the options for adopting suitable light rail technology and operational solutions. This was done without a constraint of complying with current national rail design and operating standards – other than at any interface with the current rail network.

The study concludes that there is potential for a light rail passenger operation between March and Wisbech. The assessment of suitable rolling stock types concludes that Tram; Tram Train; or Very Light Rail (VLR) vehicles could be used. The choice of rolling stock being subject to the specification of the short and long term service aspirations.

The factors influencing the choice of light rail vehicle include:

- Requirement to operate on the national rail network (e.g. to Peterborough, Ely, Cambridge);
- The multiplicity of level crossings on the route and vehicle's suitability to create a cost effective solution at each
- Opportunity to operate into Wisbech town centre using the highway network
- Future extension of the service to serve the Wisbech Garden Town development
- Consideration of passenger demand and thus vehicle size.

The study concludes that in consideration of the client's specification a Tram Train solution appears the best credible light rail option. Tram Train would enable future operation on both the national rail network and any on street operation into Wisbech town centre or to the Garden Town.

The next generation of Very Light Rail vehicles are an emerging technology, with the first demonstrator vehicle being showcased in Autumn 2021. Further development and engagement is needed with the manufacturers to explore the full potential, and limitations, of this new vehicle.

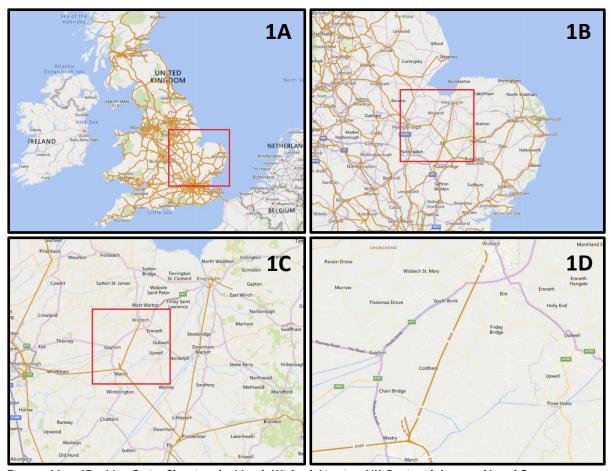
Key infrastructure aspects considered by the review include:

- The cost effective solutions for the numerous level crossings under light rail operation
- Options for an on street route into Wisbech town centre
- The location of a terminus station at Wisbech
- The required alterations at March Station and connections to the main line

At the client's request the report is largely a qualitative assessment of the potential for light rail on the March to Wisbech line. On the basis that light rail is considered a credible and feasible option further work is recommended to examine the options in more detail and to develop cost estimates to assist the business case for reopening the line.

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Figures 1A to 1D – Map Series Showing the March-Wisbech Line in a UK, Regional, Area and Local Context



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1 Introduction

Network Rail's Eastern Region directorate has requested the company's Light Rail Knowledge & Development team to assess the potential for reopening rail passenger services on the former March to Wisbech line using light rail technology. This report summarises the findings of that assessment.

The seven-mile March to Wisbech railway (known as the Bramley Line) was opened in 1847 with passenger services operating until 1968. Freight services continued to run until 2000. Since 2000 the line has remained substantially in Network Rail ownership in a mothballed, non-operational condition.

The reinstatement of rail passenger services between Wisbech and March (and possibly further afield) has been the subject of various local campaigns and studies. These given greater emphasis in recent years in the context of improving connectivity; reducing road congestion and tackling climate change through transport decarbonisation.

Recent studies to reinstate the rail connection have looked at options for conventional railway and light rail solutions, including on-street tram operation in Wisbech. To date the estimated cost of these solutions has been a limiting factor in the success of the case for reopening.

As part of the continuing evaluation of the case to reopen the line Network Rail's light rail team was asked to provide a high-level assessment of the "art of the possible" for light rail solutions. This assessment took a fresh look at the potential for light rail technology to enable a reconnection between March and Wisbech.

Network Rail's light rail team considered the options for adopting suitable light rail technical and operational solutions. This without constraint of current national rail design and operating standards – other than at any interface with the current rail network.

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2 Background

The former March to Wisbech railway ran for approximately seven miles (10km) through the Cambridgeshire Fenland linking the two towns at either end.

The line was opened as a double track railway in 1847 with one intermediate station at Coldham (which closed in 1966). At one time the route continued beyond Wisbech to Watlington (on the line to Kings Lynn) and beyond March to St Ives.

The station at Wisbech was subsequently renamed Wisbech East to differentiate it from another station located at the north of the town on the former Midland and Great Northern line. Passenger services on the line ceased in 1968. The route was subsequently shortened with the Wisbech East station location being lost to residential development. Freight services continued until 2000, serving the Nestlé Purina and Metal Box facilities. Following the cessation of freight services, the rail corridor remains in Network Rail ownership. However following land acquisition by Nestlé (for expansion of its factory) the railway owned corridor terminates just beyond Weasenham Lane on the outskirts of the town.

Given the topography of the Fenlands the route had numerous level crossings for highways and footpath and farm access.

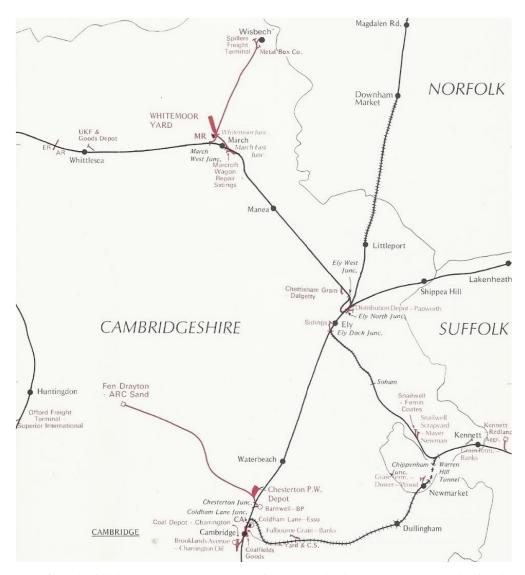


Figure 2: Map of Cambridgeshire late 1980s rail network (Source: Rail Atlas Great Britain & Ireland, Baker, 1988)

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Figure 2 shows the residual March to Wisbech route from the late 1980s. Note the station is shown as having "unadvertised/excursion" status.

The reinstatement of rail passenger services between March and Wisbech has been the subject of various campaigns and studies in recent years.

These include:

- Wider Economic Benefits of a Rail Service Between March and Wisbech, Mott MacDonald & Cambridgeshire County Council (2014)
- Study into Re-Opening of March to Wisbech Rail Link, Outline Business Case, Mott MacDonald & Cambridgeshire County Council (2015)
- March-Wisbech Transport Corridor Low Cost Alternative Tram-Train, Mott MacDonald (2019)
- March to Wisbech Transport Corridor Options Assessment Report, Mott MacDonald (2019)
- March to Wisbech Transport Corridor Full Business Case, Mott MacDonald (2020)

These studies have contributed to understanding the feasibility and options for reinstatement of rail passenger services (including assessment of light rail). These studies have included consideration of extending reinstated Wisbech services beyond March to Cambridge and Peterborough. However, there is limited or no capacity on the mainline for these additional services. It is understood that further investment on the existing network would be required to provide the capacity for new Wisbech services to operate through to Ely and Cambridge.

The most recent business case work concluded by discounting a Tram Train option in favour of a heavy rail solution with through running to Cambridge. However, the network capacity issues noted above are considered to make this option either too costly or impractical in the short/medium term.

Between 2009 and 2018 Network Rail, working with local partners, designed and implemented the UK's first Tram Train operation between Sheffield and Rotherham. From this experience Network Rail created a team as a dedicated centre of excellence for light rail knowledge. This team supports colleagues and stakeholders in the development of light rail schemes on or interfacing with the national rail network. This team brings a wealth of experience from delivering the Tram Train service and is using this to assess the case for delivering low cost innovative railway solutions.

In 2021 Network Rail's light rail team was invited to take a fresh look at reinstating rail passenger services to Wisbech in the context of the potential for light rail solutions. This to take the form of a high level consideration of "the art of the possible" and without constraints of conventional railway solutions. The assessment would concentrate on the creation of a dedicated service between March and Wisbech while commenting on the potential for that solution to enable through services to Peterborough and/or Cambridge.

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3 Scope

The scope of the study was discussed with Network Rail's Eastern Region Strategic Planning team and agreed as:

- Examine the possibility of providing a rail service between Wisbech and March using light rail technology.
- Service options of 1 or 2 trains per hour in each direction.
- Services to be considered as self-contained to the route in short/medium term.
- Consideration for future through operation to either Peterborough or Cambridge and what infrastructure/vehicle/operating alterations may be required over the base solution.
- Study to consider suitable terminating location(s) in Wisbech.
- Output to be a short report reviewing the route and high level options to reinstating it using light rail technology. Report to provide a broad conclusion on the likely feasibility of a light option(s) and, where appropriate, indicate a preferred form of light rail solution.
- Report should highlight areas of opportunity where a light rail solution might enable a more cost-effective solution compared to heavy rail.
- Report should highlight any assumptions and risks in the solutions identified for example in relation to compliance/deviation from industry standards.

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4 Discussion and Findings

4.1 Service provision

Previous studies have identified a baseline service of 2 tph between March and Wisbech, which is the Client's base requirement. This is likely to be the maximum a heavy rail option would support. A Tram Train/light rail option could support additional service options depending on the final selection of route into the town centre and the location of the stops:

- A terminus at Weasenham Lane/the Purina factory could support 2, 3 or 4 tph depending on demand and location of passing facilities
- A terminus in the town centre at/near the Horsefair bus station could support up to 4 tph (subject to demand and passing facilities).
- The provision of a Park and Ride (P&R) facility at the A47 crossing could enable a supplementary service between the P&R stop and Wisbech town centre providing an opportunity to significantly reduce traffic into town. The combination of through and P&R shuttle services could provide up to 8 tph with 2, 3 or 4 going through to March
- The town centre operation would require significant traffic management to optimise the passage of the light rail service and enable a robust timetable.
- Through services to either Cambridge or Peterborough, although technically feasible with Tram Train, would require capacity upgrades on the Peterborough – Ely – Cambridge route. It should be noted that there are already existing services competing for limited train paths within the Peterborough-Ely-Cambridge corridor, and it may not be possible to deliver all of these without significant enhancements in route capability. This is however outside the scope of this report.

All the above options require further work to assess the overall timetable feasibility and the likely demand over the next 20-30 years to select the best option. A proposed "garden town" on the North side of the River Nene would provide further extension opportunities for the tramway, however these should be the subject of a separate study as part of the development of that scheme.

