

ECONOMY AND ENVIRONMENT COMMITTEE



Date: Thursday, 08 February 2018

Democratic and Members' Services

Quentin Baker

LGSS Director: Law and Governance

10:00hr

Shire Hall

Castle Hill

Cambridge

CB3 0AP

Kreis Viersen Room

Shire Hall, Castle Hill, Cambridge, CB3 0AP

AGENDA

Open to Public and Press

1. **Apologies for absence and declarations of interest**
Guidance on declaring interests is available at
<http://tinyurl.com/ccc-conduct-code>
2. **Minutes 11th January 2018 Economy and Environment Committee** 5 - 12
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4. **Petitions and Public Questions**

KEY DECISIONS

5. **Transport Scheme Development** 19 - 28

OTHER DECISIONS

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INFORMATION AND MONITORING

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11.	Date of Next Meeting - 8th March 2018	

The Economy and Environment Committee comprises the following members:

Councillor Ian Bates (Chairman) Councillor Tim Wotherspoon (Vice-Chairman)

Councillor Donald Adey Councillor David Ambrose Smith Councillor David Connor Councillor Ryan Fuller Councillor Derek Giles Councillor Noel Kavanagh Councillor Steven Tierney Councillor John Williams

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

Clerk Name: Rob Sanderson

Clerk Telephone: 01223 699181

Clerk Email: rob.sanderson@cambridgeshire.gov.uk

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ECONOMY AND ENVIRONMENT COMMITTEE: MINUTES

Date: Thursday 11th January 2018

Time: 10.00 a.m. to 10.40 a.m.

Present: Councillors: D Adey, D Ambrose-Smith, I Bates (Chairman),
L Harford (substituting for Cllr Fuller) N Kavanagh, S Tierney, J Williams
and T Wotherspoon (Vice Chairman).

Apologies: D Connor, R Fuller and D Giles

72. DECLARATIONS OF INTEREST

None

73. MINUTES

The minutes of the meeting held on 7th December 2017 were agreed as a correct record.

74. MINUTE ACTION LOG

The following updates since the agenda publication were reported:

Minute 16 - Bikeability Cycle Training – there was no update to report from that included in the report.

22nd September Committee Minute 40 land North of Cherry Hinton –request for a new developments seminar

Democratic Services drew the Committee's attention to the seminar held on 2nd October on the County's role in Growth and Development with the Committee asked to consider whether those who attended considered it had covered the main issues raised by one Councillor or whether officers still needed to organise a further seminar. It was clarified that the specific points raised in the original request had not been covered, and therefore it was suggested that it would be appropriate to schedule a seminar on new developments later in the year.

There was also a request to hold a future seminar to clarify the restrictions on using 106 monies.

The Chairman and Vice Chairman would consider the additional seminar requests in discussion with officers outside of the meeting.

Minute 42 Request to Review Performance Indicator – Out of Work Benefit Claims
– the indicator has been reviewed and updated to include the information about the actual proportion of people claiming out of work benefits in both the most and less

deprived areas, as well as the gap. The updated version was included in Appendix 7 of the Finance and Performance Report (Item 7 on the agenda).

Minute 57 - St Neots Master Plan queries – It was highlighted in a briefing note to the Committee that a “Steering Group” to own the Masterplan had now been established with Huntingdonshire District Council being the lead delivery partner and that currently the Chairman of the Group had proposed that Councillor Ian Gardener be invited to sit on the Group as the County Council representative. The Chairman explained that he would be discussing this further with officers outside of the meeting (as this was an appropriate appointment to be made by the Committee or through the delegation already in place to him and the Vice Chairman and the Executive Director on outside bodies’ appointments within the remit of the Committee).

Minute 63 - Integrated Transport Block Funding – allocations - Air Quality - An e-mail was sent to the Committee on 10th January as a part response providing details of the allocation process. (This is included as Appendix 1 to the minutes).

The Minutes Action Log as updated at the meeting was noted.

75. PETITIONS AND PUBLIC QUESTIONS

No petitions or public questions were received.

76. PARK AND RIDE AND GUIDED BUSWAY GROUND MAINTENANCE CONTRACT

In 2015 the Park & Ride and Guided Busway grounds maintenance contract was re-tendered in partnership with South Cambridgeshire District Council (SCDC) to achieve economies of scale and simplify the pre-existing contract. As a result, a single contractor was procured for a 3 year term which led to overall savings for the Park & Ride/Busway budget of 6%. As it was due for renewal from October 2018, the report sought approval to commence a procurement process to secure a contract to cover two distinct operations; the Park & Ride/Guided Busway and SCDC Housing and grounds maintenance to be managed separately for a period of five years. It was hoped this increase in contract length would minimise inflationary pressure on budgets and encourage contractors to offer greater savings through investment in more efficient specialist equipment such as tractor and flail type machinery to speed up certain aspects of grounds maintenance currently undertaken (especially along the Busway).

In discussion an issue raised for officer consideration for the new contract specification highlighted by the Council’s Cycling Champion was requests he had received from cyclists that there should be more regular cuts to vegetation running alongside the Busway. The suggestion was that this should be as part of a planned proactive programme rather than reacting to notifications of areas which had particular issues with brambles etc.

It was resolved unanimously to:

- a) Agree the re-procurement of the Park and Ride / Guided Busway Grounds Maintenance contract;

- b) Delegate authority to award the contract to the Executive Director in consultation with the Chairman and Vice Chairman of the Committee.
- c) Agree that the contract should be for a minimum of 5 years commencing on 5th October 2018.

77. CAMBRIDGESHIRE COUNTY COUNCIL RESPONSE TO THE HERTFORDSHIRE COUNTY COUNCIL; DRAFT LOCAL TRANSPORT PLAN

Hertfordshire County Council (HCC) were undertaking a consultation exercise on their draft Local Transport Plan. The report provided a proposed draft response for comment and endorsement as set out in Appendix 1 to the report.

It was highlighted that:

- North east Hertfordshire and South west Cambridgeshire share a common boundary in the vicinity of Royston with significant travel between the two counties along the A505, A10 and A1198 corridors. The town of Royston lies in close proximity to the southern boundary of Cambridgeshire with many surrounding South Cambridgeshire villages using it as their nearest local centre for many essential services as detailed in the report.
- The two counties also share a common interest in the improvement of national and major interurban railway lines as detailed in the report and therefore HCC's transport proposals could potentially have a large impact on the transport network in Cambridgeshire.

The County Council response broadly supported the themes, objectives and principles set out in Hertfordshire's draft Local Transport Plan and:

- Welcomed a greater focus on the important transport and service links between Royston and South Cambridgeshire villages in the border area.
- Supported the continued community transport provision in Royston.
- Recommended that Hertfordshire be mindful of the wider catchment area for primary care services delivered by the three Royston General Practitioner practices
- Supported Royston as a Cycle Infrastructure Improvement Town.
- Welcomed the continued partnership working on the Royston to Cambridge cycleway scheme,
- Would like to see the strategic transport evidence that had been produced to demonstrate the impact of the North Hertfordshire Local Plan within Cambridgeshire.
- Would like to see options at the A505 / Station Road junction at Odsey investigated to address safety concerns.
- Drew attention to the proposed Cambridgeshire funded A505 to A11 Royston to Granta Park Strategic Transport Study and invited HCC's involvement in this study.

In the subsequent debate issues raised included:

- Asking whether HCC were as part of their transport plans taking into account the large scale employment growth proposed cross border in in Cambridgeshire and its impact on likely travel from their county into Cambridgeshire, especially for those seeking employment e.g. the bio-medical campus at the Addenbrooke's Hospital site. In response the Chairman indicated that he had met up with this opposite number from HCC before Christmas and gave his assurance that they were very aware of the various new business / science / medical park developments.
- The Vice Chairman highlighting his support for the proposal for a cycle bridge over the A505.

It was unanimously resolved to:

Endorse the response to the Hertfordshire Draft Local Transport Plan as set out in Appendix 1 to the Officer's report.

78. FINANCE AND PERFORMANCE REPORT – NOVEMBER 2017

Economy and Environment Committee received the latest Finance and Performance Report for the period to the end of November 2017 to enable them to both note and comment on the projected financial and performance outturn position.

The main issues highlighted were:

Revenue: There were no material changes to that at the end of October with at this stage of the year ETE was forecasting an overspend of £6k at year end.

Capital; The forecast spend on Huntingdon – West of Town Centre Link Road for 2017-18 had slipped by £845k given the land cost claims were unlikely to be resolved until the new financial year. ‘

Performance: on the Twelve performance indicators: one was currently showing as red (the average journey time per mile during the morning peak on the most congested routes) three were showing as amber, and eight green. At year-end the current forecast was that no performance indicators would be red, five would be amber and seven green.

In discussion:

- One Member highlighted that national published statistics on travel by bus indicated that nationally they were the lowest for 10 years which highlighted that Cambridgeshire was bucking the national trend.
- There was discussion regarding whether the continued increase in passengers on the Guided Busway masked decreases in passenger numbers on other bus routes. This was certainly the case in rural areas where many routes had been discontinued and was also reflected in the fall in the number of concessionary bus fares. **The Chairman undertook to provide details for the Committee** of a recent satisfaction survey into guided bus patronage which amongst its findings had

highlighted that nearly half of those who travelled on it had indicated that they would have travelled by car if it had not been available.

- In respect of the review of contracted bus services and community transport provision previously being undertaken by this Council the Chairman wished to place on record that this study had now been taken over by the Combined Authority. As a follow up question one member asked what the timescale would now be as the study (agreed at the August 2017 Committee) had originally a target date to report back within 9 months. In response it was indicated that while an outline bid for the study had been prepared the work had not yet been commissioned and therefore in that it was to be a six month study a report back on it was now not expected until at least September. The County Council and Peterborough City Council had been asked to continue to subsidise those bus services previously agreed for 2018-19 and was therefore currently business as usual for the next year.
- In respect of page 59 under the heading 'Cambridge Cycling Infrastructure' the County Council Cycling Champion drew attention to the text explaining the underspend in the programme of section 106 funded cycling projects in Cambridge where funding was generally not time limited and underspends were rolled in the next year. His concern was the next part of the text reading "The delivery team's priority had been to complete projects that have some time limited funding associated with them such as the DFT 'Cycle City Ambition' funded schemes and St Neots Northern foot and cycle bridge as well as to progress some of the higher profile projects such as the Abbey Chesterton bridge". He asked if the Committee could be given an update on the progress on cycle projects and made reference to a meeting he had attended the previous evening where there was concerns raised regarding the Chisholm Trail and issues with perceived threats to local wildlife. His concern was that delays could result in loss of funding on some time limited projects.
- A question was raised regarding the impact of using underspends in other budgets to help offset the waste pressure in the current financial year and whether this would have a detrimental impact for the Transport Development Plan. In response the Executive Director clarified that money was not being taken away from the Highways budget but that he had a duty to look at the whole budget and that where there had been unexpected underspend / gains, they needed to be used initially to help any overspend areas in order to balance the Directorate budget. The intention was that the underspends identified as set out in the paragraph 2.2.1 would only be used for the current year.
- In response to another Member question it was confirmed that there was nothing to stop town / parish councils subsidising local bus services and in fact it was the case that some already were. In response to this, another Member suggested that increased co-operation from district and parish councils would be enhanced from specifying that some section 106 monies should be identified to support community transport.

Having reviewed and commented on the report, it was unanimously resolved:

- a) To note the report.

- b) To receive an update outside of the meeting on progress on time limited cycle projects such as the Department for Transport Cycle City Ambition funded Schemes and any threats to funding. **Action: Mike Davies**

79. ECONOMY AND ENVIRONMENT COMMITTEE TRAINING PLAN

The current Training Plan was as set out with the additional clarification that the Combined Authority training seminar had been pushed back to March and would be a training seminar for all members of the Council not just E and E Committee and would be organised by them, although the date had not as yet been confirmed.

In seeking Members views on whether they wished any additional seminars to be added to the current programme the Cycling Champion highlighted that he had previously raised with lead officers the possibility of receiving a seminar topic on the bus services bill and the constraints and pressures on bus companies providing services. The Chairman suggested this would be more appropriate following the review outcomes report from the Combined Authority. The Vice Chairman recommended to the Committee MP Daniel Ziechner's blog which provided excellent information on the bus bill.

It was resolved;

- a) To note the Training Plan.
- b) To add as a future seminar, to be held after the report back on the Combined Authority review of supported bus services, explaining the economies and constraints of running a commercial bus service.

80. ECONOMY AND ENVIRONMENT COMMITTEE FORWARD AGENDA PLAN

Having received the forward agenda plans as set out in the agenda it was resolved to note the agenda plan with the following changes:

Rescheduling the Ely Bypass Costs report from 8th March to 12th April Committee.

The following change of title for reports to the February Committee meeting:

- Report currently titled 'Ely-Cambridge Transport Study – report recommendations and proposed next steps' changed to 'Recommendations From The Ely-Cambridge Transport Study'
- 'Ely North Junction Level Crossings' changed to 'Queen Adelaide Traffic Study'
- 'Transport Scheme Development Prioritisation Process' shortened to 'Transport Scheme Development'

81. DATE AND TIME OF NEXT MEETING 10 A.M. THURSDAY 8th FEBRUARY 2018

Chairman: 8th February 2018

Dear Economy and Environment Committee Members and Substitutes

During the discussion on the Integrated Transport Block Funding Allocation Proposals report considered at the December Economy and Environment Committee with specific reference to the Air Quality Monitoring Allocation, there was a request for officers to find out both how the money was distributed and also how much those district councils receiving funding, contributed themselves and to provide this information outside of the meeting.