4.2 Infrastructure

The infrastructure requirements have been based on the following assumptions for Tram Train operation:

- Whitemoor Junction to Wisbech is designated as a tramway
- Whitemoor Junction to March remains heavy rail
- A railway to tramway operational rules interface is provided on the Wisbech side of Whitemoor Junction
- Tram Train services will use a reinstated Platform 3 at March station with option to reinstate the main line connection at the Ely end of the station
- The route will be a segregated tramway except in Wisbech where if required it would be an on-street tramway to the bus station terminus
- All level crossings on the original branch line will be designated as tramway crossings with appropriate highway controls

The formation and track bed are extant from Whitemoor Junction to Weasenham Lane on the outskirts of Wisbech and could be restored to double track for all or part of the route depending on initial and future timetable demands. While the formation for the most part seems in good basic condition, a full survey will be required to check the state of the embankments, particularly as most of the route is bounded by deep drainage ditches which may have resulted in scouring over the years out of use. Key requirements will be:

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- Clear vegetation from track bed and trackside where sight lines may be compromised e.g. road crossings
- Restore drainage and prepare track bed
- Replace underbridge decks the only underbridges on the route are over watercourses
- Relay track to tramway standards note while 80lb rail would be suitable, Network Rail only bulk buys 113lb rail
- If double track, consider number and position of turnback crossovers to manage service perturbation
- All crossings will be tramway crossings with appropriate highway and tramway signalling control and with standard tramway signage
- All crossings should comply with LRG 1.0 Tramway Principles and Guidance (TPG) (LRSSB, 2021) and associated light rail standards
- Any on-street sections should have embedded grooved rail and consideration given to innovative designs which minimise the need to move utilities
- Integrated highway and tramway signalling, and control will be required for the on-street sections
- The light rail vehicles are most likely to be high floor (to match those at March Station) and careful consideration is required for the location of on-street stops in Wisbech
- With exception of March Station, the other stops could be basic tram stops with 915mm high platforms.
- The platform/vehicle interface at all locations will be RVAR compliant and allow unaided level boarding to maximise accessibility. Foot crossings will be acceptable for any new stops on the original route.
- Consideration should be given to restoring double track from Whitemoor Junction into the disused platforms at March station with associated works to replace the missing tracks and possibly the former Junction at the East end.
- Signalling for the new layout will need to be installed which will require some changes to the existing scheme plan
- A new accessible footbridge is recommended at March. This will enable the service to offer end to end accessibility
- A servicing depot could be provided in the former engineers' sidings area at March alongside Platform 4

4.3 Rolling stock

There are numerous light rail rolling stock types and suppliers, with some vehicles currently in production/operation, and others in various stages of development. Given the status of vehicles in operation, and the flexibility of operation it offers, a Tram Train vehicle is considered the most appropriate light rail mode for the route. This is subject to confirmation of demand and desired journey time, as well as the type of service offered (e.g. segregated shuttle vs hybrid interface to adjacent urban centres). Tram Train enables operation on a line of sight tramway route, with passive provision to safely operate on heavy rail main lines in the future.

The current UK Tram Train vehicles in service are the Stadler Citylink Class 399 (low floor) in South Yorkshire; and the Stadler Citylink Class 398 (high floor) on order for Transport for Wales. Other manufacturers supplying Tram Train vehicles include Alstom and Siemens.

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Figure 3 - Class 399 Citylink Low Floor Tram Train Operating in Sheffield (Photo: Ian Ambrose)



Figure 4 – Class 398 Citylink High Floor Tram Train Under Construction for Core Valley Lines (Source: Transport for Wales)

The March to Wisbech service is likely to have a journey time of between 15 and 20 minutes which will require 2 vehicles for the baseline service and up to 6 plus an operational spare for the maximum potential service frequency. This assumes a maximum speed of 60mph and suitable traffic management in Wisbech town centre to avoid congestion delays. This is a small order and better economy of scale might be achieved by joining with other Tram Train orders. The vehicle capacity will depend on the loading forecasts and the current vehicle length of 37-40m should be sufficient and the interior seating layout can be adapted to suit the customer preference. The route is sufficiently short to consider battery self-power rather than full electrification. Fast battery charging facilities to be provided at March and possibly the Wisbech terminus.

While Tram Train vehicles offer the greatest potential for service flexibility, alternative vehicle options should be considered in the context of efficiency, connectivity and cost of operation. The first of these is a standard tram vehicle. This would have lower capital cost than a Tram Train and still offer potential for street running. Tram does not offer the ability for future operation on the

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main line railway. Using a standard tram may require additional control measures for the shared running between Whitemoor Junction and March station. Existing standard tram vehicles are available from multiple manufacturers, with designs built to accommodate various urban rail gauges. These come in both low and high floor configurations, offering the flexibility to accommodate pre-existing infrastructure constraints, such as high floor platforms. This has already been applied successfully in Manchester, where existing heavy rail lines have been converted to tramways.



Figure 5 - Bombardier M5000 High Floor Tram Operating in Manchester (Source: Tom Page/Creative Commons)

Another alternative vehicle is Very Light Rail (VLR). The 'first generation' of VLR vehicle was the Parry People Mover used on the Stourbridge Branch in the West Midlands. Multiple second generation vehicles are under development, with the focus of VLR innovation centred in the West Midlands. One of these is the 'Revolution' VLR vehicle, intended for use on lines like the Stourbridge Branch, where a low capacity/low cost shuttle service is implemented on a segregated heavy rail alignment. The vehicle is exceptionally light weight, with potential consequential savings on track form¹ and structures. Such a vehicle could be an alternative for the Wisbech branch if the operation were to be limited to a segregated shuttle between March and Wisbech.

One potential limitation of VLR over a tram vehicle is its inability to operate on street alignments. However the vehicles may require modification to do so, such as fitting of skirting, roll-under protection, and track brakes². Without these modifications, it is likely that a VLR vehicle would be restricted to segregated operation on the Wisbech line. The vehicle's small size may be an issue, dependent on the passenger demand anticipated, and interface with existing connecting services from March. Like standard trams, the vehicles are unlikely to be able to interwork on heavy rail main line, confining them to operate a segregated shuttle between Wisbech and March. This would not preclude some form of limited exemption to operate over the short distance between Whitemoor Junction and March Station. There is the issue of level crossings on the route to consider, with VLR vehicles potentially requiring different levels of protection infrastructure, dependent on the extent

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¹ Note any potential savings on track/track form may be offset against Network Rail's bulk buying for standard 113ib rail see Section 4.2

² A similar French design includes these features



of alterations made to the standard vehicle design³. Recent discussions with the manufacturer of the 'Revolution' VLR vehicle have indicated the potential to incorporate market requirements into a production vehicle. This could include various design amendments for the vehicle to be classed as light rail/tram or a Tram Train and operate under line of sight regulations.



Figure 6 –Revolution VLR High Floor Demonstrator Vehicle (Source: Simon Coulthard)

4.4 Level Crossings

Based on the number of level crossings on the route and when compared to a traditional heavy rail solution a full or hybrid light rail operation could cut the cost of project implementation and operation by a considerable factor. Many sites would be considered substandard for a regular interval heavy rail passenger operation, and with 7 active sites identified alongside 12 passive ones, the cost of crossing interventions/improvements alone could make or break the project business case. A detailed description of the status of each crossing is included in Appendix B.

A light rail option would permit application of lower cost minimum intervention installations, or retention of automatic installations at current sites. A full Tram Train option would offer the potential to remove standard railway crossing controls altogether and install signalised traffic light junctions at every hybrid light rail/road interface. This would however be subject to localised vegetation clearance and suitable risk assessment of each location on an individual basis.

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³ Given the assumptions on infrastructure in 4.2, designating the VLR vehicle as a tram train would overcome most of the issues as the route can be built to tramway standards. This will also simplify the vehicle approval process



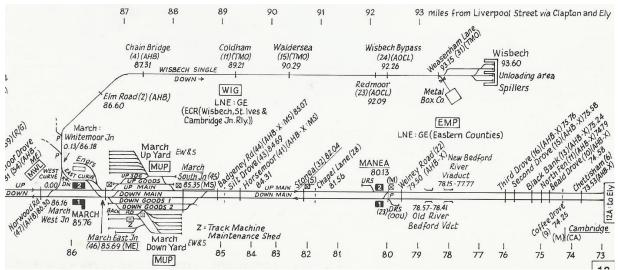


Figure 7 - Line Diagram of Wisbech Branch (Quail Map Company, 1998)

The nature of interventions required can be broken down into three specific crossing types:

- Active crossings intersecting major roads
- Active crossings intersecting minor roads
- User Worked Crossings

The level of infrastructure intervention required can be broken down for each in detail, however this would largely depend on the type of vehicle selected to operate the service, and the nature of modifications undertaken to accommodate locally specific infrastructure.

Active crossings Intersecting Major Roads

An example of this arrangement would be the Wisbech Bypass (see Figure 7 above). This was formerly an AOCL located on a busy main road. Such an arrangement would no longer be acceptable as a heavy rail solution, as the road has seen significant traffic growth, with high usage by HGVs. One option would be to create a grade separated solution in this location. Grade separation would be costly and add complexity. If this were to be undertaken, it is anticipated that the road would require elevating above the rail alignment. Not only would this cause significant disruption to road traffic during construction, but would also require substantial land take for the approach structures and significant aggregate for use as filler material. Concrete approach structures require less aggregate fill however these are generally more expensive to build, and raise environmental considerations from the increased use of synthetic material.

Application of a Tram Train or Tram option may offer a potential compromise solution. Tram vehicles fitted with track brakes already operate on a line of sight basis in urban and suburban areas, intersecting with major roads. Where an interface is created, road traffic lights are incorporated with tram signals to create a standard highway junction. This is treated just like any other road junction, with the exception that trams are often given priority over road traffic when approaching the site. Creation of a standard highway junction on the Wisbech bypass may be possible, and even practical utilising the powers of a light rail order for street interface operation. There is a need to clarify the legal status of the current crossing and the ability to reactivate a crossing at this location. Consultation with stakeholders such as the highways authority will be important.

Application of a VLR option may have a significant effect on the type of road crossing provided. By way of an example, an unmodified Revolution VLR vehicle would likely require some form of active crossing control at major road interfaces. Dependent on how such a vehicle was categorised (e.g. heavy rail, hybrid light rail, etc.), this could introduce a minimum requirement for road warning lights and half/full barrier protection. This has the potential to affect the type of solution implemented

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on the Wisbech Bypass, given a standard rail crossing us unlikely to be feasible in the current context. Such installations could however be suitable for use at less busy sites such as Elm Road in March or Station Road in Coldham.

Low cost, simplified level crossing equipment is used on continental rail networks. Many European countries apply simplified barrier mechanisms at automated crossings effectively, without compromising on the operation of the railway and providing a suitable level of safety based on anticipated risk. Such equipment is occasionally imported for use in a UK context, however for non-railway applications, such as barriers protecting car parks, secure installations and lifting bridges. Siemens, Schweitzer Electric and Unipart Dorman, all offer some form of simplified modular signalling/crossing control arrangement, as part of their wider international supply portfolio. It is anticipated that with some limited development, this technology could be applied for use in a UK context, operating with light rail vehicles and speeds comparable to many secondary heavy rail passenger lines. An example of the Schweizer Electronic Flex crossing system, currently in use on the continent is shown in Figure 8 below.

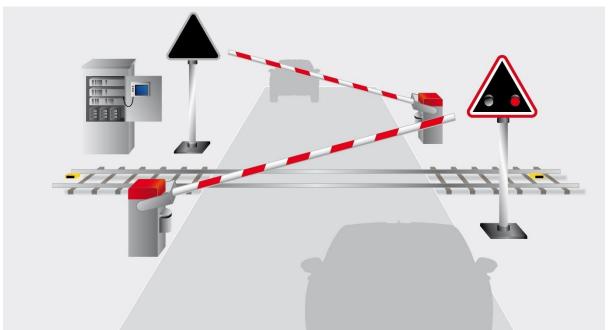


Figure 8 – Schweizer Electronic Flex Crossing System (Source: Schweizer Electronic)

Active crossings Intersecting Minor Roads

An example of this arrangement is Redmoor (see Figure 7). This was formerly an AOCL located on a quiet semi-rural/residential road.

Application of a Tram Train or Tram option offers the simplest road/rail interface solution in this instance. Given the poor sighting at the Redmoor crossing, it is anticipated that traffic lights would be required to facilitate a suitable interface. This would be treated as a standard road junction under current highway regulations. At locations where good sighting distance is available in both directions, it may be possible to incorporate a formalised road junction, without the need for an active traffic light system. Tram vehicles would operate on a line of sight basis over such crossings, with cars required to give way to approaching tram vehicles. This would be subject to individual risk assessment at specific sites, based on key local characteristics.

In the example of Redmoor, application of a VLR vehicle option would require more substantial crossing infrastructure. As per the major road example, this is assumed to be a form of active warning road lights as a minimum. Requirements for provision of barriers would require specific risk assessment for each location, largely dependent on local characteristics, anticipated rail vehicle line Version: 1.1



speed, and road usage. A simple categorisation would be application of the same active warning lights as major road interfaces, minus provision of barriers. This does not however mean projects would be limited to a single type of warning light arrangement, as several types currently exist for different crossing applications. One example of this is the Schweizer Electronic Vamos crossing system, currently in use in the UK at User Worked Crossing installations (see Figure 9 below).

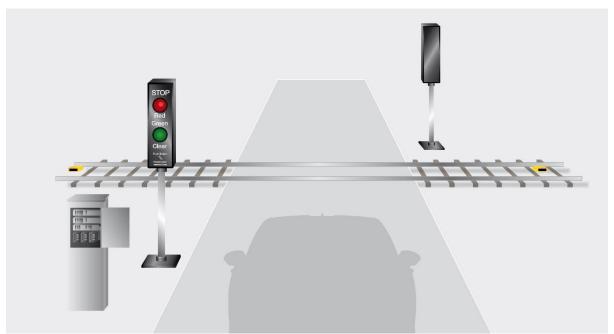


Figure 9 – Schweizer Electronic Vamos Crossing System (Source: Schweizer Electronic)

User Worked Crossings

An example of this arrangement would be Clarkes User Worked Crossing (see Appendix B1.2). This was a basic occupation crossing equipped with passive signage and metal gates. It is located on private land inaccessible to the public and connects agricultural land on one side of the crossing to a farm complex on the other.

Application of a Tram Train or Tram option could allow application of a basic signage based road interface solution, with give way indications for road vehicles. This would be dependent on current/anticipated usage of the adjacent fields, as there could be a risk of livestock accessing the rail alignment. Where fields are to be used for the purpose of grazing, etc. user worked gates would be a minimum requirement. Where gates are provided, it is anticipated that basic give way signage would be replaced with usage signage instructions, including details of penalties for not closing gates.

User Worked Crossings are standard on heavy rail infrastructure and it is not anticipated that such arrangements would differ greatly where a VLR vehicle option is applied on the route. There would need to be consideration of modifications to the VLR vehicle in terms of driver visibility, braking capability and impact protection. A worst case scenario would be a crossing with poor visibility in both directions, utilised regularly by long/slow vehicles. In a heavy rail context, this would normally be managed through the provision of telephones. Telecoms requirements add additional cost/complexity to projects, requiring alternatives to be considered.

One option is to provide a control centre/signal box number for users to call via a mobile phone. Given most of the crossing in question operate with nominated users, as opposed to general public, it would not be unreasonable to expect users to be equipped with mobile phones. Another covers use of remote GSM-R public call technology. This concept uses standalone solar/battery powered

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GSM-R handsets installed at crossings, to provide contact with the signaller/controller in the event of poor mobile phone coverage. This technology is already in use successfully at several locations on the UK heavy rail network.



Figure 10 - Typical UWC installation on Wisbech Branch Route (Photo: Alex Dodds)

5 Optioneering

5.1 Minimum Intervention

Option Overview

Baseline optioneering for a light rail proposal assumes the Client base specification of up to 2 services each way per hour. To allow for expansion as allowance has been made for up to 3 services per hour. This assumes an approximate 20 minute journey time incorporating any additional intermediate stops. Requirements for infrastructure provision will ultimately be dependent on the attained journey time and service schedule, however as a minimum this would include a single/double platform station/tram stop on the edge of Wisbech town centre and an intermediate mid-point passing loop on an otherwise single track route.

The route would be largely self-contained, with a signalised interface at the southern end, where the freight only line to Whitemoor connects with the Peterborough-Ely through lines at March Station. Given this limited heavy rail interface, it is assumed that the service would be implemented as a Tram Train/hybrid light rail operation. With the heavy rail interface limited to a single interlocking transition, scope for utilising Very Light Rail vehicles may be possible, subject to application of route separation/lockout arrangements⁴ provided in the Whitemoor Junction/March Station area. However, Tram Train rolling stock offers greater flexibility for service extension onwards from March on existing heavy rail.

Proposed Infrastructure

⁴ Designation of the VLR vehicle as a tram train may avoid the need for this



The minimum intervention option reduces the cost of initial construction through limiting the infrastructure requirement. It is proposed that a station site located on the edge of Wisbech town centre be utilised for commencement of service. This option would require minimal land take and would run through a former industrial corridor up to a site south of the Nestlé Purina factory. The station would be located on the existing factory site staff car park. This would require relocation of these facilities elsewhere, however this would not be unfeasible due to the varying industrial land uses around the site (with some adjacent plots being semi-derelict at the time of writing).

It is recommended that the station site incorporates a single platform, limited light rail signalling infrastructure, a singe track and platform, with associated light rail based facilities. This initial option is outlined in Figure 11 below. As noted in the Option Overview, in the event a minimum intervention station option was not sufficient to meet anticipated demand, or proposed service schedule, scope exists for a second platform on the same site. It is recommended that provision be made for conversion of the single platform into an island, should future demand warrant (see Figure 11 below). This would require the initial build to be of a suitable width, possibly with platform copers pre-installed.

Provision of parking facilities is also recommended, due to the station's location within the wider urban area, and the potential for use of the town as a railhead for outlying rural areas in the vicinity. Options for a car park on the site are shown in Figure 11 and Figure 12. An alternative option to provide sufficient parking for rail users avoiding additional traffic through the town is to include a park and ride stop at the A47 crossing

One of the disadvantages of the Nestlé Purina site is the potential impact on pedestrian connectivity. In this instance the proposed site offers significant potential for enhanced pedestrian connectivity, with only minor intervention. There are five potential pedestrian corridors that could be constructed/enhanced to provide pedestrian connectivity in all geographic directions from the station. These are listed in clockwise order as follows:

- North footway skirting Nestlé Purina factory (main pedestrian connection to town centre)
- East connection to Victory Road and east side residential areas
- South connection to Weasenham Lane and industrial/commercial district
- South West pedestrian access via Oldfield Lane
- West connection to Cromwell Road through existing footway adjacent to Nestlé Purina factory

Figures 11 and 12 outline pedestrian access provision in brown, with potential light rail style pedestrian crossings denoted in yellow.

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Figure 11 - Proposed Purina Factory Car Park Station Site

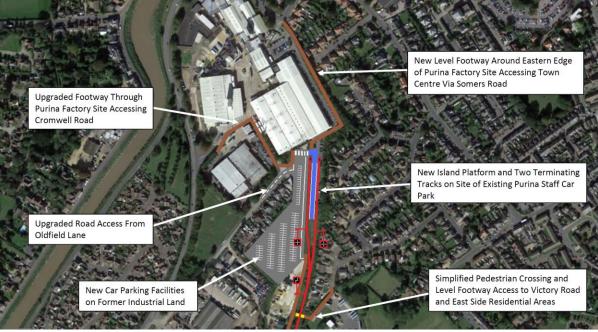


Figure 12 - Proposed Purina Factory Car Park Station Site

Regarding core route infrastructure a minimum light rail intervention for the route would incorporate a single track with a mid-point passing loop (outlined in Figure 13 below). This would allow for a minimum 20 minute peak service provision, assuming that trains would be scheduled to pass in the loop on an out and back basis. If additional contingency time, or extended layovers were required at Wisbech, a second platform would be required for operational flexibility and to accommodate potential service disruption. Signalling interventions include a simplified light rail based single line occupation system. This is similar to examples seen on tram networks throughout the country, with a specific example being the single track Meadowhall Interchange line on the Sheffield Supertram network (see Figure 14 below).



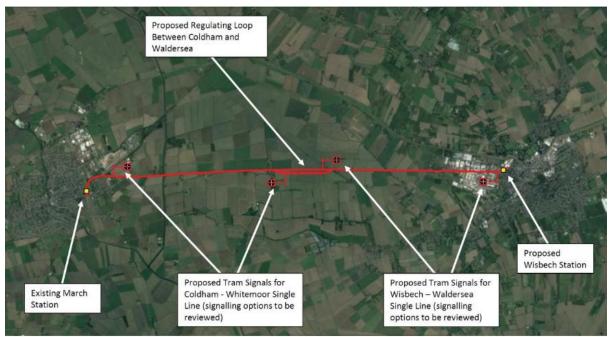


Figure 13 – Proposed Route and Coldham Regulating Loop Location



Figure 14 – Example Single Line Occupation Tramway Controls at Meadowhall Interchange, Sheffield (Source: Ian Ambrose)

Where light rail and heavy rail lines interface a signalling arrangement like that on the Tinsley Chord Tram Train connection in Sheffield is recommended. This incorporates a single main aspect signal on the approach to Whitemoor Junction. This would be designated as the transition point from light rail to heavy rail infrastructure. A corresponding train crew instruction sign would be provided in the opposing direction at the signal denoting 'Start of Line of Sight Infrastructure'. This would be the point that drivers switched to the light rail line of sight operation on the single track section. This arrangement is outlined in Figure 15.

It is recommended that an approach berth or annunciation be provided on the single line, to advise the Network Rail signaller of approaching light rail vehicles. Figure 17 outlines the simplified transition arrangements applied by the Sheffield Tram Train project. It is assumed that in this case, drivers would receive a cautionary aspect for movements towards light rail infrastructure, as is the



case on Sheffield Tram Train. The ownership, operation and maintenance responsibility of the light rail infrastructure will need to be agreed. With formal boundaries established if the light rail section is not the responsibility of Network Rail.

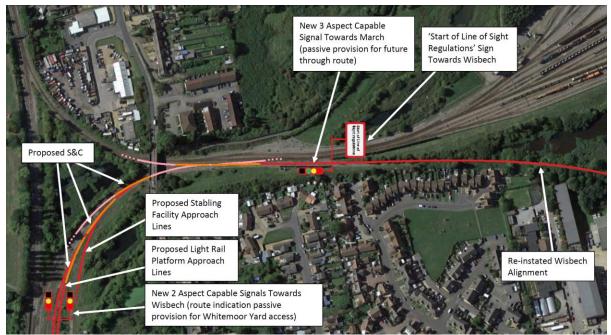


Figure 15 - Proposed March East Curve Connection

Key

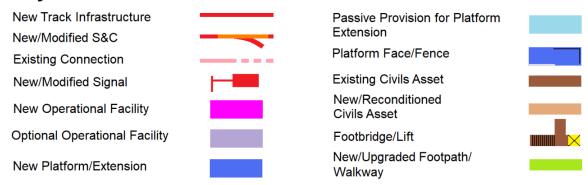


Figure 16 – Key to Aerial Image Overlay Diagrams (Figures 14, 18, 22, 24 and 25)



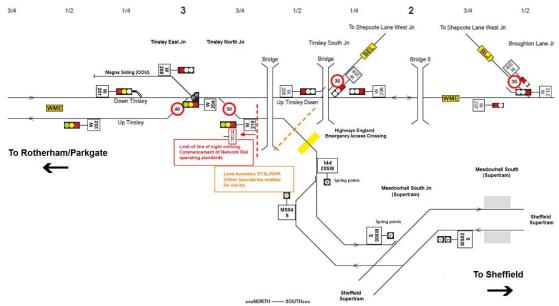


Figure 17 - Simplified Heavy Rail Interface Signalling at Tinsley Chord on Sheffield Tram Train Extension

Access to March Station is assumed to be via the existing West Curve connection to/from Whitemoor Yard. This would require limited shared running on heavy rail infrastructure, with the integrity of the interlocking providing suitable light rail vehicle separation. In addition to reinstating existing S&C towards the Wisbech alignment, a new turnout would be required from the curve towards a proposed platform and depot facility in the current disused area of March Station. Figure 18 shows the indicative layout for two platforms on the disused through alignment. Potential cost savings could be made through temporary frangible decking over the eastern end (shown in yellow), to permit passenger circulation and level access to the north side car park, without reinstating the currently disused portion of station footbridge.