Having consulted with the District Councils the lead officers are able to provide the following update:

The Air Quality (AQ) 'monitoring' budget of £23k has remained at this level for a number of years. This budget is labelled as for AQ monitoring, but is actually used for contributions towards small scale AQ initiatives (monitoring being a common initiative, as this fits within the relatively small budget). All the Districts have their own AQ budgets, and this particular budget is used to help them deliver smaller scale local initiatives that their own budget may not stretch to. Often, the Local Transport Plan ITB money is used as a contribution towards a scheme or initiative, rather than paying for all of it.

The Cambridgeshire & Peterborough Pollution Group meet quarterly and this includes officers from the County Council and all the Districts (plus Peterborough City Council). This group allocate funding from this £23k budget between them, based on that year's priorities. If one or two of the Districts have a number of smaller projects upcoming, they may get priority over another District with less of a requirement for the funding that year (this is then evened up during the next cycle of funding). This decision is usually made at the 'years end' meeting in March/April.

In terms of the actual figures for who has been allocated what amount and how much the Districts have contributed themselves, we have requested that information and will feedback to Members in due course.

If you have any further queries please contact:

Elsa Evans
Funding and Innovation Programme Manager
Elsa.Evans@cambridgeshire.gov.uk
01223 715943 SH1310 or 01223 715943 SH1310.

Kind regards

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**ECONOMY AND
ENVIRONMENT COMMITTEE****Minutes - Action Log**Cambridgeshire
County Council

This is the updated minutes action log as at 30th January 2018 and captures the actions arising from the most recent Economy and Environment Committee meetings and updates Members on the progress on compliance in delivering the necessary actions.

ACTIONS FROM MINUTES OF THE 13th JULY 2017 COMMITTEE

MINUTE NO.	REPORT TITLE	ACTION TO BE TAKEN BY	ACTION	COMMENTS	STATUS
16.	BIKEABILITY CYCLE TRAINING - LOCAL SPONSORSHIP	Mike Davies	The original action was for the Chairman to write to the Local Government Association (LGA) to ask them to lobby the Department for Transport regarding retaining the same level of funding.	<p>An update at the 22nd November Meeting indicated that Richard Mace from the Department of Transport leading on Bikeability had been exploring whether Cambridge based charity, 'The Bikeability Trust', could take on this role in future.</p> <p>At a local level, officers had been talking to OFO bikes on the possibility of funding cycle training in Cambridgeshire. At the time of this log update no further progress had been made and officer's view was that local sponsorship appeared unlikely.</p>	ACTION ONGOING

18.	ECONOMY AND ENVIRONMENT COMMITTEE TRAINING PLAN – SEMINAR ON THE COMBINED AUTHORITY	Democratic Services	There was a request for a seminar on how the functions of the E and E Committee fitted into the decision making process in relation to the terms of reference of both the Combined Authority and the Greater Cambridge Partnership.	This has now been confirmed as a one hour plus slot on the Member's Friday seminar to be held on 16 th March 2018 to be led by Michelle Rowe/Martin Whiteley	ACTION COMPLETED
ACTIONS FROM THE 22nd SEPTEMBER COMMITTEE 2017					
38.	A10 ELY TO KING'S LYNN STUDY - MEETING TO BE ARRANGED BETWEEN OFFICERS AND CLLR AMBROSE SMITH	James Barwise	<p>There was a request for a meeting to discuss further the following issues raised:</p> <ul style="list-style-type: none"> the impact of proposed new housing development around Littleport / Ely and the local business expansion when assessing the improvement proposals for the A10. The need to prioritise the provision of a cycleway between Littleport and Ely. 	The meeting took place on 11 th January when the issues listed were discussed.	ACTION COMPLETED
40.	LAND NORTH OF CHERRY HINTON SUPPLEMEN-	Bob Menzies to discuss with	Suggestions raised included:	This was still to be arranged.	ACTION ONGOING

	TARY PLANNING DOCUMENT - REQUEST FOR A NEW DEVELOPMENTS FUTURE SEMINAR	Tamar Oviatt-Ham.	<ul style="list-style-type: none"> • future proofing new homes to take account of the demands of a rising elderly population, • builders installing solar panels where possible • landscaping including where practicable, a tree planting programme. 		
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ACTIONS FROM THE 12TH OCTOBER 2017 COMMITTEE

57.	FORWARD AGENDA PLAN St Neots Master Plan query	Bob Menzies	Councillor Fuller asked when the Committee would see the St Neots Master Plan and when the Combined Authority would engage on it with all the relevant authorities.	A briefing note provided before the January Committee indicated that a “Steering Group” to own the Masterplan had now been established with Huntingdonshire District Council being the lead delivery partner. The Chairman of the Group had proposed that Councillor Ian Gardener be invited to serve as the County Council representative. At the January Committee meeting the Chairman explained that he would be discussing this further with officers as he knew of at least one other Member representing a St Neots electoral division who had previously expressed to be considered. (Note: this was an appropriate appointment for the Committee or through the delegation already in place	
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				to approve outside body appointments within the remit of the Committee).	
				An oral update will be provided.	ACTION ONGOING
ACTIONS FROM THE 14TH DECEMBER 2017 COMMITTEE					
63.	INTEGRATED TRANSPORT BLOCK (ITB) FUNDING ALLOCATION PROPOSALS - AIR QUALITY (AQ) MONITORING ALLOCATION OF £23K	Elsa Evans Funding and Innovation Programme Manager	<p>Officers undertook to find out both</p> <ul style="list-style-type: none"> a) how the money was distributed and b) how much those district councils receiving funding, contributed themselves. 	<ul style="list-style-type: none"> a) A response was provided to the Committee on 10th January regarding how the money was distributed. See Appendix 1 to the Minutes of the January Committee. b) Officers are still chasing up responses on individual districts contributions. <p>Clarification Note:</p> <ul style="list-style-type: none"> - All the Districts have their own budget (figures still awaiting). It is unlikely that we will receive a set figure from them for AQ monitoring each year, more likely just their overall figures for all AQ projects. - The Districts all carry out numerous monitoring/small initiatives using their own budget (as well as other larger projects). - The £23k County Council allocation is used to boost their own budget (Example: if a District has the money in 	<p>ACTION COMPLETED</p> <p>ACTION ONGOING</p>

				<p>their budget to monitor 10 sites, the Local Transport Plan (LTP) money can be used to monitor an 11th).</p> <p>- So rather than a question on whether the Districts contribute, the answer is more the case that the County Council helps to contribute/add to the Districts own budgets rather than the other way around.</p>	
ACTIONS FROM THE 11th JANUARY 2017 COMMITTEE					
78.	FINANCE AND PERFORMANCE REPORT – NOVEMBER 2017 a) Bus patronage – Guided Busway	Chairman and relevant officers	The Chairman undertook to provide details for the Committee of a recent satisfaction survey into guided bus patronage.	The survey from the Greater Cambridge Partnership was sent to the Committee attached to an email dated 15 th January from Democratic Services.	ACTION COMPLETED
	b) Time Limited Cycle Projects	Mike Davies	Request to receive an update outside of the meeting on progress on time limited cycle projects such as the Department for Transport Cycle City Ambition funded Schemes and any threats to funding.	<p>The response was provided orally following the meeting to Councillor Kavanagh who had raised the query and was also e-mailed to the whole Committee on 19th January.</p> <p>The response has been included as Appendix 1 below.</p>	ACTION COMPLETED

APPENDIX 1

Update on Time Limited Cycle Projects

The Department for Transport (DfT) Cycle City Ambition Grant (CCAG) funding comes to an end in April 2018. The final schemes have just been completed (Quy to Lode and A10 Harston). The only exception is Abbey-Chesterton bridge which is part funded by CCAG. Other cities in receipt of CCAG have failed to deliver some elements of their programmes, and the DfT have advised that they are content on the basis that some commitment is shown regarding the final project/s. In our case having obtained planning consent, all political approvals and finalised land deals, the DfT consider this adequate level of commitment to ensure that no funding is at risk. The DfT have already paid us the funding allocation and we draw down on it, which is typically how much DfT funding is dealt with.

In terms of S106 funding the only project at risk is St Neots Northern foot and cycle bridge. One of the S106 agreements ends in July 2018, which means that £400,000 needs to be spent on the project by then. Activities that might normally be undertaken later in the project development process (such as ground investigation work) are being brought forward to ensure that the funding is not lost. Current spend is £247,465, so on track to spend the £400,000 by July.

Regards

Mike Davies
Team Leader - Cycling Projects, Major Infrastructure Delivery

TRANSPORT SCHEME DEVELOPMENT

To: Economy & Environment Committee

Meeting Date: 8th February 2018

From: Graham Hughes, Executive Director

Electoral division(s): All

Forward Plan ref: 2018/029 **Key decision:** Yes

Purpose: To set out the process for prioritising transport infrastructure schemes to be developed using budget allocated in the Business Plan

Recommendation: The Committee is asked to:

- a) Note the scheme development work being undertaken by the Combined Authority;
- b) Approve the list of schemes shown in Table 2 to be developed in 2018/2019; and
- c) Approve the process for sifting and prioritising transport schemes from 2019/20 onwards (as shown in Appendix 1), to be developed and designed ready to be implemented when funding opportunities arise.

<i>Officer contact:</i>	<i>Member contacts:</i>
Name: Karen Kitchener	Names: Councillors Bates and Wotherspoon
Post: Principal Transport & Infrastructure Officer	Post: Chair/Vice-Chair
Email: Karen.Kitchener@cambridgeshire.gov.uk	Email: ian.bates@cambridgeshire.gov.uk Timothy.wotherspoon@cambridgeshire.gov.uk
Tel: 01223 715486	Tel: 01223 706398

1. BACKGROUND

- 1.1 Historically, the County Council had a dedicated budget for delivering medium-sized transport schemes (between £1m - £5m). As local government finances became more challenging, the available funding for such schemes was withdrawn and with it the development of a pipeline of schemes ready to implement. With the creation of the Cambridgeshire and Peterborough Combined Authority and the additional investment this brings, it is timely for the County Council to once again develop a pipeline of transport schemes ready for implementation either by the Combined Authority or to submit as part of funding bids when opportunities arise.
- 1.2 A budget of £1 million has been set aside for this as part of the Capital Budget in the Council's Business Plan, with the intention of bringing schemes to the point where they can be submitted for funding and the development costs reclaimed. It is expected that this investment could unlock significant future funding in transport from successful funding bids to deliver projects.
- 1.3 Funding bidding rounds often stipulate that eligible schemes need to be deliverable within a certain limited timeframe, therefore having a number of schemes that are ready to be delivered will help to maximise the chances of securing additional funding.
- 1.4 It should be noted that the Greater Cambridge Partnership (GCP) is developing its Future Investment Strategy for 2020 onwards. A paper to the GCP Executive Board in December 2016 considered principles for the prioritisation of future GCP schemes as well as the potential for a fund for smaller-scale schemes and a rolling fund. There is therefore no requirement to consider schemes in Cambridge in the proposed criteria as they are likely to be developed by the GCP. South Cambridgeshire has not been excluded as there may be schemes, particularly further from Cambridge that are close to or that cross geographic boundaries, that are not a priority for the GCP or that do not meet relevant GCP criteria, but might be a priority when considered in a County-wide context.

2. MAIN ISSUES

- 2.1 It is proposed that this budget be used to develop schemes costing between £1m and £5m, filling a gap not currently covered by other budgets. Funding for schemes costing under £1m is already available through the Local Transport Plan Integrated Transport Block, while funding for schemes over £5m can be sought from the Greater Cambridge Greater Peterborough Local Enterprise Partnership and the Department for Transport's (DfT's) Large Major Schemes Pot (subject to meeting specific criteria), as well as the Cambridgeshire and Peterborough Combined Authority and the Greater Cambridge Partnership, both of which plan to deliver a programme of wide-ranging schemes, many costing over £5m.
- 2.2 It is also proposed that schemes developed using this budget focus on addressing existing congestion issues on the road network. Many of the existing budgets focus on safety, encouraging sustainable transport, and catering for future planned growth and development. Therefore there are limited budgets available to develop schemes addressing specific existing congestion issues. Such issues can often have considerable impacts on quality of life and local economies.

2.3 It is proposed that schemes be identified in line with the principles set out in paragraphs 2.1 and 2.2. The budget would then be used to fully develop and design new transport schemes. Work would include feasibility, design, business case work, consultation, and any land purchase, planning permissions, or other statutory processes. This would result in a pipeline of schemes that are ready to be delivered when funding opportunities arise.

2.4 Work to date has focussed on two areas:

- Projects that could be developed during 2018/19, and
- A sifting and prioritisation process for identifying schemes to be developed if further funding comes forward in future years

2018/19 Schemes

2.5 Officers have reviewed the Transport Investment Plan to identify schemes which could be developed early on in the programme. Officers have focused on schemes which could be delivered without planning permission and within the existing highway boundary or schemes where sufficient information is already available in order for design work to commence. The long list of schemes identified are shown in Table 1.