Figure 18 makes provision for two platform lines; however one may be acceptable to reduce cost or align with the service specification. This would require as a minimum, full reconditioning of the current disused platform faces (dark blue) and associated remedial work to structures adjacent to circulation areas. A recent site visit noted severe deterioration in station canopies and supporting metalwork, which may require addressing separately as part of a wider package of station enhancements⁵. Passive provision is made for future platform extensions (light blue) if the business case warranted, or a single extended platform to hold up to two 35-40m vehicles. Signals shown are two aspect with route indication, however the latter may be dispensed with if only one route is to be made available towards the Wisbech branch.

The current land area north of the station site appears to be utilised by Network Rail/contractors for storage of materials and vehicle access. This may permit the optional construction of a two road stabling area for light rail vehicles, and optional maintenance shed (highlighted in pink in Figure 18). This would require re-allocation of maintenance/operational use into a smaller compound area east of the existing site. A standard Ground Position Light signal is assumed to be acceptable for such a facility in this instance

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⁵ Upgrade work to March station has been approved and is underway. Proposed access to the island platform needs to be confirmed



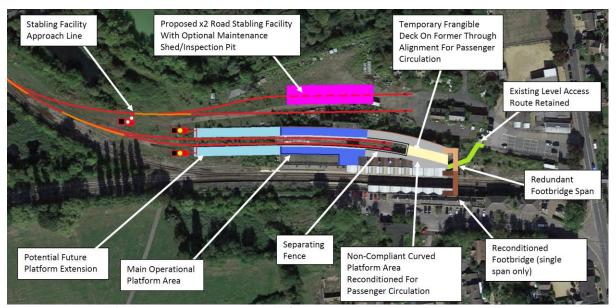


Figure 18 – Proposed March Station Terminating Platforms

Additional Requirements

Additional considerations for the proposed route include level crossings outlined separately in Section 4. Light Rail optioneering offers significant potential cost savings over heavy rail, due to the greater reliance on vehicle capability for managing road rail interfaces. Vehicles intended for tramway operation are normally fitted with track brakes, enhanced standard braking capability, improved driver visibility, and crash energy management. As such, level crossing equipment provision can be substantially reduced over equivalent heavy rail options. None of the existing level crossing equipment provided on the route would be satisfactory for a modern passenger operation, and it is proposed that each crossing be re-assessed for operation with a light rail hybrid service.

A minimum provision on tramway networks is un-signalled crossings. These simply incorporate advisory signage and assume standard road junction compliance. This may be acceptable for several of the user worked crossings on the route, however it is recommended that gates be retained for control of livestock from adjacent fields. Telephones are not normally provided on tramway crossings, however in this instance individual risk assessment may require some form of permission based crossing, in the event of frequent slow traffic/poor sighting/visibility. Technology exists to provide remote GSM-R solar powered communications to rural crossings, which may assist in improving safety without a disproportionate impact on cost. It should be noted that Signal Post Telephones are not proposed for light rail infrastructure, with all traffic based communications being managed by radio, preferably from a central control. Further detail on level crossing interventions can be found in Section 4.4.

Examples of light rail and simplified crossings are shown in Figure 19 (traffic light control interlocked with tram signal indicators) and Figure 20 (simplified light weight barriers).

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Figure 19 - Standard Tramway Traffic Light Road Junction Crossing (Source: YouTube/MrCrompton 33012)



Figure 20 – Simplified Light Rail Barrier Crossing on Isle of Man Steam Railway (Source: YouTube/Perryd Pelle)

For a self-contained light rail service (March-Wisbech only) traction power is assumed to be battery. This would require as a minimum, charging points at both terminus stations, and provision of shore supply in any depot facility constructed. Two options are available for charging facilities including four foot mounted charging grids and overhead conductor bars. Currently no UK market Tram Train vehicles are equipped for four foot mounted charging grids, however the two vehicle types currently in production (Class 398 and Class 399) are both capable of overhead charging.

If a self-contained network is preferred other potential rolling stock could include Very Light Rail (VLR) vehicles. Examples such as the Revolution VLR can be provided with both battery and diesel powerpacks and are proposed to accommodate fast charging from lineside infrastructure.

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5.2 Wisbech Town Centre Interchange

Option Overview

The application of light rail vehicles offers the opportunity for the service to run closer into Wisbech town centre. This would require street running to access a more central location and would potentially extend journey times beyond the assumed 20 minutes of a segregated edge of town station alignment. If the aspiration was to assume a minimum of 2, 3 or 4 tph (see section 4.1) this would require additional route capacity in the urban area to accommodate the extended journey time. Requirements for flexibility of operation, brought about by issues over service reliability/road traffic interface, may dictate a need for additional passing loops/double track infrastructure in the main route corridor.

As per the Minimum Intervention Option outlined in Section 5.1, the core route would be largely self-contained, with a signalised interface at the southern end, where the freight only line to Whitemoor connects with the Peterborough-Ely through lines at March Station. Given this limited heavy rail interface, it is assumed that the service would be implemented as a Tram Train operation, accounting for the extended street tramway interface at the Wisbech end of the route. This would also offer greater flexibility for service extension onwards from March on existing heavy rail if the business case warranted.

Proposed Infrastructure

The required infrastructure for a Wisbech town centre tramway connection would largely mirror that outlined in the Minimum Intervention Option in Section 5.1. The core route infrastructure and March Station options would be the same, excepting potential capacity based interventions associated with the operation of a street tramway service. The most notable difference is the addition of approximately 1.1 miles of unidirectional embedded rail double track street tramway between Weasenham Lane and Horse Fair Shopping centre (see Figure 21 below). This alignment has been identified as the most direct to the main shopping precinct however is only enabled by direct incorporation of the rail alignment into the existing two lane roadway.

Formal signalisation will be required at each major road junction dissected by the tramway alignment, with corresponding tram signal indicators specifically for light rail vehicle movements. There is scope for tram stops to be added along the line of route, in both high level and low level platform configuration. High level platforms offer greater flexibility for onward connection and are slightly more complex to implement in an urban environment. Space does exist in certain locations (such as land in front of the Nestlé Purina factory), where tracks could be gauntleted to provide a segregated high level platform stopping point for light rail vehicles in each direction.

One of the most significant interventions of this proposal would be the construction of a two platform terminus station at the Horse Fair Shopping Centre. This would break off from the street alignment, avoiding the Horse Fair Roundabout and terminating in the ground level of the existing Horse Fair multi-storey car park. Two platforms are assumed to be the minimum intervention in this instance due to the potential performance impact associated with street running discussed in the Option Overview.

A scissors crossover would be required to regulate traffic between the two platforms, and this would need to be clear of the active roadway, to avoid damage to the S&C. The only suitable alignment in this instance runs through part of the current Job Centre site, which would need to be partially re-developed to facilitate a segregated alignment. It is assumed that tram signals and points indicators would be installed as per standard installations for tramways in other mainland UK cities. Additional traffic management interventions, such as road traffic lights, junction stand backs and

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yellow box hatching would be required on the approach to Horse Fair Roundabout, to ensure adequate traffic management in an already congested part of the town.

The existing Horse Fair multi storey car park structure may not incorporate suitable vertical clearance for Tram Train style vehicles. Thus, potential partial or full reconstruction of the upper parking deck to accommodate Tram Train vehicles below may be required. Construction of buildings and car par structures above active tramways is not uncommon, and scope may exist for incorporating 'air rights' development above the station site and above the partially demolished Job Centre site.



Figure 21 – Proposed Wisbech Street Tramway Route Alignment to Horse Fair Interchange

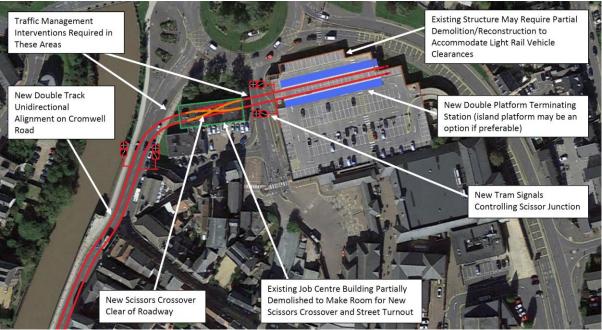


Figure 22 - Proposed Horse Fair Interchange Town Centre Station

As noted earlier in this section additional track infrastructure along the core line of route may be required, to provide enhanced service resilience for interface with a street tramway. It is assumed this would take the form of at least two regulating loops in each direction, between Chain Version: 1.1



Bridge/Coldham South and Waldersea/Redmoor (see Figure 23 below). This would provide capacity to pass services at one third intervals along the route, and could be utilised both for contingency pathing, and future enhanced service if the demand warranted.

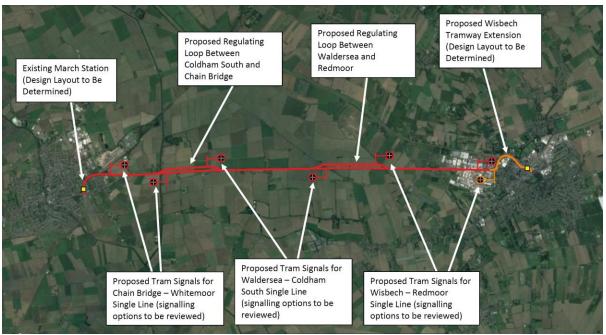


Figure 23 – Proposed Route and Chain Bridge/Waldersea Double Regulating Loop Location



Additional Requirements

Additional considerations remain largely the same for this proposal, as per the Minimum Intervention Option covered in Section 5.1. One of the key differences is anticipated to be the use of embedded rail on the street running sections of route. This would need to be taken into consideration from a procurement and installation perspective, as well as for long term maintenance of the asset. Such a small amount of a very specific infrastructure may add cost/complexity to the project, however larger combined procurement initiatives may be possible through industry organisations such as UKTram. The ownership, operation and maintenance of the on-street sections would need to be established.

Another key difference from the Minimum Intervention Option concerns rolling stock. Integration of a street tramway into the system operation requires the use of a tram or Tram Train type vehicle. For a self-contained network, some form of modified 'off the shelf' tram design may be adequate for the limited interlocking segregation proposed at the Whitemoor Junction. An example being the M5000 tram design used in Manchester. Where onward heavy rail connectivity is being considered in the long term the available option is a Tram Train

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6 Future Considerations6.1 Increase in Service Provision

Heavy Rail Connectivity Beyond March

While the client's baseline requirement is for a dedicated shuttle service between March and Wisbech there is the opportunity, and longer term aspiration, to extend the service beyond March to Peterborough, Ely and/or Cambridge. This section discusses the potential requirements at March to enable such a service extension.