Table 1- Long list of schemes identified

<i>Scheme</i>	<i>District</i>
A142 Fordham to Soham	East Cambridgeshire
A10/A142 roundabouts, Ely	East Cambridgeshire
March junctions improvements package <ul style="list-style-type: none"> • Phase 2 Industrial Northern Link Road, March • A141/B1099 Wisbech Road – roundabout • A141/Gaul Road • A141/Burrowmoor Road • B1101 Broad Street /B1101 Station Road /B1099 Dartford Road • B1101 High Street/Burrowmoor Road – roundabout • B1101 High Street/St Peters Road • A141/Hostmoor Avenue • B1101 Elm Road/Twenty Foot Road 	Fenland
A141 junctions Huntingdon <ul style="list-style-type: none"> • A141 / St Peters industrial area roundabout • A141 / B1090 roundabout 	Huntingdonshire
St Ives junctions <ul style="list-style-type: none"> • A1096 / Meadow Lane • A1123/B1040 and A1123/Harrison Way roundabouts • B1090/A1123 	Huntingdonshire

2.6 It should be noted that in October 2017 the Cambridgeshire and Peterborough Combined Authority approved a shortlist of feasibility studies and business cases for schemes in Cambridgeshire and Peterborough. Three of the schemes being taken forward by the Combined Authority were identified by officers in the longlist shown above in Table 1. These are as follows:

- A142 Fordham to Soham, expanded to cover the route from Newmarket to Chatteris

- A141 capacity enhancements, Huntingdon – including the two junctions listed above
- March junctions improvements package

- 2.7 There is additional work being brought forwards in Wisbech using funding from the LEP to develop the Wisbech Access Strategy which sets out the case for transport investment to support the Fenland Local Plan.
- 2.8 The longlist has been updated to reflect the Combined Authority's programme to form a shortlist of proposed schemes. Members are asked to approve this list of schemes for further development as set out in recommendation a).

Table 2 – Schemes proposed to be developed in 2018/19

<i>Scheme location</i>
St Ives Junctions:
A1096 / Meadow Lane roundabout, St Ives
A1123 / B1040 and A1123 / Harrison Way roundabouts
B1090 / A1123 Houghton Road, St Ives
A10/A142 roundabouts Ely

- 2.9 For completeness, the full programme of Combined Authority schemes in Cambridgeshire only is shown in Table 3 (some of these schemes may cost over £5million). Some of this work covers existing County Council priorities and identified schemes at congested junctions.

Table 3 – Relevant Cambridgeshire and Peterborough Combined Authority Schemes

<i>Scheme</i>	<i>Work to be carried out</i>
<i>Highway Scheme Development</i>	
A142 Capacity Study (Newmarket to Chatteris)	Feasibility
A141 capacity enhancements, Huntingdon	Feasibility
March Junctions improvement package	Feasibility
A505 corridor study	Feasibility
A14 Junction Improvements (Jct 35 – 38)	Feasibility
Wisbech Access Study Packages	Preliminary Design
Coldham's Lane roundabout improvements	Design
<i>Strategic Schemes</i>	
Cambridgeshire capacity rail study	Feasibility
Cambridge South Station	Options appraisal / business case
Soham Station	Options appraisal / business case
Regeneration of Fenland Railway Stations	Preliminary Design
A10 Foxton Level Crossing	Feasibility
Huntingdon Strategic River Crossing	Feasibility
St Neots River Great Ouse cycle bridge	Preliminary Design

Sifting and prioritisation process

- 2.10 If further scheme development funding is allocated for future years, it is proposed that a sifting and prioritisation process be established to develop a forward pipeline of schemes

ready for delivery as and when funding becomes available. It is suggested that the sifting and prioritisation process be developed to focus on schemes which tackle congestion, cost under £5 million, and are not already funded or part of a committed wider future scheme, as set out above. The full proposed process is described below and shown in Appendix 1.

- Stage 1 – Initial sift of schemes

The Transport Investment Plan has been used as the starting point for schemes and a sifting process has been developed based on the factors set out above. Approximately 80 schemes have passed this first sift to form a long list of candidate schemes. Thoughts on this process and the sifting criteria used would be welcomed.

- Stage 2 – second sift

For the stage 2 sift it is proposed to score the long list schemes solely against the congestion criteria of the National Productivity Investment Fund (NPIF) scoring system to produce a short list of schemes. The NPIF system is being utilised by the Combined Authority to develop its priority transport programme.

- Stage 3 - Prioritisation

The next stage would be to score the shortlist schemes against all the NPIF criteria to form a prioritised list of schemes that would become the scheme development programme. It is worth noting that the NPIF has been used by the Cambridgeshire and Peterborough Combined Authority to help determine its transport priorities.

- 2.11 It is proposed that a paper be presented to this committee each December to approve the following year's programme of schemes to be developed.

3. ALIGNMENT WITH CORPORATE PRIORITIES

3.1 Developing the local economy for the benefit of all

- Developing a pipeline line of schemes aimed at tackling congestion will enable improved access to jobs, services and homes in Cambridgeshire.

3.2 Helping people live healthy and independent lives

There are no significant implications for this priority.

3.3 Supporting and protecting vulnerable people

There are no significant implications for this priority.

4. SIGNIFICANT IMPLICATIONS

4.1 Resource Implications

- What are the capital and revenue costs?

A budget of £1 million has been allocated to this work from the Capital Budget as part of the Council's Business Plan – Scheme Development for Highways Initiatives.

- Is the organisation delivering value for money?

The Council will follow the correct procurement process to ensure value for money.

4.2 Procurement/Contractual/Council Contract Procedure Rules Implications

The following bullet point sets out details of significant implications identified by officers:

- All Council procurement and contractual procedures will be followed for any work that is commissioned e.g. feasibility studies, business cases, or design work.

4.3 Statutory, Legal and Risk Implications

A risk assessment for each scheme would be developed once schemes have been selected.

4.4 Equality and Diversity Implications

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

- The development of schemes to tackle congestion should provide improved access to services in Cambridgeshire.
- A full Community Impact Assessment will be carried out once schemes have been selected and the development process has commenced.

4.5 Engagement and Communications Implications

The following bullet point sets out details of significant implications identified by officers:

- Full public engagement would be carried out for individual schemes at the appropriate times.

4.6 Localism and Local Member Involvement

There are no significant implications within this category.

4.7 Public Health Implications

The following advice was provided by the Cambridgeshire County Council (CCC) Public Health team:

Transport policies have potentially significant public health implications, which are worthy of careful consideration by decision makers. The emphasis on tackling congestion in the criteria for funding outlined in Appendix 1 has a potential positive impact on health because (a) congestion may worsen air quality, with increased concentrations of particulates and nitrogen dioxide, which can have negative short and longer term impacts on respiratory and heart disease (b) if the economic benefits of reducing congestion translate through to

improved employment and income in the local area, this is associated with better health outcomes.

However, the number of formal air quality management areas in Cambridgeshire is low, and the impacts on health of reducing congestion at specific junctions, where people spend a limited amount of time during travel to work or school, are likely to be smaller than the potential benefits to health from increased local rates of walking and cycling. Studies show that cycling and walking for both utility and leisure have direct health implications including:

- Active commuting conferring a 10% reduction in the risk of developing heart disease and stroke¹.
- Switching from private motor transport to active travel or public transport being associated with a significant reduction in body mass index (BMI)².
- Regular cycle commuters having half the level of sickness absence (1 day less) per year compared to those who do not.
- Individuals cycling for utility 4 time more likely to achieve UK recommended level of physical activity compared to those who do not³.

A synthesis of studies⁴ which examined the relationship between cycling/walking and mortality over time found that individuals who walked 168 minutes per week (17 mins twice per day for 5 days) cycled 100 minutes per week (10 minutes twice per day for 5 days) had 10% lower death rates compared to non-walkers and cyclists. In addition, a growing evidence base shows that access to cycling and walking infrastructure is associated with increased levels of cycling and walking. A study⁵ of 3 infrastructure projects showed that after 2 years, proximity to new cycling and walking infrastructure predicted increases in activity compared to those living farther away (with 15.3 additional minutes/week walking and cycling per km nearer to the new infrastructure).

The exclusion of cycling and walking infrastructure projects from the criteria outlined in Appendix 1 may therefore reduce opportunities to improve population health locally, particularly if this sets a precedent for other transport policy decisions.

¹ Hamer, M., & Chida, Y, *Active commuting and cardiovascular risk: a meta-analytic review*. Preventative Medicine, 2008;46(1):9-13.

² Martin A, et al. Impact of changes in mode of travel to work on changes in body mass index: evidence from the British Household Panel Survey. (2015) J Epidemiol Community Health 0:1–9. doi:10.1136/jech-2014-205211

³ Quantifying the contribution of utility cycling to population levels of physical activity: an analysis of the Active People Survey

⁴ http://www.euro.who.int/__data/assets/pdf_file/0010/256168/ECONOMIC-ASSESSMENT-OF-TRANSPORT-INFRASTRUCTURE-AND-POLICIES.pdf?ua=1

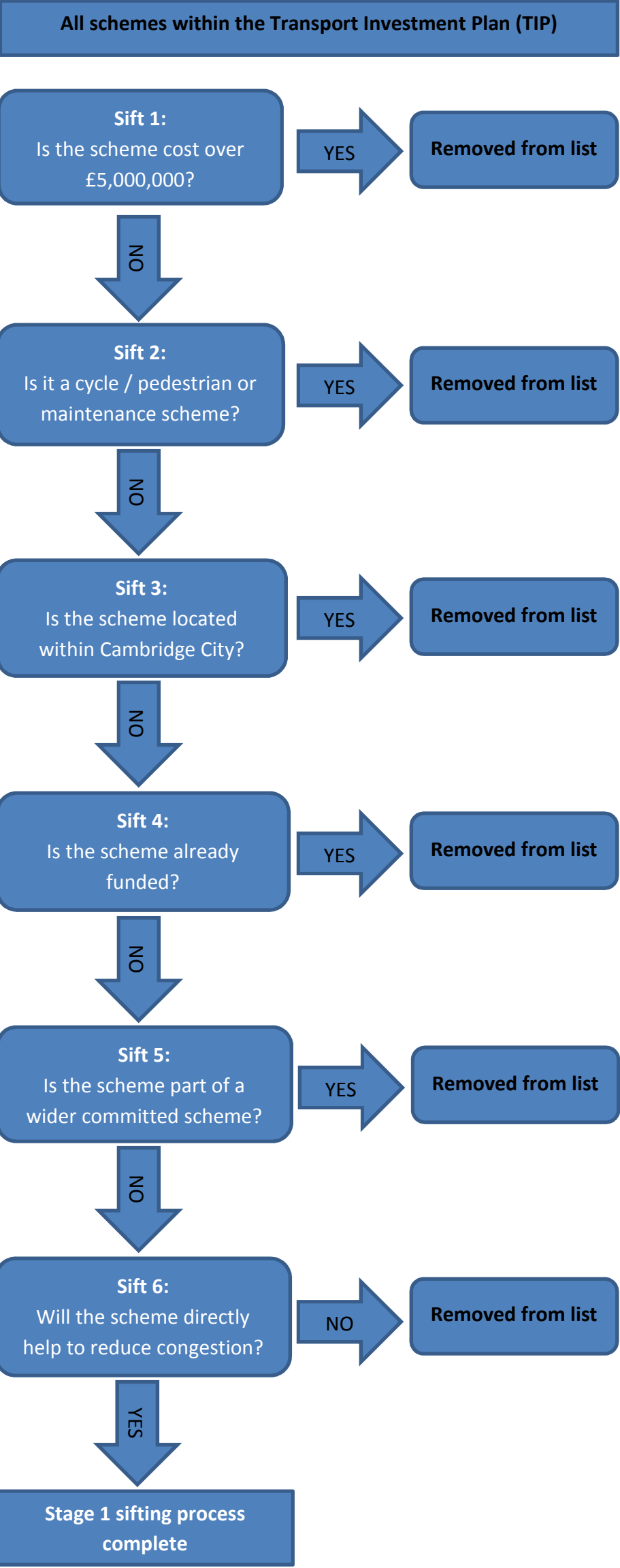
⁵ New Walking and Cycling Routes and Increased Physical Activity: One- and 2-Year Findings From the UK iConnect (2014)

Implications	Officer Clearance
Have the resource implications been cleared by Finance?	Yes Name of Financial Officer: Fiona McMillan
Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the LGSS Head of Procurement?	Yes Name of Officer: Paul White
Has the impact on statutory, legal and risk implications been cleared by LGSS Law?	Yes Name of Legal Officer:
Have the equality and diversity implications been cleared by your Service Contact?	Yes Name of Officer: Tamar Oviatt-Ham

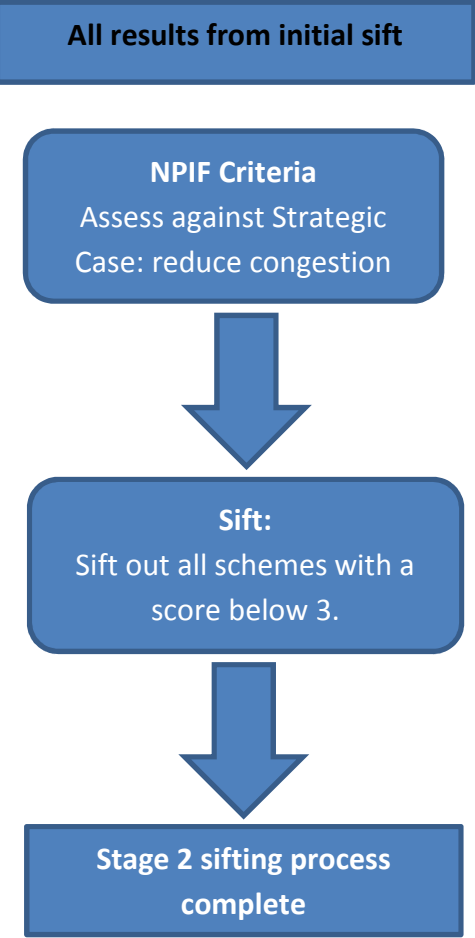
Have any engagement and communication implications been cleared by Communications?	Yes Name of Officer: Sarah Silk
Have any localism and Local Member involvement issues been cleared by your Service Contact?	Yes Name of Officer: Tamar Oviatt-Ham
Have any Public Health implications been cleared by Public Health	Yes Name of Officer: Stuart Keeble

Source Documents	Location
Transport Investment Plan	https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/transport-plans-and-policies/transport-investment-plan/