As noted in Section 5 Optioneering, such service extension places a limitation on the type of rail vehicle that can be used in all feasible scenarios, namely Tram Train. Loading gauge restrictions and a lack of electrification limits any chosen vehicle to a battery hybrid option. Due to the presence of electrification on the fringes of the route (Ely-Cambridge, and Peterborough), it is recommended that consideration be given to a 25kV charging capability from overhead catenary. This does not rule out alternative ground based charging provision previously discussed, with charging grids installed in the four foot at the respective terminals. Alternative options exist for onward heavy rail operation beyond March; however these are limited to the semi segregated mode of operation outlined in the Minimum Intervention Option in Section 5.1.

March Station

An extended service enables opportunities for stabling and maintenance of Tram Train/light rail vehicles at existing depot facilities. This would avoid the stabling/maintenance facilities shown in Figure 25. Figure 25 highlights the key changes required to permit light rail vehicle access to the main running lines east of the station. It is assumed that the existing east end freight connection would remain in situ, with the platform lines being designated for Tram Train use only. This would require reconfiguration of the existing level access arrangements for the north side Platform 2.

As a minimum, this proposal recommends significant rehabilitation of the existing footbridge structure (shown in dark brown), which is not PRM compliant and in poor condition. To obtain full PRM compliance lifts would be required. This proposal recommends the construction of a new central footbridge on the site of the existing long stay car park, and former terminating bays in the central island (shown in light brown with lifts in yellow). This would provide a significant enhancement in overall station accessibility, in addition to PRM compliance, and may permit removal of the existing footbridge structure if the asset condition is poor enough to warrant⁶.

More complex signalling arrangements would also be required for the new routes created, with a new single lead spur from the existing main lines connecting to up to two platform lines. In order to accommodate the new S&C on approach to the level crossing, the existing crossover S&C may require partial re-alignment to permit parallel movements. It is assumed that the platform spur would be served by an additional crossover east of the level crossing, within the limits of the existing goods loops. A minimum of two new two aspect signals would be required as starters for the proposed additional platforms, with consideration given to application of standard heavy rail overlaps. It should be noted that this would require changes to the main line interlocking along with additional indications/approach controls on signals controlling westbound movements towards the station.

The layout shown in Figure 24 covers future service provision eastbound towards Ely and Cambridge. It is recommended that consideration be given to service provision towards Peterborough. The site constraints of the existing station, and its defined location make the

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⁶ This may be partially resolved in the current station refurbishment programme. The plans for the footbridge need to be confirmed



question of westbound connectivity somewhat of a challenge. Figure 25 below outlines two potential proposals for a Peterborough service, with both requiring additional infrastructure intervention and potential operational compromise.

The first and most technically complex option would be for an additional spur line connecting one or more of the proposed re-instated through platforms at the western end of the station. This would require a platform reversal in March Station for services proceeding towards Peterborough. This would potentially add additional time to schedules and tie up a platform for the duration of the change procedure. The west chord would connect at the existing March West Junction, in order to utilise the existing crossover for the single lead freight curve and shorten the junction lead times on the main line. This would require enhancement to the basic proposed signalling provision, with one or more west facing signals requiring full aspect sequence and route provision.

It should be noted that while a second platform connection may be desirable in flexibility/ performance terms, this has the potential to add technical complexity/maintenance issues to the intervention. This is due to the requirement for up to two non-standard cast crossing diamonds on an existing track curve.

The second option covered in Figure 25 covers installation of a separate platform on the existing West Curve freight alignment to Whitemoor Yard (shown in blue). This would potentially free up capacity in the main station area for Cambridge services and terminating shuttles from Wisbech, while also permitting through journeys not requiring a reversal. This option would permit fewer signalling infrastructure interventions to enable a Peterborough service, with only minor alterations to the existing freight line required to install TPWS/AWS/overlaps to passenger standards. A walkway could be constructed across apparently unused land to reach the main station site, with PRM compliant access to the main station assumed to be via the proposed new footbridge structure in the centre of the site. An optional connection could also be included to Norwood Road to improve station accessibility if the business case warranted.

It should be noted that for the West Curve platform connection, standards limitations on station design may require some form of deviation or may limit application entirely. One of the key issues concerns platform stepping distances. These would be non-standard for any platform structure installed on a curve of that specific radius. It is however anticipated that any light rail vehicle used for the service would incorporate some form of retractable step system to mitigate this issue. This would render the platform unfit for use by standard heavy rail vehicles. Another standards issue to consider would be the issue of wayfinding within the station site. The West Curve is located some distance away from the main station complex, and even with a PRM compliant walking route, the location may be difficult to find for customers not used to the arrangements. Signage and wayfinding innovations can mitigate against such issues, however the distance between the two sites may be a challenge for persons with reduced mobility in general.

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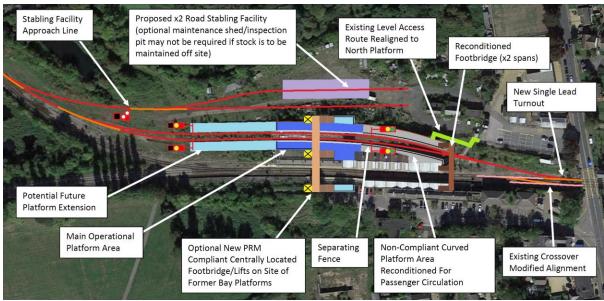


Figure 24 - Proposed March Station Additional Through Platforms

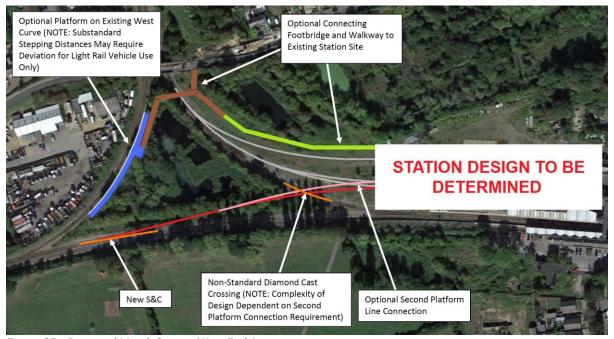


Figure 25 - Proposed March Station West End Access

Additional Considerations

A key consideration is the potential impact of the future West side Garden Town development proposed in Wisbech. The impact is currently difficult to quantify as detailed proposals are not advanced, however it is evident that passive provision for a western connection would be prudent. Figure 26 below outlines several potential high level route options, placed in the context of the detailed versions outlined in Section 5 Optioneering. From the West side Garden Town development perspective, this includes three potential routings for either a 'Y' shaped connection, separate terminating spur, or combination of the two to form some sort of 'loop' arrangement. This introduces the question of additional station stop provision on these routes and whether the business case for these would be enhanced by some additional requirement for route interchange.

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It should be noted that Options 2A, 2B and 3A in Figure 26 all cover some form of tramway based street running as part of the high level proposal, limiting them to tram/Tram Train based vehicle applications. Option 1 (Core) and Option 3B do offer potential for other VLR/light rail vehicle types. This is covered with the caveat of a limitation on existing urban area penetration and does not rule out safeguarding of a segregated route through the proposed garden town district.

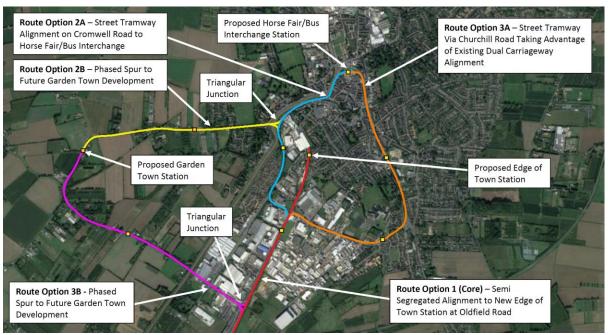


Figure 26 - Summary of Potential Wisbech Area Route Options

6.2 Heavy Rail Option

This section provides a summary of the requirements for a heavy rail solution. Its intent is to highlight the key areas of difference with the light rail options discussed elsewhere.

Operational standards and practices differ considerably between light and heavy rail systems, and this is particularly pertinent for train control and level crossings. The cheapest heavy rail option would be one that limits signalling intervention, which could be achieved through a system of One Train Working. One Train Working systems by nature are not suited to frequent passenger operations and could limit service options to hourly at best (assuming a 20 minute end to end journey time between March and Wisbech).

Adding additional capacity to a heavy rail single line would require formal signal interlocking protection where intermediate loops are provided. This could include some form of token working, or a fully track circuited single line section. Regardless, this would require provision of full heavy rail lineside signalling and supporting infrastructure such as TPWS and AWS. This in turn requires a robust signalling power supply to support system operation, along with a complex and extensive lineside cabling arrangement. There is also no guarantee that additional infrastructure would offer significant gains in capacity, due to the more stringent standards for train speeds and braking distances applied to heavy rail signalling design.

A crucial consideration when evaluating heavy rail options for route re-openings/re-instatements is the issue of level crossings. Current practice within the heavy rail sector is to seek closure/replacement of road/rail crossing interfaces where possible. Where crossings are retained as part of reopening projects, ORR best practice recommends application of full barrier crossings on main roads and/or urban/residential neighbourhoods. An example of such an arrangement is shown

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in Figure 25 below. There are seven active warning crossing sites on the Wisbech branch. Most are of the TMO/AOCL variety which are either considered non-preferred by modern day regulatory standards, or unsuitable for passenger service operation. There may be scope to retain the two semi-intact AHB crossings on the route, subject to suitable risk assessment. Standard practice however is currently to install MCB-OD full barrier crossings, in lieu of older automatic types. These are some of the most expensive and technically complex crossings in the national portfolio, second only to crossings equipped with remote CCTV control.



Figure 27 – Typical Full Barrier Heavy Rail Level Crossing (Source: NR Media Centre)

Additional factors to consider cover station design and construction, largely driven by heavy rail accessibility compliance. Light rail station stops are generally cheaper to build and are subject to differing design standards and guidance. Within the station fabric, integrated CIS systems, help points, station phones and TRTS. There are also end of route infrastructure requirements to consider such as heavy rail compliant buffer stops, compliant overruns, train crew walking routes and lighting. Finally, train control is an important long term requirement of any project, and where this takes place from will have a significant impact on cost, complexity and level of impact/disruption to existing infrastructure. In the case of the Wisbech Line, March East Junction Signal Box would be a reasonable assumption for initial line control. This location is however planned for future recontrol into a ROC facility, and as such any signalling changes applied would need to be incorporated as part of future re-signalling schemes.

6.3 The Role of Technology

Improvements in battery technology within the last decade have enabled electric rail vehicles with practical ranges available to the mass market. Within the rail industry, VivaRail has a simple battery vehicle with a stated range of approximately 40 miles between charges. Further developments are currently in progress and an enhanced battery system with a 60 mile range is anticipated at the time of writing. Additionally, most tram manufacturers offer battery hybrid options which currently charge from the OLE, and alternatives are under consideration.

Other manufacturers are developing rail based battery systems, with Stadler leading innovation on inductive charging systems for the new MerseyRail fleet of vehicles. In parallel, infrastructure companies have been developing methods of safely delivering charging current to rail vehicles, and Furrer & Frey is known to be developing at least two of these. One is an overhead retractable

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charging system, currently being trialled for use on the Coventry VLR scheme, with the other being a four foot track mounted unit, currently being developed for use with the Revolution VLR vehicle.

One of the most important developments in the field of battery technology, after range, is the charging time capability. New 'fast charging' systems are currently being trialled or are under development in this field, with VivaRail currently offering an option for its battery vehicles capable of fully charging a unit in 10 minutes. Charging time is critical when considering service provision/options, as this greatly affects turnaround times and service recovery, in the event of disruption.

As the development of battery charging technology is moving apace with differing methods being trialled it will be important to understand the optimum solution as the vehicle and infrastructure specification is developed.

An important technological development within the rail industry relates to the future capability for interoperation of different types of rail vehicles. The current Level 2 crashworthiness standards for light rail vehicles have allowed operators like Tyne & Wear Metro/Stagecoach Supertram to run light rail services on shared infrastructure with heavy rail services. Both examples run with enhanced legacy signalling control provisions and associated safety systems ensuring traffic separation. Future developments in the field of Digital Railway technology are anticipated to bring additional flexibility to the control of legacy routes. One aspect of this covers application of ETCS operation to manage light/heavy rail vehicle separation. In effect, traffic separation on cab signalled vehicles could be 'programmed' based on vehicle type, with a 'virtual buffer' being placed around lower category light rail vehicles operating in the area. It is unclear at this stage how such technology would affect VLR vehicle operation on Network Rail main lines, however it may offer a practical/cost effective solution for limited heavy rail interfaces for future projects.

Another area of consideration is the current decarbonisation drive being promoted by the government. Rail has a potential role to play in transfer of freight. Early concepts have already been proposed for Freight VLR/Freight Tram Train vehicles, and consideration is already being given to practical routes these could be operated on. Light rail vehicles offer greater scope for urban penetration at an acceptable cost over heavy rail alternatives. Issues arise when interfacing with heavy rail main lines, and this highlights the need for effective transload capability and cargo transfer solutions. The Revolution VLR is being considered in a freight variant (see Figure 28 below).



Figure 28 – Proposed Freight VLR (Source: Transport Design International)

Further study will be needed to understand the feasibility of operating a VLR freight service on the Wisbech line, including any transhipment requirements at either end of the route.

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7 Conclusion

This study has considered the suitability of light rail technology for the provision of passenger rail service between March and Wisbech. The study concludes that a light rail operation is feasible with several options of vehicle type available.

The potential vehicle options have been identified as:

- Very Light Rail
- Tram
- Tram Train
- Heavy Rail

Each vehicle option is dependent on the required service specification and influenced by the following key elements:

- Urban penetration within Wisbech town/Garden City development
- Location of Wisbech railhead
- Complexity of train control/signalling infrastructure
- Complexity of level crossing infrastructure/engineering intervention
- Provision of loops/regulating facilities within the corridor
- Station design/compatibility with existing infrastructure at March
- Cost/constructability considerations
- Onward connectivity to adjacent urban centres, e.g. Cambridge, Peterborough, etc.

Figure 29 is a summary of a comparative qualitative assessment of each vehicle option against the key elements. The RAG status provides an indication of the comparative complexity/degree of difficulty/whole system cost of each option. Note that VLR technology is at an earlier stage of development compared to the other modes. Further research is required to enable a greater level of assurance on the benefits of VLR compared to the other vehicle options.

	Tram	Tram Train	Very Light Rail	Conventional Train
Ability to access Wisbech town centre				
Compatibility with a future Garden Town extension				
Ability to service an edge of town Wisbech Station				
Comparative complexity of signalling control required				
Comparative complexity of level crossing interventions				
Complexity of station design/integration				
Ability to operate on the main line				
Comparative indicative capital cost				
Comparative indicative operating cost				

Figure 29: Indicative comparative analysis of possible rail vehicle types for deployment on the Wisbech to March line.

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The comparative analysis indicates Tram Train as having the best potential for a light rail operation on the route. This is supported by the following key conclusions:

- The base service specification has a limited interface with heavy rail operations. This combined with the potential for a street tramway operation into Wisbech centre and the future possibility of for service extension onwards from March suggests a Tram Train would be an optimum solution.
- The number of level crossings on the route may make a full or hybrid light rail operation cheaper than a comparable heavy rail solution. Many of the current level crossing locations are considered substandard for a modern regular interval heavy rail passenger operation.
- Light rail vehicles operating on tramways are designed for highway interfaces (including track brakes and enhanced forward visibility). For these vehicles level crossing design can be optimised and the level of infrastructure required substantially reduced over equivalent heavy rail options.

The two development options outlined in Section 5 cover potential implementation of each light rail option identified, excluding heavy rail as outside the scope of this document. The Minimum Intervention option proposed in Section 5.1 is compatible with all light rail vehicle types assessed. This is due to its segregated nature and limited requirements for interoperation with heavy rail services. This would require novel operational process development and offers the most cost effective solution for enabling an initial service between March and Wisbech.

The use of any one vehicle type at commissioning should not preclude the future use of another. For example, initial deployment of a VLR vehicle would not preclude later application of a Tram Train. This assumes that a single floor height is selected for any vehicles used on the route. The Minimum Intervention option does not offer full urban penetration or connectivity with the existing bus interchange. This requires consideration of walkability of the station site from the town centre and how this and the applicable pedestrian routes are managed. This does avoid potential traffic congestion on the main north-south corridor into the town centre. It does not preclude phased development of additional light rail connections, as future travel needs are identified.

The Wisbech Town Centre Interchange option, proposed in Section 5.2 offers full urban penetration to the existing bus interchange. This is intended to take full advantage of light rail operational capability, and primarily focusses on application of a Tram or Tram Train vehicle solution. Further assessment is required of the capability of VLR technology to understand the potential of this mode to operate into the centre of Wisbech. The Tram Train option is a proven technology with the capability to operate on the main line, segregated light rail and on-street tramway routes. While this option may be more costly in initial outlay it offers greater flexibility for future system expansion.

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8 Next Steps

This report has identified several actions that are recommended to be adopted as next steps in future development. These are summarised below:

Recommended Next Step 1

The legal status of all the former level crossings on the March to Wisbech line should be confirmed. Confirmation is required if the legal status needs to change if the route is to be used by light rail vehicles.

Establishing the existing rights and liabilities at each crossing will help inform the appropriate solution for each vehicle option.

Recommended Next Step 2

Options for the ownership, operations and maintenance responsibility for the route need to be identified and resolved prior to further development. This includes any on street system into Wisbech town centre or the extension to serve the Garden Town.

While Network Rail retains the freehold of the former railway alignment and associated land there are various options for the long term reinstatement of the route and service. Any extensions beyond the existing Network Rail land boundary create options for the delivery, operation and ownership of any assets.

Recommended Next Step 3

A detailed asset condition survey is required of the entire route. This will assist to confirm the level of remedial work required to reinstate any form of rail infrastructure. This survey to include March Station and the required alterations to create a fully accessible route to the Wisbech platforms.

The former railway infrastructure has not been fully maintained since the line was mothballed. A full asset condition survey will enable greater clarity on the scale and costs of any reinstatement of railway infrastructure.

Recommended Next Step 4

Continued analysis of the light rail rolling stock market and the opportunity for further development in areas such as stored energy and very light rail.

There are continuing technological developments in light rail that may provide further opportunities for the Wisbech to March route. The very light rail market is still emergent and the fully capability (and limitations) of this mode are not yet fully understood.

Recommended Next Step 5

Consider the requirements of providing a double track route between Wisbech and March.

The ability to provide a full double track route will confirm the maximum capacity of the route and determine the degree to which any future-proofing works are required should the initial phase of reopening be less than double track.

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9 Appendices

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Appendix A: Glossary

Acronym	Meaning
0m 00ch	Miles and Chains
ABCL	Automatic Open Crossing Locally Monitored
AC	Alternating Current
AOCL	Automatic Barrier Crossing Locally Monitored
AHBC	Automatic Half Barrier Crossing
AWS	Advanced Warning System
CIS	Customer Information System
DC	Direct Current
DfT	Department for Transport
DMU	Diesel Multiple Unit
DNO	Distribution Network Operator
EMU	Electric Multiple Unit
ETCS	European Train Control System
GRIP	Governance of Rail Investment Projects
GSM-R	Global Standard for Mobile communications - Railway
FOC	Freight Operating Company
FPC	Footpath Crossing
FTN	Fixed Telecoms Network
LRSSB	Light Rail Safety and Standards Board
МСВ	Manually Controlled Barrier crossing
MCB-CCTV	Manually Controlled Barrier crossing – Closed Circuit Television
MCB-OD	Manually Controlled Barrier crossing – Obstacle Detector

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OLE	Overhead Line Equipment
ORR	Office of Rail and Road
OTW	One Train Working
PRM	Persons with Reduced Mobility
ROC	Railway Operating Centre
ROGS	Railway and Other Guided transport Systems (Safety) Regulations
RSSB	Rail Safety and Standards Board
SEU	Signalling Equivalent Unit
S&C	Switches & Crossings
TfW	Transport for Wales
ТМО	Traincrew Manually Operated (crossing)
ТОС	Train Operating Company
tph	Trains per hour
TPWS	Train Protection Warning System
TRTS	Train Ready To Start
TSI	Technical Specifications for Interoperability
ULR	Ultra Light Rail
UWC	User Worked Crossing
VfM	Value for Money
VLR	Very Light Rail
WMG	Warwick Manufacturing Group



Appendix B: Route Level Crossing Assessment B1 Level Crossings

This appendix provides a review of each of the main level crossings on the Wisbech line. The review is based on historic data and from a site visit conducted in June 2021. The site visit was a visual only survey of the current condition. The intent of this appendix is to provide an overview of the differing crossing types it is not a formal engineering assessment of current condition or future potential.

B1.1 Significant Road Crossing Interfaces

Elm Road Automatic Half Barrier (AHB) Crossing (WIG 86m 60ch)

This installation is located on the B1101 secondary road that runs between the Norwoodside district of March up to the Wisbech ring road. It should be noted that in this location the road name is Elm Road, however this changes multiple times on the alignment north of Friday Bridge.

An initial site assessment taken from historical imagery captured in 2018 identifies an elderly 'all in one' AHB installation, possibly from the 1970s, in poor condition. Original wooden laminate barrier arms are missing along with the entire Down side entry 'penguin' unit. The remaining incandescent light installations are in reasonable original condition. The "bomac" surface appears to have been recently removed and replaced with a patched tarmac fill. The rails remain in situ either side of the crossing with some light vegetation encroachment. Examination of imagery notes a former lineside speed sign on the Wisbech side of the crossing, denoting a former line speed of 25mph at this location.

The B1101 in this location appears in average surface condition with full road markings and standard lane width. The road has straight approaches on both sides of the crossing with street lighting either side. The road speed is 60mph at the crossing location and is bordered by a 30mph zone on the south side. Current good practice guidance for installation of new/upgraded level crossings for heavy rail project interventions, would likely recommend a full barrier MCB-OD Mk2/CCTV installation for this location as a minimum requirement. This would be subject to bridging/closure/diversion being discounted as practical options.



Figure AB1 - Elm Road Site Overview

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Figure AB2 – Looking South Along B1101/Elm Road Towards March

Chain Bridge Automatic Half Barrier (AHB) Crossing (WIG 87m 31ch)

This installation is located on the B1101 secondary road that runs between the Norwoodside district of March up to the Wisbech ring road. This is north east of the Elm Road AHB crossing and intersects with an unclassified road at this location.

An initial site assessment identifies another elderly 'all in one' AHB installation, similar to the example at Elm Road, albeit in slightly better condition. Original wooden laminate barrier arms are partially/fully intact along with both integrated 'penguin' units. The incandescent light installations remain intact in reasonable original condition. The "bomac" surface also remains in situ, in remarkably good condition considering the time elapsed since abandonment. The rails remain in situ either side of the crossing with some light vegetation encroachment. This location presents a unique constraint being situated immediately next to the Twenty Foot River waterway. This restricts crossing equipment on the March side into a narrow strip between the road and riverbank, with the adjacent rail bridge running directly off the B1121 road.