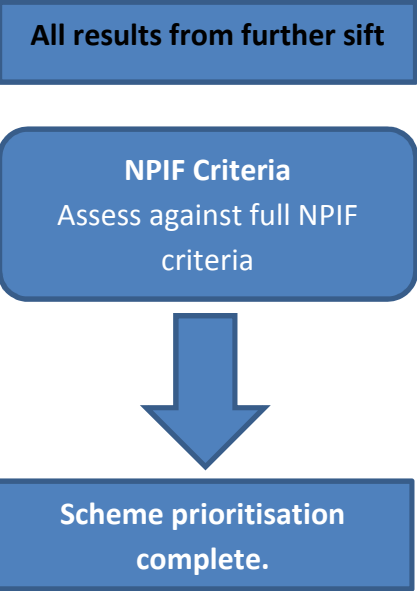
STAGE 1: Initial Sift



STAGE 2: Further Sift



STAGE 3: Prioritisation



NPIF Scoring Criteria:

	Strategic case: reduce congestion	Strategic case: jobs and housing	Economic case: Scale of impact	Economic case: value for money	Management case: early delivery	Management case: stakeholder support	Financial case: Local contribution
Key Considerations	Improve the efficiency of the existing space allocated to transport.	Unlock economic and job creation opportunities.	What is the scale of impact on traffic condition, journey time, reliability?	What level of benefits will the project deliver assessed against cost, either in BCR or qualitative assessment?	Certainty of commencing during 2018/19.	Is there evidence of support for the project from e.g. Members, the public, District Council, Parish Council, local MP?	Percentage of local contribution.
	Avoid simply unlocking latent demand.	Enable new housing developments.			Certainty of statutory powers in place.		Level of private sector funding.
	Use smart technology to ease congestion.						
3	Major improvement to congestion and meets new development needs.	Jobs/homes delivered by 2021 or large number enabled.	Major congestion reduction with wider positive impact.		High certainty commence in 18/19, stat powers in place.	Formal consultation carried out evidencing support.	>50% some private or 30-50% mostly private.
2	Some improvement to congestion and meets new development needs.	Jobs/homes delivered by 2021.	Mid-large scale positive impact.		Can commence in 18/19, low risk of stat powers issue.	Supported multiple (public and Members).	30-50% some private.
1	Minor improvements to congestion and meets development needs.	Some jobs/homes enabled but not by 2021.	Small scale/localised positive impact.		Can commence late 18/19, high risk of stat powers issue.	Support indicated (e.g. public and Members).	<30% private.
0	No change.	No change.	No impact or +/- balance.	No impact or +/- balance.	Feasible, but highway land issues.	No evidence.	None.
-1	Minor negative impact on the reliability of journey times.		Small scale/localised negative impact.		Feasible, but highway land not sufficient/multiple issues.	Minor opposition indicated.	
-2	Some negative impact on the reliability of journey times.		Mid-large scale negative impact.		Feasible, but more significant issues with land, services, etc.	Multiple opposition indicated.	
-3	Major negative impact on the reliability of journey times.		Major/cross-district negative impact.		Not possible without major additional works.	Formal consultation shows large opposition.	

QUEEN ADELAIDE TRAFFIC STUDY

To: Economy and Environment Committee

Meeting Date: 8 February 2018

From: Graham Hughes, Executive Director Place and Economy.

Electoral division(s): Burwell, Ely North, Ely South, Littleport, Soham North and Isleham, Soham South and Haddenham, Sutton, Woodditton.

Forward Plan ref: Not applicable *Key decision:*
No

Purpose: To consider the results of the Queen Adelaide Traffic Study.

Recommendation: The Committee is asked to:

- a) Note the proposals for wider regional and national benefits, of increased rail capacity through Ely North Junction;
- b) Note the potential impact on the whole community, residents and local businesses of increased frequency and duration of level crossing closures;
- c) Agree to oppose any measures that restrict traffic flow across the level crossings to the detriment of residents and local businesses until alternative solutions are put in place;
- d) Note the intention to explore opportunities with the Cambridgeshire and Peterborough Combined Authority to fund the options development for a road bridge solution (Options 7 or 8 of the traffic study) and;
- e) Agrees to continue to work with the Combined Authority, Network Rail and the Ely Area Task Force to develop a comprehensive road solution that meets the needs of all Cambridgeshire residents and in particular the communities of Queen Adelaide, Prickwillow and Ely.

<i>Officer contact:</i>		<i>Member contacts:</i>	
Name:	Jack Eagle	Names:	Councillors Ian Bates and Tim Wotherspoon
Post:	Principal Transport and Infrastructure Officer	Email:	ian.bates@Cambridgeshire.gov.uk Tim.wotherspoon@cambridgeshire.gov.uk
Email:	Jack.Eagle@Cambridgeshire.gov.uk	Post:	Chairman/Vice-Chairman
Tel:	01223 703269	Tel:	01223 706398

1. BACKGROUND

- 1.1 Five railway lines converge on Ely from Cambridge, Newmarket, Norwich, King's Lynn, and Peterborough. The lines to King's Lynn, and Norwich split from the Ely-Peterborough line at Ely North Junction. In the early 1990s the line from Cambridge to King's Lynn was electrified and to keep costs down the junction layout was simplified. This limited the number of trains that could use the junction and with growing demand for both passenger and freight trains this is now a serious strategic constraint on the wider railway network in East Anglia. As a result Network Rail have been considering a project to upgrade the rail junction and release additional capacity through this key bottleneck.
- 1.2 Any increase in rail capacity at the Ely North Junction will have impacts on the level crossings in the area from increased train numbers and additional barrier down time. This report summarises the results of a traffic survey in this area which considers the existing situation, and the impact of any future proposal by Network Rail to change or close any level crossings.

Benefits

- 1.3 The Government have committed through the existing rail franchises to increase the King's Lynn – Cambridge service from hourly to half hourly and to increase the Ipswich-Peterborough service from two hourly to hourly. In addition there is pressure to increase the frequency of other services that pass through the junction from hourly to half hourly: Norwich – Cambridge, Birmingham – Stansted and Liverpool – Norwich (which reverses at Ely passing through the junction twice on each trip). There is also a desire for a Wisbech to Cambridge service and for an increased number of container trains from Felixstowe to Nuneaton. Although the Ely North junction works will increase capacity it will not be sufficient for all of these desires to be met and decisions will be required on which services are most needed.
- 1.4 The benefits to Cambridgeshire of improving the Ely North junction are both direct through better train services, e.g. Littleport will benefit from the enhanced King's Lynn service, and the business case for a new station at Soham will be much higher with an enhanced Ipswich – Peterborough service. Even where train service frequencies aren't enhanced passengers on those routes will benefit from better connectivity and reliability at Ely. The benefits are also indirect through fewer vehicles on the A10, and in the case of an increase in rail freight services, fewer heavy goods vehicles on the A14.

Level Crossings

- 1.5 North of the rail junction all three lines cross the B1382 at Queen Adelaide. The Peterborough and King's Lynn line crossings are very close together. The Norwich line crosses the river and Queen Adelaide Way on a bridge before crossing the B1382 at a level crossing.

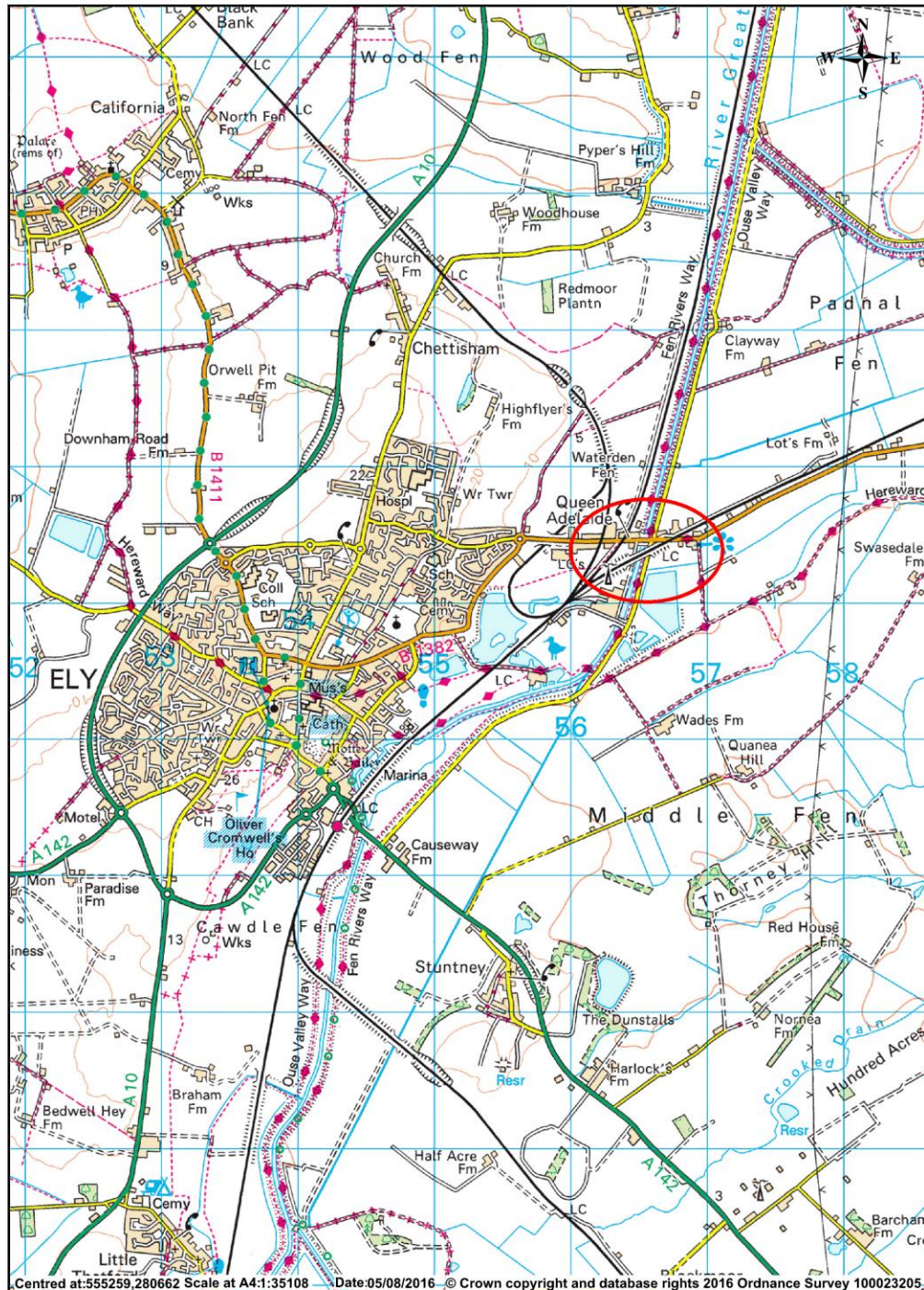


Figure 1: Queen Adelaide Level Crossing location

- 1.6 Increasing the number of trains will impact on traffic and safety at the level crossings. Network Rail are required to consider the risks of increasing the number of trains on the level crossings, and to manage the risk to be as low as reasonably possible. In carrying out that work they identified significant safety concerns if train numbers increased, in particular the risk of traffic blocking back from one crossing on to another was likely to increase substantially. It was also likely that the current half barrier crossings would need to be

replaced with full barrier crossings, which are closed for much longer, increasing barrier down time and therefore queueing traffic.

Current Position

- 1.7 In 2015 Network Rail approached the County Council seeking assistance with the highway issues as their project had effectively come to a halt over the issues identified at the level crossings. Network Rail recognised that closing the crossings would not be acceptable to the Council or stakeholders, but that providing a new road to bypass or replace the crossings would very substantially increase the cost of the project.
- 1.8 At around the same time Sir Peter Hendy was appointed as Chairman of Network Rail and was tasked with reviewing all current projects in the light of substantial delays and increased costs. The Hendy review cut Network Rail's funding for the project. Local MPs led by Liz Truss held a summit to try and restart the project. This led to the establishment of a local authority led task force with membership from Norfolk, Suffolk and Cambridgeshire Counties and Districts and both Local Enterprise Partnerships (LEPs), Network Rail, Train Operators and the Department for Transport (DfT).
- 1.9 In order to understand traffic movements over the crossings and in the wider area affected the Council commissioned a traffic study in November 2016 to establish a baseline from which options could be developed, and to outline initial ideas and proposals.
- 1.10 The two LEPs plus the Strategic Freight Network (a grouping of freight train operating companies) agreed to fund Network Rail development of proposals for both the junction and all other aspects of increasing train numbers on these lines, all with a view to securing funding from the DfT for implementation in the next Network Rail five year Control Period starting in 2020. Network Rail will have a rail scheme developed by summer 2019.
- 1.11 The baseline traffic study is now complete and has included a public engagement session to gather information from local people on how they use the crossings.
- 1.12 A Summary of the Traffic Study is provided in section 2 below. The full Traffic Study is available as appendix 1.

1 MAIN ISSUES

- 2.1 The below provides a summary of the report of the Queen Adelaide Level Crossing Traffic Study that is provided as Appendix 1.
- 2.2 The report is structured in the following five sections.
 - Phase 1 investigation of current situation using traffic surveys carried out in November/December 2016 using Automatic Traffic Counters (ATCs) and Automatic Number Plate Recognition (ANPR) surveys
 - Phase 2 used transport modelling to investigate the possible future situation at the level crossings, taking account of developments such as Ely North and the Ely Southern Bypass
 - Phase 3 investigated the impact of level crossing closures including potential rerouting of traffic. This section investigates the impact on public transport and emergency services
 - Phase 4 investigates the possibilities of reducing traffic over the level crossings,

- using mechanism such as Traffic Regulation Orders (TROs)
- Phase 5 investigates road based infrastructure solutions such as bridges or level crossing replacements

2.3 On an average week day 4,800 vehicles crossed the Peterborough and Kings Lynn level crossings with 3,400 crossing the Norwich line.