The B1121 in this location appears in good surface condition with full road markings and standard lane width. The road has straight approaches on both sides of the crossing transitioning to a sharp diverging bend on the south side approximately 200m from the crossing. The road speed is 60mph at the crossing location, and lower advisory speeds may apply for the diverging bend on the south side. Current good practice guidance for installation of new/upgraded level crossings for heavy rail project interventions, would likely recommend a full barrier MCB-OD Mk2/CCTV installation for this location as a minimum requirement. This would be subject to bridging/closure/diversion being discounted as practical options.





Figure AB3 – Chain Bridge Site Overview



Figure AB4 – Looking South East Along B1101 Towards Wisbech

Coldham Traincrew Manually Operated (TMO) Crossing (WIG 89m 21ch)

This installation is located on the unclassified Station Road that connects with the B1101 at Coldham village. This is situated approximately half-way on the alignment between March and Wisbech, around 1.9 miles north of Chain Bridge AHB.

An initial site assessment identifies a former TMO crossing installation in remarkably good condition, considering the period of disuse. Both manual wooden gates and concrete posts were fully intact as of 2018, albeit somewhat overgrown. The original wooden "bomac" surface remains in situ, also in reasonable condition, with some historic light tarmac patching up to the outer sides of the rail. The rails remain in situ either side of the crossing with moderate to heavy vegetation encroachment. The Stop Boards relating to the TMO crossing operation also remain in place on their original posts. This location presents an interesting constraint being situated immediately next to residential properties in Coldham village. The two houses closest to the alignment appear to be relatively new build in comparison with other properties in the area. It is however unclear whether

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these sites were developed subsequent to formal route abandonment. The presence of these properties could present a restriction on development of a formalised remote/automatic crossing layout, with lights/barrier equipment possibly encroaching on their party land.

Station Road in this location appears in average surface condition, with minimal road markings and narrow lane width. Most of the markings are in poor faded condition, with the crossing stop marker on the Up side having been lost under a recent resurfacing effort. The road has straight approaches on both sides of the crossing however markings on the Down side only apply for 50m immediately before the crossing itself. The road speed on the Coldham village side is 30mph with the speed increasing to the 60mph national limit on the north side of the crossing immediately beyond the gates. Current good practice guidance for installation of new/upgraded level crossings for heavy rail project interventions, would likely recommend a full barrier MCB-OD Mk2/CCTV installation for this location as a minimum requirement due to the residential nature of the location. This would be subject to closure/diversion being discounted as practical options.



Figure AB5 - Coldham Site Overview



Figure AB6 – Looking West Along Station Road



Waldersea Traincrew Manually Operated (TMO) Crossing (WIG 90m 29ch)

This installation is located on Long Drove unclassified Road connecting Ring's End and Friday Bridge. This is situated approximately one mile north of the Coldham TMO crossing on the geographical rail alignment.

An initial site assessment identifies a former TMO crossing installation in remarkably good condition, considering the period of disuse. Both manual wooden gates and concrete posts were fully intact as of 2018, albeit somewhat overgrown. The Down side gate appears in markedly better condition than the Up side as the adjacent site is used by a heritage organisation.

The original alignment appears to have been installed with dock tramway style check rails with no "bomac" surface present. This arrangement remains in original condition however the flangeways have become degraded and blocked with debris over time. The rails remain in situ either side of the crossing with moderate to heavy vegetation encroachment north of the crossing. The south side remains clear, presumably due to intervention from the heritage operation. The Stop Boards relating to the TMO crossing operation also remain in place on their original posts. The sharp angle of this crossing could present a restriction on development of a formalised remote/automatic crossing layout, with lights/barrier equipment potentially located some distance from the actual alignment.

Long Drove Road in this location appears in average surface condition, with no road markings and substandard lane width with passing places. The road has straight approaches on both sides of the crossing however there is a slight kink on the Up side alignment, that could present a challenge for sighting unless some level of vegetation clearance was applied. The road speed is assumed to be a 60mph national limit in the absence of any other evident restriction signage. It is unclear what good practice guidance would recommend for this location, given the unclassified nature of the road and the immediate rural surroundings. As noted earlier any MCB-OD Mk2/CCTV installation at this location would require significant work to alter the alignment of the roadway and may have been one of the factors for not installing an AHB/AOCL originally. As referenced previously, any crossing control intervention would be subject to bridging/closure/diversion being discounted as practical options.



Figure AB7 – Waldersea Site Overview





Figure AB8 – Looking North East Along Long Drove Road

Redmoor Automatic Open Crossing Locally Monitored (AOCL) (WIG 92m 09ch)

This installation is located on the unclassified Redmoor Lane that runs between the South Brink district of Wisbech down to Begdale. This is approximately 2 miles north east of the Waldersea TMO crossing.

An initial site assessment identifies an elderly ABCL installation in moderate to poor condition, and with most original equipment largely intact. All four incandescent light installations remained intact as of 2018, in reasonable original condition. The original AOCL indicator lights are also intact in both directions. The "bomac" surface has been completely removed as part of recent resurfacing, with the edge kerb stones being all that remain as an outline. The rails appear to have been severed on both sides as part of this work. Beyond the severed points, the rails remain in situ either side of the crossing with some light vegetation encroachment. This location presents another unique constraint being situated immediately next to a form of drainage culvert on the north side of the crossing. This restricts crossing equipment on the Wisbech side into a narrow strip between the road and the edge of the culvert, with the adjacent rail bridge running directly off Redmoor Lane. The original REB installation is still present on the Wisbech side of the alignment however, this is not in a secure condition and appears to have been gutted of operational equipment.

Redmoor Lane in this location appears in moderate to poor surface condition with partial road markings in similar condition and narrow lane width. The road has straight approaches on both sides of the crossing. The road speed appears to be a 60mph national limit on both sides of the crossing, however the presence of residential properties in the area suggests that lower advisory speeds may be aspirational at some point in the future. Current good practice guidance for installation of new/upgraded level crossings for heavy rail project interventions, would likely recommend a full barrier MCB-OD Mk2/CCTV installation for this location as a minimum requirement. This would be subject to bridging/closure/diversion being discounted as practical options.

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Figure AB9 - Redmoor Site Overview



Figure AB10 - Looking West Along Redmoor Lane

Wisbech Bypass Automatic Open Crossing Locally Monitored (AOCL) (WIG 92m 26ch)

This installation is located on the A47 Wisbech Bypass road that runs around the east side of Wisbech town. This is approximately 0.5 miles north of the Redmoor AOCL crossing.

An initial site assessment identifies the remains of another elderly ABCL installation in very poor condition, with most original equipment missing. All four incandescent light installations were missing as of 2018, with only the combination AOCL indicator light post and fittings remaining. The "bomac" surface has been completely removed as part of a recent resurfacing effort, with most traces of the original alignment being limited to a tarmac patch outline. The rails appear to have been severed on both sides as part of this work. Beyond the severed points, the rails remain in situ either side of the crossing with some moderate to heavy vegetation encroachment. The original REB installation is still present on the March side of the alignment and appears to be in a secure condition (although condition of interior components is unknown).

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The A47 Wisbech Bypass in this location appears in moderate to good surface condition with full road markings, as would be expected of a major A road. The road has reasonably straight approaches on both sides of the crossing with the east side approach curving gently off to the north, without affecting sigh lines. The road speed is 60mph on both sides of the crossing, and direct observation indicates the route is used by several commercial and heavy goods vehicles. Current good practice guidance for installation of new/upgraded level crossings for heavy rail project interventions, would likely recommend a full barrier MCB-OD Mk2/CCTV installation for this location as a minimum requirement. This would be subject to bridging/closure/diversion being discounted as practical options. Given the A47's current designation, it may well be possible that a new heavy rail crossing installation would be unacceptable from a risk ranking point of view.



Figure AB11 – Wisbech Bypass Site Overview



Figure AB12 – Looking East Along A47 Wisbech Bypass



Weasenham Lane Traincrew Manually Operated (TMO) Crossing (WIG 93m 15ch)

This installation is located on Weasenham Lane unclassified Road connecting the B198 in the west to Churchill Road in the east. This is situated in an industrial estate area approximately one mile north of the A47 Wisbech Bypass AOCL crossing, on the geographical rail alignment.

An initial site assessment identifies a former TMO crossing installation in moderate to poor condition in line with the period of disuse. A single manual wooden gate and concrete posts remained intact on the Up side as of 2018. The Down side gate is missing completely, and no traces of the original post locations remain.

The original alignment crossing the roadway has disappeared completely, and there is no evidence of tarmac patching at the crossing site itself. This suggests that the road was resurfaced in its entirety at this location, since the original crossing structure was removed. The status of the rails south of the crossing is unknown due to substantial overgrowth between industrial units, however these are assumed to remain based on analysis of satellite imagery. The rails have been removed to the north of the crossing site, with only a dirt track and corrugated barrier indicating where the original alignment led. No other visible infrastructure remains, although this could feasibly be obscured by vegetation growth on the south side of the crossing.

Weasenham Lane in this location appears in average surface condition, with full road markings and standard lane width, albeit the markings are somewhat faded. The road has straight approaches on both sides of the crossing, however there is a gentle curve to the south on the Up side alignment which would not likely affect sighting. The road speed is assumed to be a 30mph limit for a built up industrial area, in the absence of any other evident restriction signage. Current good practice guidance for installation of new/upgraded level crossings for heavy rail project interventions, would likely recommend a full barrier MCB-OD Mk2/CCTV installation for this location as a minimum requirement due to the heavily commercialised/industrial nature of the location. This would be subject to closure/diversion being discounted as practical options.

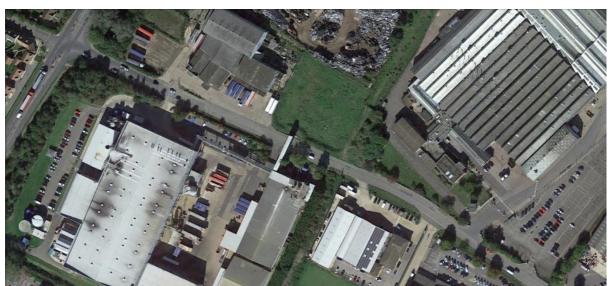


Figure AB13 – Weasenham Lane Site Overview





Figure AB14 – Looking West along Weasenham Lane

B1.2 User Worked/Footpath Crossing Interfaces

Clarkes User Worked (UWC) Crossing (WIG 86m 48ch)

This location falls between Whitemoor Junction and Elm Road AHB. Analysis of satellite imagery indicates the presence of gates either side of the rail alignment and wooden crossing boards spanning the track. It is unclear if these are still actively maintained by the rail authority. The crossing appears to connect a local farm on the Up side of the alignment to adjacent fields on the Down side. The nearest identifiable landmark defined on Ordnance Survey map resources is Three Corner Cut.



Figure AB15 – Unnamed User Worked Crossing Site Overview

Sheldrach User Worked (UWC) Crossing (WIG 87m 10ch)

This location falls between Elm Road and Chain Bridge AHB crossings. Analysis of satellite imagery indicates the presence of gates either side of the rail alignment and a dirt road alignment spanning the track. It is unclear if these are still actively maintained by the rail authority. The rails appear to remain in situ. The crossing appears to connect a local farm on the Up side of the alignment to the

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B1101 Elm Road on the Down side. This appears to be the primary vehicular access for Elm Tree Farm as defined on Ordnance Survey map resources.