The report in Appendix 1 provides a greater breakdown of the traffic survey data including vehicle classification and queue length data.

2.4 The Study considered eight initial options for reducing traffic over the Queen Adelaide level crossings. It should be noted that alternative provision for pedestrians and cyclists has been considered as being needed to be provided separately to the proposals outlined below.

- Option 1 Restricting all traffic through the Peterborough and Kings Lynn level crossings
- Option 2 Allowing local traffic through the Peterborough and Kings Lynn level crossings
- Option 3 Implementation of a One-Way system with no exemptions
- Option 4 Implementation of a One Way system with exemption for local traffic
- Option 5 Restricting all traffic through the Norwich line
- Option 6 Allow local traffic through the Norwich line
- Option 7 Implementing a bridge over the Peterborough line
- Option 8 Constructing a bypass north of Queen Adelaide

2.5 The table below provides a summary of the eight options set out in the report and their impact on the rail network, traffic flow over the level crossings and the impact on the wider transport network. Note that PBO is the line to Peterborough, KLN is the line to King's Lynn and NRW the line to Norwich.

Table 1 Summary of options

Proposal	Rail impact	Benefits	Issues
Option 1 - Restricting ALL traffic through PBO & KLN	PBO & KLN lines increased capacity 100%	PBO & KLN lines increased capacity, low cost, no enforcement	Local traffic impacted, increased journey times, negative impact on businesses, extra traffic on wider road network
Option 2 - Local traffic only through PBO & KLN	PBO & KLN lines increased capacity from existing	PBO & KLN lines increased capacity, low cost, local traffic not impacted	Increased journey times, negative impact on businesses, extra traffic on wider road network, enforcement required
Option 3 - Implementation of a One-Way system with no exemptions	PBO & KLN lines increased capacity from existing	PBO & KLN lines increased capacity, low cost, local businesses still receive passing trade	Local traffic impacted on return journey, increased journey times, extra traffic on wider road network, enforcement required
Option 4 - Implementation of a One-Way system with exemption for local traffic	PBO & KLN lines increased capacity from existing	PBO & KLN lines increased capacity, low cost, local businesses still receive passing trade, local traffic not impacted	Increased journey times, extra traffic on wider road network, enforcement required, uncertainty over TRO
Option 5 - Restricting ALL traffic through Norwich line	NRW line increased capacity 100%	NRW line increased capacity, low cost, no enforcement	Local traffic impacted, particularly Prickwillow, Increased journey times, negative impact on businesses, extra traffic on wider road network

Option 6 - Allow local traffic through Norwich line	NRW line increased capacity from existing	NRW line increased capacity, low cost, local traffic not impacted	Increased journey times, negative impact on businesses, extra traffic on wider road network, no benefit to PBO or KLN line, enforcement required
Option 7 - Implementing Bridge over PBO	PBO & KLN lines increased capacity 100%	PBO & KLN lines increased capacity, no impact to any traffic, local businesses not impacted, no TRO	High cost, possible need for compulsory purchase of property, potentially poor BCR score, maintenance
Option 8 - Constructing a Queen Adelaide Northern By-Pass	PBO, KLN & NRW lines increased capacity 100%	All lines increased capacity, minor impact for local traffic, no TRO	High cost, negative impact businesses, poor BCR score, maintenance

- 2.6 In September 2017 the County Council and Network Rail ran an engagement event. The aim of the event was to have an initial conversation with local residents and businesses in advance of any proposals being developed to understand more about the way residents and businesses use the local roads and the three level crossings.
- 2.7 A full report into the engagement is provided in chapter 4 of appendix 1. In summary both the public and businesses were very concerned around the impacts of any potential level crossing closures and the impacts this would have regarding access to employment, customers, education and key services. There were a large number of concerns regarding the additional trip length both in time and fuel costs. There were also concerns regarding access for emergency services.
- 2.8 It is clear from the above that residents and businesses in Queen Adelaide and Prickwillow and further afield have serious concerns regarding any changes to the level crossings on the B1382. This road provides a vital link to Ely for a variety of key services, employment and education. The road also provides access for customers to businesses in the area and provides access to fields and farm yards.
- 2.9 The B1382 is also used by a wider population than just those who live in the villages of Queen Adelaide and Prickwillow as part of a wider commuter route both into and out of Ely. There was a concern that Queen Adelaide could be isolated from Ely which could result in house prices decreasing and businesses would find it harder to operate.

Summary of recommendation from the Consultant's report

- 2.10 The Consultant's report concludes that it is not possible to introduce full barrier level crossings in Queen Adelaide, as would be required by Network Rail, without reducing the volume of traffic in some way. This is due to both the interface between the crossings and impact on traffic in the area.
- 2.11 The report recommends that more work is done on the initial options identified if there is a requirement to mitigate any impact from Network Rail's strategic scheme at the Ely North Junction. From the preferred options identified, two will involve major investment to deliver. The options are:
- Option 2 - Allow local traffic through the Peterborough and Kings Lynn level crossings
 - Option 7 - Implementing a bridge over the Peterborough line
 - Option 8 - Constructing a bypass north of Queen Adelaide

- 2.12 Option 2 is considered to be impractical to implement for a number of reasons:
- Enforcement would be difficult and involve bespoke agreements with the police
 - Deciding what was classed as 'local traffic' would be difficult and open to challenge to people who were not classed as local
 - There would be a large amount of administration for delivery vehicles and visitors to the area and it is unlikely that residents will want to register visitors or deliveries in advance
 - Local businesses would see a reduction in passing trade
 - Due to administration and uncertainty surrounding the restriction local business may become less attractive
 - Local residents may feel cut off with their area becoming a no through road
 - Some residents may feel visitors would be less inclined to visit
 - Ongoing maintenance of the ANPR cameras would have a revenue cost
 - This option does not provide any solution for "non-local" trips
- 2.13 It is clear that any proposals in this area need to be brought forward to address both the road and rail requirements and impacts, and that the regional and national benefits should not be achieved by imposing unreasonable costs on local people. It is therefore important that the costs and benefits to road and rail users are considered together
- 2.14 Early discussions with the Combined Authority have indicated that they may consider undertaking work to further develop and establish a case for any road investment required to mitigate the local impacts of unlocking the strategic benefits to the rail network. Funding this work may be considered at a Combined Authority Board meeting in March.
- 2.15 For the reasons outlined above it is therefore recommended that the County Council welcomes this work being taken forward by the Combined Authority, which could take place in parallel with any development work for Network Rail's proposal, with the intention of establishing a case for investment. Given the high costs indicated by this study a full and broad assessment of the benefits of investment should be undertaken.
- 2.16 This work would involve more detailed investigation including further traffic surveys, more detailed costings, and assessing the benefits of the options. It is proposed that the Combined Authority Study, working closely with the County Council, investigates Options 7 and 8 in the broadest sense and develops a more detailed range of options. This should be based on the principle that if the rail proposals are to be implemented and the level crossings need replacing, at this stage indications are that significant investment in either a bridge over the Peterborough line or a northern bypass for Queen Adelaide will be required.

3. ALIGNMENT WITH CORPORATE PRIORITIES

3.1 Developing the local economy for the benefit of all

Achieving the right solution in this area is vital for local residents and businesses. However, as this report is not selecting a particular option there are no significant implications at this stage.

3.2 Helping people live healthy and independent lives

There are no significant implications for this priority. As this report is not selecting a particular option there are no significant implications at this stage.

3.3 Supporting and protecting vulnerable people

There are no significant implications for this priority. As this report is not selecting a particular option there are no significant implications at this stage.

4. SIGNIFICANT IMPLICATIONS

4.1 Resource Implications

There are no significant implications within this category as the proposal is for the Combined Authority to take on the future work.

4.2 Procurement/Contractual/Council Contract Procedure Rules Implications

There are no significant implications within this category.

4.3 Statutory, Legal and Risk Implications

There are no significant implications within this category.

4.4 Equality and Diversity Implications

There are no significant implications within this category.

4.5 Engagement and Communications Implications

There are no significant implications within this category.

4.6 Localism and Local Member Involvement

There are no significant implications within this category. Local Members were invited to attend the engagement event held in September 2017. Officers have had, and will continue to have, meetings with Local Members.

4.7 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: Sarah Heywood

Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the LGSS Head of Procurement?	Yes Name of Officer: Paul White
Has the impact on statutory, legal and risk implications been cleared by LGSS Law?	Yes Name of Legal Officer: Debbie Carter-Hughes – Note Appendix 1 not reviewed.
Have the equality and diversity implications been cleared by your Service Contact?	Yes Name of Officer: Tamar Oviatt-Ham

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: Tamar Oviatt-Ham
Have any Public Health implications been cleared by Public Health	Yes Name of Officer: Tess Campbell

Please include the table at the end of your report so that the Chief Executive/Executive Directors/Directors clearing the reports and the public are aware that you have cleared each implication with the relevant Team.

Source Documents	Location
2020 Consultancy Queen Adelaide Level Crossing Traffic Study.	Appendix 1 (separate attachment included with this report)
Appendices for 2020 Consultancy Queen Adelaide Level Crossing Traffic Study: Appendix A- ATC Data Appendix B- Queue Length Tables Appendix C- Traffic Modelling Outputs	Appendices are available on request by emailing: Transport.Plan@Cambridgeshire.gov.uk Or available to view in Shire Hall Room 301 (on an appointment basis – officer contact details on page 1).



Cambridgeshire
County Council



QUEEN ADELAIDE LEVEL CROSSING TRAFFIC STUDY

Study on the impact of closing or restricting traffic
on the B1382 Ely Road in Queen Adelaide,
Cambridgeshire

Abstract

This report investigates the existing situation with traffic in the Queen Adelaide region of Cambridgeshire and considers the local and wider impact of closing or restricting traffic along the B1382 Ely Road to enable additional passenger service trains and freight to use the three level crossings that lead to Peterborough, Kings Lynn, and Norwich.

2020 Consultancy
January 2018

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1.0 Introduction

Cambridgeshire County Council commissioned 2020 Consultancy to carry out a traffic study focusing on three level crossings in Queen Adelaide in November 2016. The purpose of the study is to investigate the impact the three level crossings have on traffic in the region and the impact it would cause traffic if Network Rail increased the number of trains passing through the Ely region.

The three level crossings that form part of this study are located along the B1382 in Queen Adelaide and the railway lines carry passenger services and freight to Peterborough, Kings Lynn, and Norwich. There is an increasing demand to carry more passenger services and freight along all of these lines and along with a lack of junction / track capacity in the Ely area, the level crossings are a constrain to increasing train services.

Please see figure 1 below for a location plan of the area.

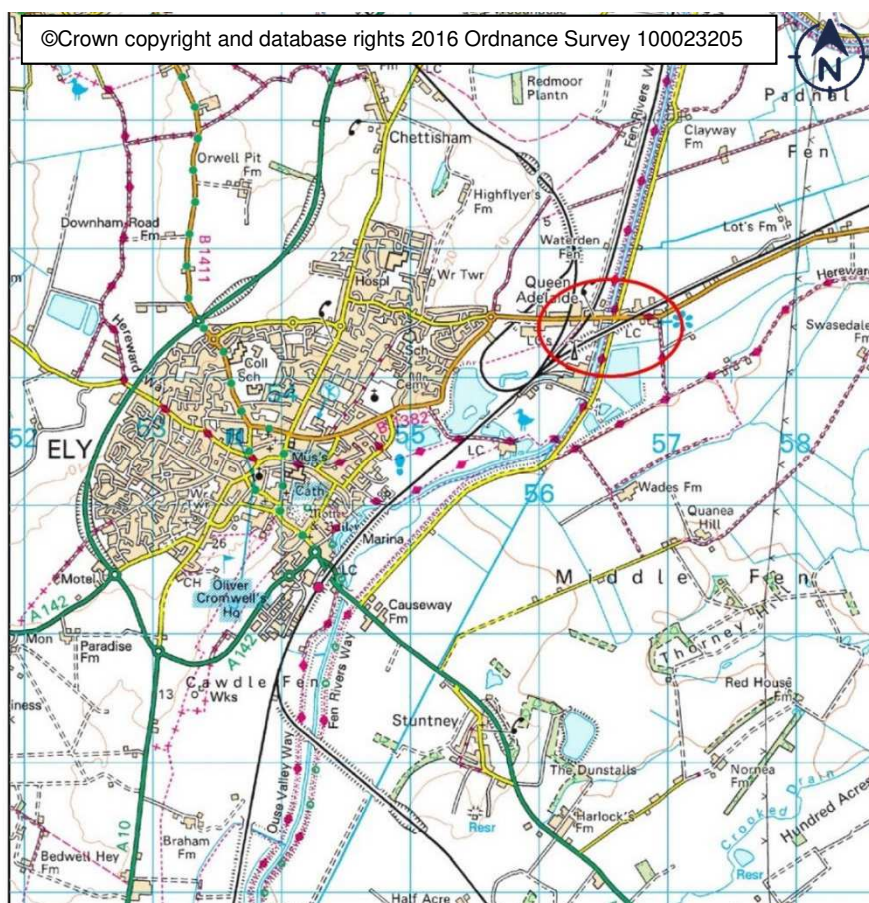


Figure 1

All three level crossings are currently automatic half barrier crossings. If rail infrastructure was upgraded for rail services the Queen Adelaide crossings would need to be upgraded to full barrier crossings to meet an acceptable level of risk for Network Rail.

The following information is found on Network Rails website regarding level crossings.

There are 6,300 level crossings on our rail network and we have a legal duty to assess, manage and control the risk for everyone.