Figure AB16 – Unnamed User Worked Crossing Site Overview

Fishers User Worked (UWC) Crossing (WIG 87m 54ch)

This location falls between Chain Bridge AHB crossing and Coldham TMO crossing. Analysis of satellite imagery indicates the presence of gates either side of the rail alignment and a dirt road alignment spanning the track. It is unclear if these are still actively maintained by the rail authority. The rails appear to be missing or buried under dirt. The crossing appears to connect a local farm on the Up side of the alignment to adjacent fields on the Down side. This appears to be secondary vehicular access for Chain Bridge Farm as defined on Ordnance Survey map resources.

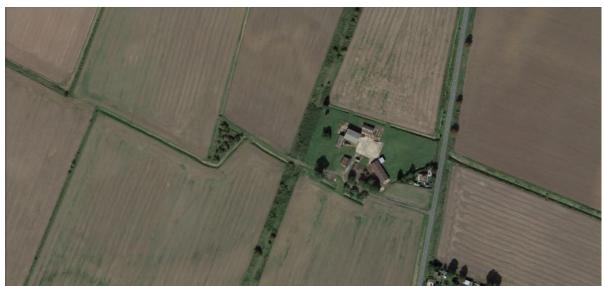


Figure AB17 – Unnamed User Worked Crossing Site Overview

Ballast Pit User Worked (UWC) Crossing (WIG 88m 21ch)

This location falls between Chain Bridge AHB crossing and Coldham TMO crossing. Analysis of satellite imagery indicates the presence of gates either side of the rail alignment and a dirt road

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alignment spanning the track. It is unclear if these are still actively maintained by the rail authority. The rails appear to remain in situ. The crossing appears to connect a local farm on the Up side of the alignment to adjacent fields on the Down side. This appears to be secondary vehicular access for Rutlands Farm as defined on Ordnance Survey map resources.



Figure AC18 – Unnamed User Worked Crossing Site Overview

Crellins and Heads King User Worked (UWC) Crossings (WIG 89m 69ch and 90m 21ch)

These locations fall between Coldham and Waldersea TMO crossings. Analysis of satellite imagery indicates the presence of gates either side of the rail alignment and a dirt road alignment spanning the track at both locations. It is unclear if these are still actively maintained by the rail authority. The rails appear to remain in situ, although are heavily overgrown at the northernmost site. The crossings appear to connect a local farm on the Down side of the alignment to adjacent fields on the Up side. These appear to be secondary vehicular access for Fourscore Farm as defined on Ordnance Survey map resources.



Figure AB19 – Unnamed User Worked Crossings Site Overview



Co-Op No. 1 and No. 2 User Worked (UWC) Crossings (WIG 90m 42ch and 91m 00ch)

These locations fall between Waldersea TMO crossing and Redmoor Lane AOCL. Analysis of satellite imagery indicates the presence of gates either side of the rail alignment and wooden crossing boards/dirt road alignment spanning the track. It is unclear if these are still actively maintained by the rail authority. The rails appear to remain in situ at both locations. The crossings appear to connect local farms and Bet Drove on the Up side of the alignment to adjacent fields on the Down side. The nearest identifiable landmarks appear to be Lillypool House, and Jew House Cottages as defined on Ordnance Survey map resources.



Figure AB20 - Unnamed User Worked Crossings Site Overview

Crooked Bank Road and Holly Bank User Worked (UWC) Crossings (WIG 91m 32ch and 91m 42ch)

These locations fall between Waldersea TMO crossing and Redmoor Lane AOCL. Analysis of satellite imagery does not indicate gates or crossing infrastructure at either location; however the southernmost site is heavily overgrown. The rails appear to remain in situ at both locations. The crossings appear to connect local farms and Belt Drove on the Up side of the alignment to adjacent fields on the Down side. The two crossings appear to serve formally defined tracks, these being Crooked Bank and Narrow Drove respectively, as defined on Ordnance Survey map resources.





Figure AB21 - Unnamed User Worked Crossings Site Overview

Broad Drove User Worked (UWC) Crossing (WIG 91m 78ch)

This location falls between Waldersea TMO crossing and Redmoor Lane AOCL. Analysis of satellite imagery indicates the presence of gates either side of the rail alignment and wooden crossing boards spanning the track. It is unclear if these are still actively maintained by the rail authority. The rails appear to remain in situ. The crossing appears to connect local farms on both sides of the alignment along a local dirt road known as Broad Drove. The nearest identifiable landmark appears to be Whitehouse Farm on the Down side, as defined on Ordnance Survey map resources.



Figure AB22 - Unnamed User Worked Crossing Site Overview

New Bridge Lane Footpath (FPC) Crossing (WIG 92m 44ch)

This location falls between the A47 Wisbech Bypass AOCL and the Weasenham Lane TMO crossing. The site appears to be a former road alignment that was historically downgraded to permit foot/cycle traffic only. Bollards and concrete blocks have been installed to restrict vehicle access, which appear to be a recent addition, possibly installed when the rail alignment was tarmacked over. This crossing is not listed on the historical Quail map shown in Figure 2, so the downgrade may have occurred on construction of the A47 Wisbech bypass, with traffic diverted accordingly.

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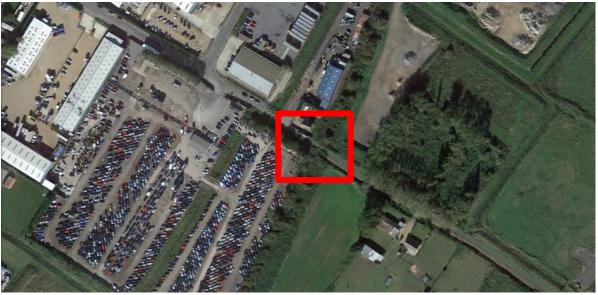


Figure AB23 – New Bridge Lane Site Overview



Figure AB24 – Looking East Along New Bridge Lane

Development Group



Network Rail Anglia HQ One Stratford Place London E20 1EJ

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Agenda Item No: 2.9

Snailwell Loop

To: Cambridgeshire and Peterborough Combined Authority Transport and

Infrastructure committee.

14th September 2022 Meeting Date:

This report contains appendices which are exempt from publication Public report:

> under Part 1 of schedule 12A of the Local Government Act 1972, as amended, in that it would not be in the public interest for this information to be disclosed (information relating to the financial or business affairs of any particular person (including the authority holding that information). The public interest in maintaining the exemption outweighs the public

interest in publishing the appendices.

Lead Member: Mayor Dr Nik Johnson, Chair of the Transport Board

From: Robert Jones, Transport Programme Manager

Key decision: No

Forward Plan ref: N/A

Recommendations: The Transport and Infrastructure Committee is asked to consider the

approach for Snailwell Loop, either to:

a) Recommend to the Combined Authority Board to suspend works developing Snailwell Loop and release the allocated funding back into the relevant revenue or capital funds. Whilst requesting that the Interim Head of Transport continue to lobby government for the EACE scheme which is required to realise benefits for Snailwell Loop along with local Members; or

b) Recommend to the Combined Authority Board to continue to develop the project (in alignment with current budgetary commitment) in the absence of government certainty of linked EACE project progressing and enabling the benefits of Snailwell Loop being realised.

Voting arrangements: A simple majority of all Members present and voting, or

A vote in favour by at least two thirds of all Members (or their Substitute Members) appointed by the Constituent Councils, to include the Members appointed by Cambridgeshire County Council or Peterborough City Council, or their Substitute Members

To be carried, the vote must include the vote of the Mayor, or the Deputy Mayor when acting in place of the Mayor.

1. Purpose

1.1 The Combined Authority are looking to improve the rail network to improve the offer for national, regional, and local businesses, as well as enhancing the connectivity from and to our communities. The potential improvements include Ely Area Capacity Enhancements (EACE) and Snailwell Loop schemes. These will enable more frequent services and make journeys quicker for passengers, whilst improving the potential for greater and more efficient freight movements, to, from and through our region

2. Background

- 2.1 East Cambridgeshire, and particularly Ely, is well-served by the rail network, with direct services to Kings Lynn, Cambridge, London, Norwich, Stansted Airport, Peterborough and the Midlands and the North West. However, some services, particularly on the Kings Lynn Cambridge London corridor especially during peak times, suffer from severe overcrowding. Whilst other services such as those to Ipswich are too infrequent (two hourly) and do not offer a genuine, realistic, and attractive options for many. In addition, the complex junctions north of Ely act as a key constraint on capacity and make it difficult to run additional train services for both passengers and freight. In order to truly realise the full potential of Soham Station, double tracking, and the provision of the Snailwell Loop is necessary to allow for direct hourly services to serve the community.
- 2.2 The EACE scheme would facilitate additional rail services to Cambridge, as well as additional services to Peterborough, Ipswich, and Norwich. The Combined Authority continue to work with Network Rail to deliver additional capacity through the Ely area for the benefit of passenger and freight services, whilst protecting the quality of life of residents in Queen Adelaide. The EACE project will help to deliver additional rail services, including to Cambridge, Kings Lynn, Peterborough, and Ipswich, and provide the capacity for any future services to Wisbech.
- 2.3 The scheme should ensure more reliable journeys for all passengers whilst providing additional capacity for freight services between Felixstowe and Nuneaton, hence reducing the need for freight to be transported by heavy goods vehicles along the A14. The benefits brought about the implementation of the EACE will be maximised by the double (twin) tracking of the Ely to Soham route. These two schemes will provide much-needed additional capacity, create new journey opportunities, and deliver faster, more frequent rail journeys for passengers, whilst maintaining highway access for residents and businesses in Queen Adelaide. These schemes form part of a rail package for the area that also includes the Snailwell Loop and Dullingham Loop.
- 2.4 The benefits of the Snailwell Loop cannot be released until the EACE scheme to the north is completed. The area around Ely currently acts as a significant bottleneck for rail services (passenger and freight). If both schemes can be delivered in tandem or simultaneously then efficiencies and value for money would be increased significantly. By the introducing additional rail paths at Ely and the opportunity for other Combined Authority rail schemes to be brought forward to capitalise on the removal of the log jam at Ely.
- 2.5 To progress this project the approved funding would be used by Network Rail to develop an options study, outline design, costing and Business Case. It is important that the Combined Authority are ready to progress key, regional and local schemes in a timely and effective manner. However, following the publication of the CPCA funded EACE report by Network

Rail it would appear that this study could be mothballed. On receipt of Network Rail's Outline Business Case on EACE in March 2022.

2.6 The mayor has received a letter from the Secretary of State for Transport, Grant Shapps MP, on the EACE Business Case advising that despite the very high BCR of 4.89, there is a significant amount of capital required to realise the benefit. The Combined Authority and stakeholders continue to lobby central government around the need for EACE for the benefit of the local, regional, and national community.

Significant Implications

- 3. Financial Implications
- 3.1 The current CPCA MTFP has an approved funding of £150,000 to be spent this financial year.
- 4. Legal Implications
- 4.1 None.
- 5. Public Health Implications
- 5.1 None.
- 6. Environmental and Climate Change Implications
- 6.1 There would be both Environmental and Climate change benefits from the Snailwell loop and its reliant EACE project. By opening up additional rail paths to the region for both passengers and freight services this would reduce road traffic.
- 7. Other Significant Implications
- 7.1 There are no known significant implications at time to preparing this paper.
- 8. Appendices
- 8.1 Exempt Appendix 1 Secretary of State for Transport Grant Shapps MP Letter: EACE.
- 9. Background Papers
- 9.1 None