Level crossings fall into five distinct categories but each is unique so we've worked with our rail industry partners to develop a standardised method for assessing crossing risk. Factors taken into account include frequency of trains, frequency and types of users and the environment and where the crossings are located.

Risk assessment

Level crossings are assessed at a frequency that is based on the level of risk a crossing poses. The assessment frequency ranges from 1¼ to 3¼ years.

We strive to improve safety by managing and mitigating the risk at crossings. Education and safety campaigns are a fundamental part of this.

A safer railway

We can eliminate risk by closing crossings where agreement can be reached to do so. As part of our commitment to a safer railway we have delivered the following so far:

- *Closed 900 crossings (804 closures in the five years to 2013, and to date 96 closures in the five years to 2019)*
- *Improved sighting at over 1,000 crossings*
- *Repositioned over 250 crossing phones into safe areas for users*
- *Installed overlay barriers at 45 open crossings*
- *Introduced a fleet of mobile safety vehicles*

Next steps

We are now working on:

- *The national rollout of red light safety cameras*
- *Power operated gates at user worked crossings*
- *Closing at least another 250 crossings*

Quotation from Network Rail website

The upgrade of barrier from half to full and the increase in trains would lead to a situation where barrier down time is too great, again leading to a level of risk which would be too high. To reduce this level of risk to an acceptable level there are a number of solutions which have been considered within this study report.

The study has been separated into five investigations that include:

1. Summary of the existing situation and usage of the level crossing;
2. Investigation as to how usage at the crossings may change over time;

3. An investigation of the impact of closing the level crossings now and in the future;
4. Investigation into potential ways to reduce the number of people using the level crossings;
5. Investigation into possible infrastructure solutions for closing the level crossings.

2.0 Background & Policy

2.1 National Policy

A level crossing is a place where a railway is crossed by another transport route (road, path, bridleway, etc) on the same level. There are about 6,300 level crossings in the country. There is inevitably risk on every level crossing: trains are heavy pieces of machinery, often travelling at high speed, and usually unable to stop within the distance that the driver can see ahead.

Drivers, pedestrians, wheelchair users, cyclists and horse-riders all present risks when crossing the railway. On average 12 people died in accidents on level crossings each year over the last ten years.

The Department for Transport and the Office of Road and Rail Regulation instigated a nationwide review of level crossings in order to reduce the possibility of incidents. The Department for Transport, Office of Road and Rail Regulation, highway authorities and their trade association, the Association of Transport Coordinating Officers (ADEPT), Highways England and the Health and Safety Executive have been part of the advisory group considering the closure of level crossing across the country.

2.3 County Policy

The Rights of Way Improvement Plan

The Rights of Way Improvement Plan (ROWIP) was adopted in 2006 as part of the Cambridgeshire Local Transport Plan 2006-2011. The Plan was formulated following considerable research, data gathering and extensive public and stakeholder consultation with the Local Access Forum playing a key part in the plan's development. The Plan is well used and has been invaluable to helping to bring improvements to the rights of way network and enhancing countryside access.

The ROWIP was updated in 2016. The update does not amend the policy basis of the existing ROWIP or LTP3 however it does update all Statements of Action that was published in the first ROWIP. The update demonstrates how Cambridgeshire County Council policies and plans for rights of way will contribute towards the County Council's vision – 'creating communities where people want to live and work: now and in the future'.

The Third Cambridgeshire Local Transport Plan

The Third Cambridgeshire Local Transport Plan (LTP3) covers the period 2011-2026 and demonstrates how transport policy contributes to the County Council's vision of "creating communities where people want to live and work: now and in the future." It provides a framework for the strategy, to ensure that planned development can take place in a sustainable way. The strategy looks to apply the LTP's overarching policies

and objectives at a local level whilst reflecting the local needs and views. The LTP is a live document and is updated as required. The Transport Strategy for East Cambridgeshire forms part of the LTP3 suite of documents.

2.4 Cambridgeshire Transport Strategy

A number of schemes relevant to the alleviation of both rail congestion and traffic congestion (involving the potential removal of level crossings, or improvement to the rail network) are identified in the county's transport strategy. These include funding the Ely southern bypass, on which work is underway.

Scheme Reference	Schemes	Scheme Type	Relevant document / Source	Timescale	Cost £= <10k ££ <250k £££= <500k ££££= £500k+
Major schemes					
LTTS	Ely Southern Bypass A southern bypass of Ely, allowing closure of the level crossing on the A142 and large increases in freight and passenger trains through Ely. More information on this scheme is available here: http://www.cambridgeshire.gov.uk/info/20051/transport_projects/63/ely_southern_bypass	Works	CCC Long Term Transport Strategy (2015)	By End of 2017	£35M

Other rail related projects identified in the strategy include the Ely North railway junction improvements, which in part could be dependent upon the rationalisation of the Queen Adelaide level crossings.

			Strategy (2015)		
LTTS	Soham railway station GRIP 3 Study and outline business case is currently been carried out for completion in early 2017.	Works	CCC Long Term Transport Strategy (2015)	2021	£6.5m (Cost from GRIP2 Study)
LTTS	Ely North junction rail improvements. Increased capacity through Ely North junction for freight and passenger trains.	Works	CCC Long Term Transport Strategy (2015)	By March 2024	Network Rail to fund and deliver

The council has identified anticipated traffic growth within the county until 2031. The estimates for Ely, including the impact of the Ely southern bypass, indicate an increase in traffic using Ely Road through the Queen Adelaide crossings.

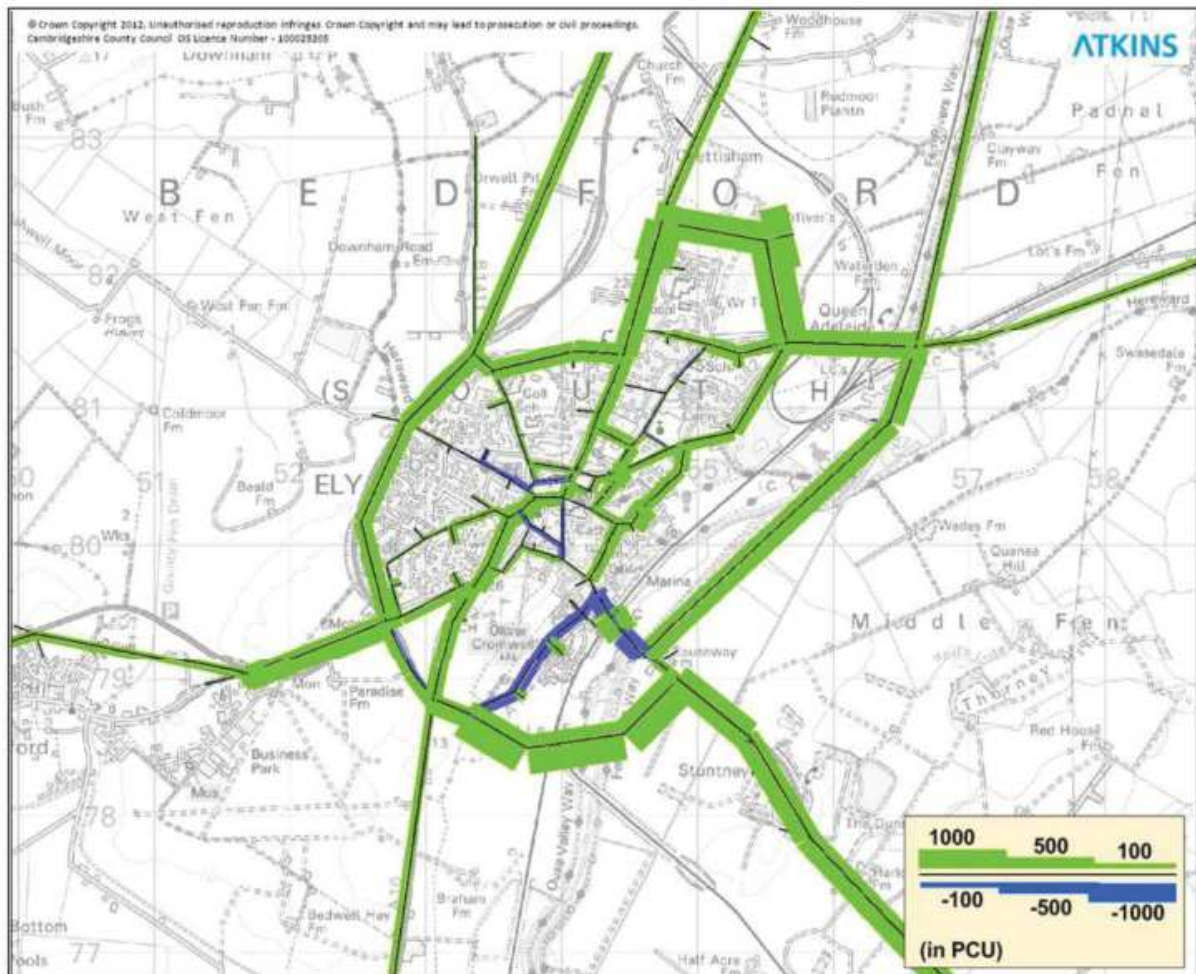


Figure 2: Anticipated increased traffic flows between 2011 and the 2031 Local Plan scenario (this assumes the Ely Southern bypass is open) – East Cambridgeshire Transport Strategy

2.5 Transport Strategy for East Cambridgeshire Policies

Transport Strategy for East Cambridgeshire

Key Issues

The Transport Strategy for East Cambridgeshire identifies a number of key issues include:

- Limited highway capacity
- Missing links on the walking and cycling network
- Impact of HGVs on village
- Availability of public transport in rural areas
- Improving the transport network without having a negative impact on the historic and natural environment can be difficult
- Dispersed rural communities mean that addressing transport needs sustainably can be difficult due to distances travelled
- Road safety issues associated with rural roads
- Access to Cambridge can be difficult during peak times
- Limited rail capacity

- Climate change impacts on transport infrastructure

The rail network

There is potential to increase rail travel within East Cambridgeshire, to help achieve this aim the council will:

- Build the case for opening new railway stations and railway lines, and for improvements to existing stations;
- Support Network Rail / Department for Transport (DfT) plans for improved rail frequencies and faster journey times;

There are a number of rail related schemes in the Ely area supporting the aspiration to improve rail efficiency, patronage, closure of level crossings and improvements to Ely North junction. Network Rail are programming the work to ensure that projects are delivered in the most effective way. This work has included the Ely North Junction and Ely Area Capacity Enhancements. There are a number of other rail infrastructure improvements being developed but these require Ely North Junction to be in place.

The cycle and pedestrian networks

Greater levels of walking and cycling are critical if existing traffic problems are not to be exacerbated. Investment in the cycle and pedestrian network is therefore a key investment priority. The benefits of walking and cycling (Active Travel) are greater than simply keeping additional vehicles off the road. Walking and cycling contribute to the health agenda, and can provide those without access to a car or a good public transport service to take advantage of opportunities to access employment, training and other essential services

The council aims to increase the levels of walking and cycling trip in Ely:

- Increase walking and cycling levels in Ely and its hinterland by enhancing and adding to the current networks.
- Develop the cycle network in and around Ely, providing greater opportunity for cycling to replace the use of the private car for more trips into the city.
- Enhance or develop rural cycle and pedestrian networks around key destinations in the rural area such as village colleges, larger village centres, major employment sites, doctor's surgeries, and transport hubs on the main transport corridors, especially through improvements to PROW.
- Develop a comprehensive longer distance cycle network across the district.
- To enhance cycle parking provision across the county, recognising that the lack of secure areas to park a bicycle can be a deciding factor in the choice to cycle.
- Ensure that developments in all areas of the county provide high quality linkages into existing pedestrian and cycle networks, and to key destinations where new links are needed.

- Identify and tackle local barriers to walking and cycling such as missing links, unsuitable provision, difficulties crossing the road and lack of cycle parking facilities

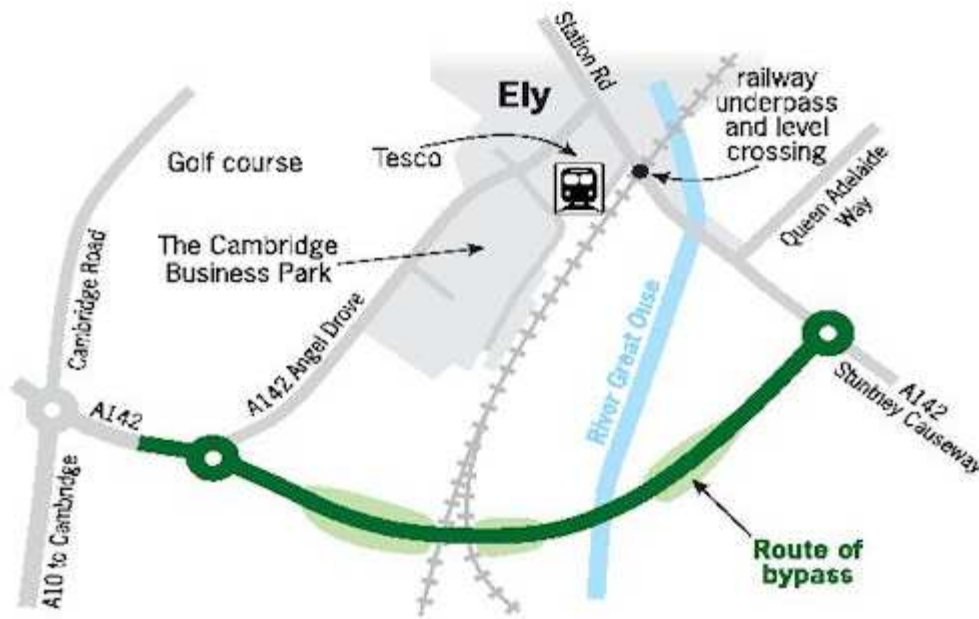
Where possible segregated cycleways, particularly on the main transport corridors and on busier rural routes would be introduced. However, there are areas where road provision will be the most appropriate solution for cyclists. In practical terms, there is a balance between usability, convenience, traffic and safety concerns that needs to be considered. Safe but inconvenient off-road routes are often not well used.

Freight movements and Heavy Goods Vehicles (HGVs)

The efficient movement of road and rail freight is essential to our economy and prosperity, with the demand for goods continuing to increase over the next 20-30 years. This will lead to increased freight traffic. East Cambridgeshire is a largely rural district, therefore heavy agricultural vehicles and machinery are commonplace on local and strategic roads. While the use of these heavy vehicles is vital for the successful operation of farms, the size and weight of the vehicles can impact on the quality of the road network and road verges.

Road freight and the use of inappropriate routes can have considerable impacts on villages in the county. It can lead to localised congestion, noise, vibration, and poor air quality, and can significantly impact on people's quality of life, health and well-being. Particular issues arise when these large vehicles attempt to negotiate small roads through villages, which were not built or designed to withstand road freight, in order to have a shorter journey.

The strategy aims to transfer freight onto the rail network, which could allow for a quadrupling of rail freight traffic through the county, and remove some pressure from the road network. Other schemes include the removal of level crossings, such as on the A142 at Ely, will address the local impacts of increased use of the rail network and demonstrates the council's commitment to the increased use of the strategic rail freight link. An integral part of the level crossing scheme is the Ely southern bypass which bridges both the Ouse and the railway.



Route of Ely southern bypass - Source: Transport Strategy for East Cambridgeshire

The freight strategy aims to minimise the environmental impact of HGVs and address safety issues for all users of the network. The strategy will also need to balance the needs of local communities and haulage operators.

Cambridgeshire County Council has a HGV Policy which aims to balance the needs of local communities with the requirements of lorry operators. It explains that the police are responsible for the enforcement of weight restrictions and the difficulties with restricting HGVs from using the road network. The council aims to better manage HGV traffic by giving freight companies information on appropriate routing when planning their journeys.

Policy TSEC 2: Accommodating demand in Ely

Travel demand within Ely would be accommodated on the constrained transport network in Ely:

- More people will walk, cycle and use public transport
- More people will car share
- Pedestrians, cyclists and buses will be prioritised for trips across Ely.
- General vehicular traffic will not be prohibited and accessibility will be maintained but a car journey may be longer and more time consuming than at present.
- General traffic levels will remain at current levels.

Policy TSEC 3: Accommodating demand in East Cambridgeshire

More travel demand would be accommodated in the constrained network in East Cambridgeshire:

- Passenger transport services on main corridors will be used for part or all of more trips to key destinations
- More people will walk and cycle
- More people will car share
- More locally led transport solutions will be provide passenger transport options in more remote areas that cannot viably be served by conventional bus services

Policy TSEC 10: Improving rail services

The County Council will work with other authorities and the rail industry to bring forward service enhancements and new infrastructure to increase rail use, through frequency and capacity improvements and increasing the proportion of freight moved by rail in line with the Strategy approach.

3.0 Existing Conditions

To gain a full understanding of the existing traffic conditions in the Queen Adelaide area 2020 Consultancy commissioned Automatic Traffic Surveys (ATC) and Automatic Number Plate Recognition Surveys (ANPR) to be undertaken in various locations across the Queen Adelaide area. The purpose of these surveys was to collect data such as the volume of traffic in the area, the origin and destination of traffic in the area, and the type of vehicle in the area such as vehicles, HGV's, and buses.

3.1 ANPR Surveys

Five ANPR survey locations were chosen to provide coverage of all routes into the Queen Adelaide region. Each location picked up traffic in each direction. The surveys were carried out over a period of three days, Tuesday 29th, Wednesday 30th, and Thursday 1st in November and December 2016 to enable an average to be calculated removing any unnatural flows that may have been experienced.

Due to the vast quantity of data the ANPR results have been adjusted to provide data for a 12-hour period which is 7am to 7pm. Therefore the figures shown below differ to the figures shown in the ATC surveys. It is also worth noting that ANPR cameras have a time period of 10 minutes for vehicles to pass through a second camera and be recorded as a continuation of journey. Therefore an ANPR camera will not pick up local traffic that start or stop between two cameras. This again results in the total volume of data differing from the ATC surveys.

Figure 3 provides a location plan for the ANPR surveys. The red and yellow indicators demonstrate the direction of traffic that was collected.

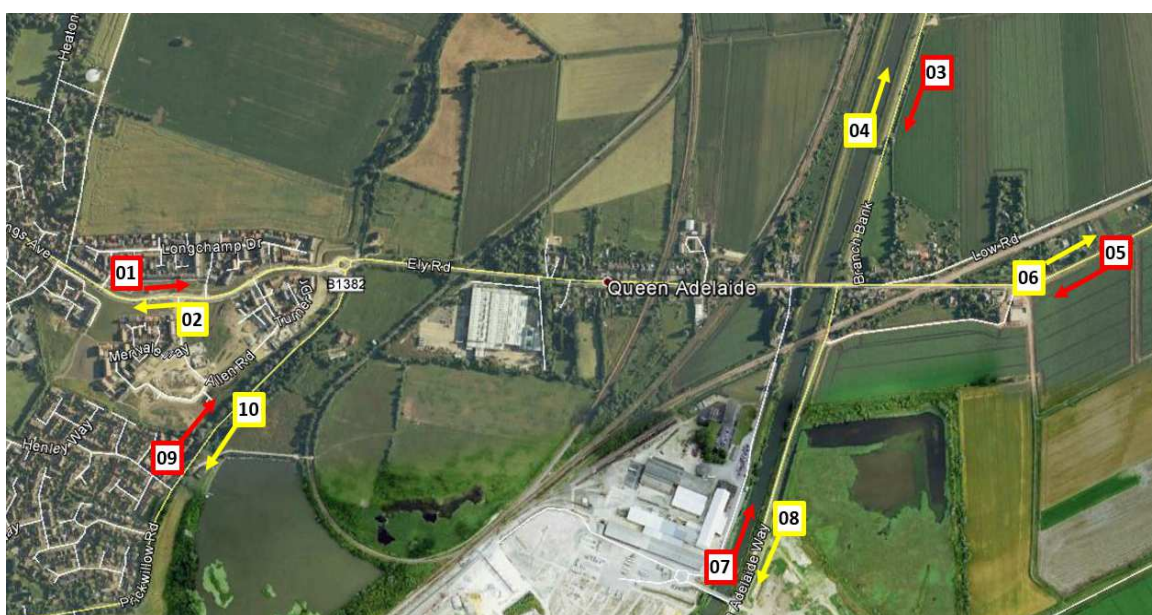


Figure 3 – ANPR survey locations

Table 1 below provides the results of the ANPR surveys averaged out over the three days. For information the numbers shown in figure 2 represent the following roads:

- 1 – Kings Avenue Eastbound
- 2 – Kings Avenue Westbound
- 3 – Branch Bank Southbound
- 4 – Branch Bank Northbound
- 5 – Ely Road Westbound
- 6 – Ely Road Eastbound
- 7 – Queen Adelaide Way Northbound
- 8 – Queen Adelaide Way Southbound
- 9 – Prickwillow Road Northbound
- 10 – Prickwillow Road Southbound

Origin	Destination	No. of vehicles	Crossings in Traffic Route
Kings Avenue EB (1)	Kings Avenue WB (2)	120	None
Kings Avenue EB (1)	Branch Bank NB (4)	84	Peterborough; Kings Lynn
Kings Avenue EB (1)	Ely Road EB (east of crossings) (6)	477	All
Kings Avenue EB (1)	Queen Adelaide Way SB (8)	219	Peterborough; Kings Lynn
Kings Avenue EB (1)	Prickwillow Road SB (10)	749	None
Branch Bank SB (3)	Kings Avenue WB (2)	107	Peterborough; Kings Lynn
Branch Bank SB (3)	Branch Bank NB (4)	14	None
Branch Bank SB (3)	Ely Road EB (east of crossings) (6)	224	Norwich
Branch Bank SB (3)	Queen Adelaide Way SB (8)	1,480	None
Branch Bank SB (3)	Prickwillow Road SB (10)	400	Peterborough; Kings Lynn
Ely Road WB (east of crossings) (5)	Kings Avenue WB (2)	588	All
Ely Road WB (east of crossings) (5)	Branch Bank NB (4)	317	Norwich
Ely Road WB (east of crossings) (5)	Ely Road EB (east of crossings) (6)	8	None
Ely Road WB (east of crossings) (5)	Queen Adelaide Way SB (8)	261	Norwich
Ely Road WB (east of crossings) (5)	Prickwillow Road SB (10)	827	All
Queen Adelaide Way NB (7)	Kings Avenue WB (2)	283	Peterborough; Kings Lynn
Queen Adelaide Way NB (7)	Branch Bank NB (4)	1,572	None
Queen Adelaide Way NB (7)	Ely Road EB (east of crossings) (6)	345	Norwich
Queen Adelaide Way NB (7)	Queen Adelaide Way SB (8)	17	None
Queen Adelaide Way NB (7)	Prickwillow Road SB (10)	100	Peterborough; Kings Lynn
Prickwillow Road NB (9)	Kings Avenue WB (2)	1,036	None
Prickwillow Road NB (9)	Branch Bank NB (4)	572	Peterborough; Kings Lynn
Prickwillow Road NB (9)	Ely Road EB (east of crossings) (6)	644	All
Prickwillow Road NB (9)	Queen Adelaide Way SB (8)	89	Peterborough; Kings Lynn
Prickwillow Road NB (9)	Prickwillow Road SB (10)	52	None
Total		10,586	

Table 1 – ANPR Results between 7am-7pm 3 day average

This data illustrates that on average some 10,500 vehicles pass through Queen Adelaide during a typical weekday (12 hours 7am to 7pm).

- The most common origin is from Queen Adelaide Way in a northbound direction heading north along Branch Bank with an average of 1,570 (15%) trips in this direction during the day.
- The second most common origin is from Branch Bank in a southbound direction heading south along Queen Adelaide Way with an average of 1,480 (14%) trips in this direction a day.

These trips represent typical tidal movements associated with the morning and evening peak traffic flows. These two movements represent 29% of the daily trips within the area and do not cross any of the three level crossings that form part of this study.

- A further 17% of journeys also do not involve vehicles using any of the three level crossings.

Therefore 48% of trips (some 5,000 of the 10,500 vehicles) in the Queen Adelaide area would not be impacted by changes to the operation of the level crossings in question.

- The ANPR surveys indicate that typically some 2,500 vehicles use all three of the level crossings during their journey (equalling 24% of the total traffic)
- Some 1,800 vehicles (or 17% of daily traffic) pass over the Peterborough and Kings Lynn level crossings but not the Norwich crossing, indicating these vehicles are either turning into, or out of, Branch Bank or Queen Adelaide Way thus not using Norwich crossing.
- Typically, some 1,200 vehicles (11% of traffic) use only use the Norwich level crossing. meaning that these vehicles are either turning into, or out of, Branch Bank or Queen Adelaide Way.
- The ANPR data indicates that 52% (or some 5,500 vehicles) of traffic in the Queen Adelaide area uses at least one level crossing.

The table below demonstrates the number of vehicles that passed over each crossing on average a day taken over a three-day period.

Crossing	ANPR No. of vehicles
Queen Adelaide (Peterborough)	4,392
Queen Adelaide (Kings Lynn)	4,392
Queen Adelaide (Norwich)	3,683

Table 2 – Number of vehicles passing over each crossing a day

3.2 ATC Surveys

Two ATC surveys were carried out as part of the study. One location was to the west of the Peterborough line (most western crossing) and the other location was to the east of the Norwich line (most eastern crossing). These surveys were carried out for a period of 14 days over the end of November 2015 and early December 2016 to capture a wide range of vehicle data to ensure any unusual traffic behaviour could be identified.

Figure 3 shows a location plan for the western survey and figure 4 shows a location plan for the eastern survey.

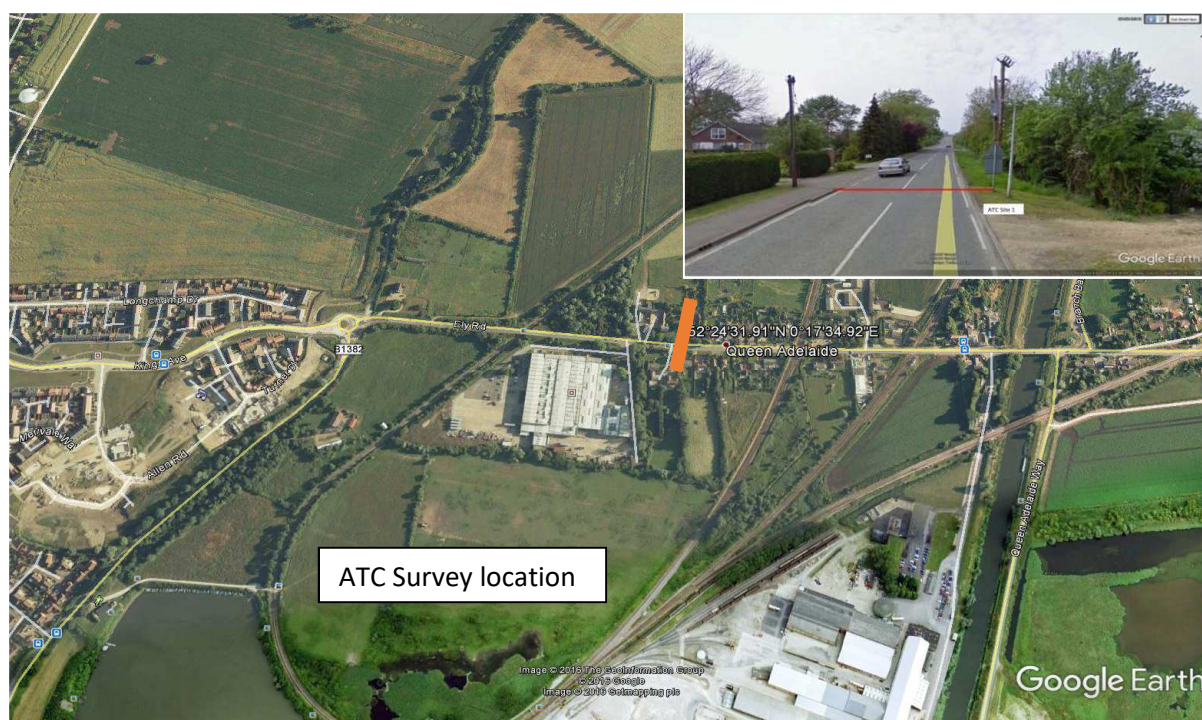


Figure 4 – Location Plan for the western ATC survey

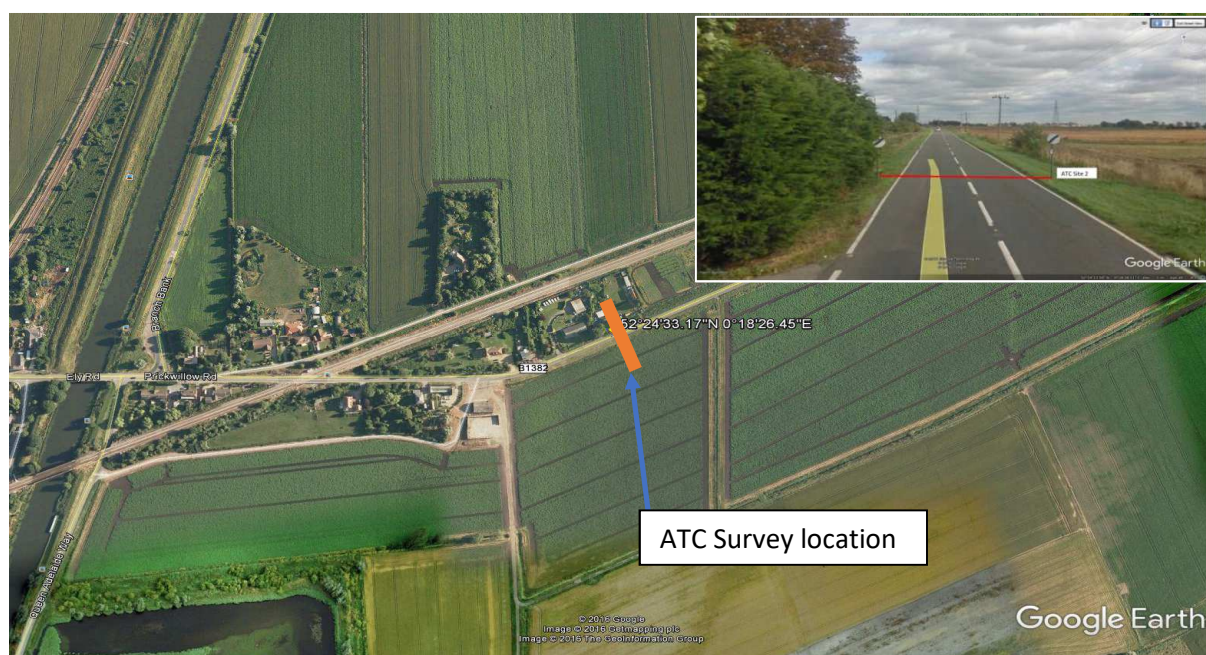


Figure 5 – Location Plan for the eastern ATC survey

The data from the western survey demonstrates that over the 14 days a total of 28,500 vehicles were recorded travelling eastbound and 31,600 vehicles were recorded travelling westbound. This totals 60,100 in both directions. The weekday average east bound was some 2,200 vehicles and west bound was some 2,500 vehicles.

Table 3 shows the western ATC survey figures split over each day of the week for eastbound traffic for week 1 and table 4 shows week 2. Table 5 shows the figures split over each day of the week for westbound traffic and table 6 shows week 2.

Week 1	Total number of vehicles EB
Monday	2179
Tuesday	2209
Wednesday	2186
Thursday	2248
Friday	2230
Saturday	1732
Sunday	1294
Average Mon-Fri	2210
TOTAL	14078

Table 3 – West ATC Traffic volume EB (Week 1)

Week 2	Total number of vehicles EB
Monday	2233
Tuesday	2174
Wednesday	2257
Thursday	2298
Friday	2364
Saturday	1779
Sunday	1319
Average Mon-Fri	2265
TOTAL	14424

Table 4 – West ATC Traffic volume EB (Week 2)

Week 1	Total number of vehicles WB
Monday	2360
Tuesday	2412
Wednesday	2406
Thursday	2474
Friday	2640
Saturday	1750
Sunday	1287
Average Mon-Fri	2458
TOTAL	15329

Table 5 – West ATC Traffic volume WB (Week 1)

Week 2	Total number of vehicles WB
Monday	2548
Tuesday	2457
Wednesday	2573
Thursday	2673
Friday	2813
Saturday	1783
Sunday	1383
Average Mon-Fri	2617
TOTAL	16250

Table 6 – West ATC Traffic volume WB (Week 2)

Table 7 shows the eastern ATC survey figures split over each day of the week for eastbound traffic for week 1 and table 8 shows week 2. Table 9 shows the figures split over each day of the week for westbound traffic and table 10 shows week 2.

Week 1	Total number of vehicles EB
Monday	1462
Tuesday	1603
Wednesday	1514
Thursday	1624
Friday	1527
Saturday	1115
Sunday	880
Average Mon-Fri	1546
TOTAL	9725

Table 7 – East ATC Traffic volume EB (Week 1)

Week 2	Total number of vehicles EB
Monday	1521
Tuesday	1502
Wednesday	1602
Thursday	1601
Friday	1619
Saturday	1108
Sunday	909
Average Mon-Fri	1569
TOTAL	9862

Table 8 – East ATC Traffic volume EB (Week 2)

Week 1	Total number of vehicles WB
Monday	1749
Tuesday	1820
Wednesday	1748
Thursday	1860
Friday	1964
Saturday	1148
Sunday	945
Average Mon-Fri	1828
TOTAL	11234

Table 9 – East ATC Traffic volume WB (Week 1)

Week 2	Total number of vehicles WB
Monday	1867
Tuesday	1768
Wednesday	1844
Thursday	1924
Friday	2070
Saturday	1185
Sunday	970
Average Mon-Fri	1894
TOTAL	11628

Table 10 – East ATC Traffic volume WB (Week 2)

As shown in the tables above traffic over the weekend is considerably lower than on weekdays. Therefore, figures 6 and 7 below demonstrate the combined traffic flow for each of the two sites to demonstrate traffic flow only on weekdays. Both graphs show that traffic flow is higher on Thursday and Friday of each week. It also demonstrates that site 1 (west of Peterborough rail line) is subject to higher traffic flows than site 2 (east of Norwich rail line) with over 1,300 more vehicles passing over site 1.

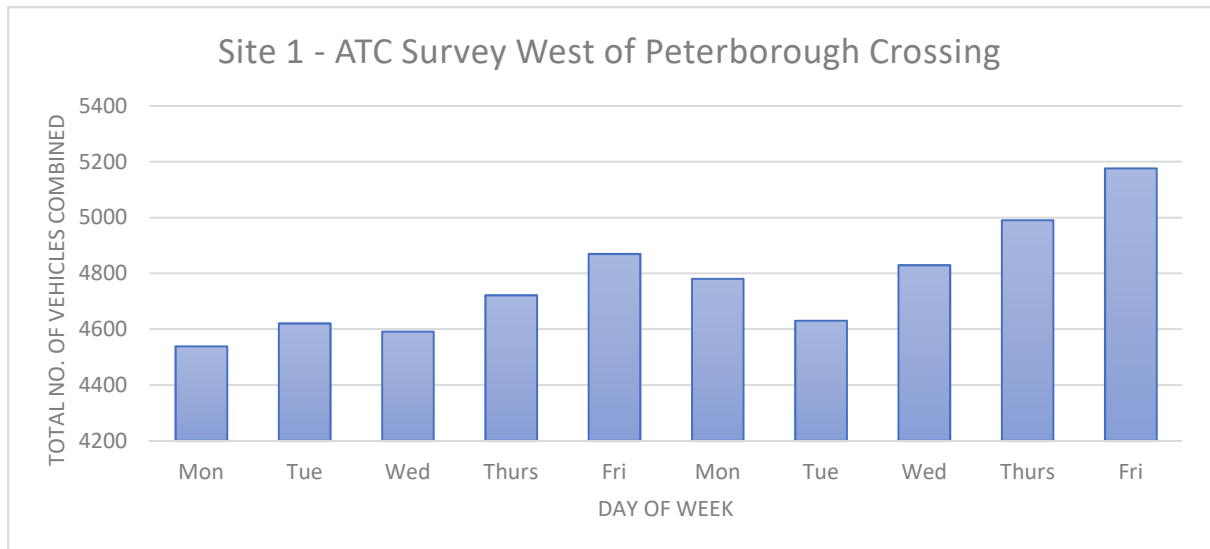


Figure 6 – Site 1 ATC Survey Monday – Friday combined

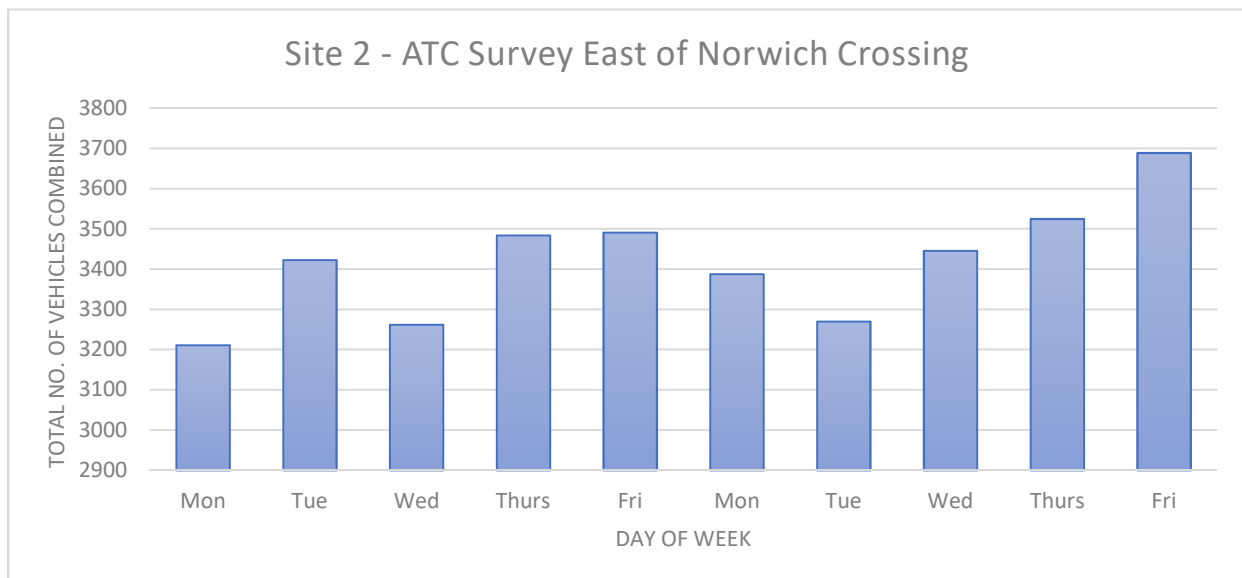


Figure 7 – Site 2 ATC Survey Monday – Friday combined

The ATC surveys also broke down the total number of vehicles into the class of vehicle that could demonstrate the type of vehicles travelling through the Queen Adelaide region. Table 11 provides guidance on the type of vehicle that belongs to the class of vehicle.

Table 12 provides a breakdown of the class of vehicle for the western ATC survey over the total survey period of 14 days for eastbound traffic and table 13 provides a breakdown of the class of vehicle over the total survey period of 14 days for eastbound traffic for week 2. Tables 14 and 15 provide the same information for westbound traffic.


Type	Axes	Groups	Description	Class		Parameters	Dominant Vehicle
Short up to 5.5m	Light Vehicles						
	2	1 or 2	Very Short Bicycle or Motorcycle	MC	1	d(1) < 1.7 and axles = 2	
	2	1 or 2	Short Saloon, Hatchback, Estate, 4WD, Pick-Up, Light Van, Bicycle, Motorcycle, etc.	SV	2	d(1) > 1.7m. d(1) <= 3.2m and axles = 2	
Medium 5.5m to 14.5m	3, 4 or 5	3	Short - Towing Trailer, Caravan, Boat, etc.	SVT	3	groups = 3, d(1) > 2.1m. d(1) <= 3.2m. d(2) >= 2.1m and axles = 3,4,5	
	Heavy Vehicles						
	2	2	Two Axle Truck or Bus	TB2	4	d(1) > 3.2m and axles = 2	
	3	2	Three Axle Truck or Bus	TB3	5	axles = 3 and groups = 2	
	> 3	2	Four Axle Truck	T4	6	d(1) > 3.2m. axles = 3 and groups = 3	
Long 11.5m to 19.0m	3	3	Three Axle Articulated Three axle articulated vehicle or rigid vehicle and trailer	ART3	7	d(1) > 3.2m. Axles = 3 and groups = 3	
	4	> 2	Four Axle Articulated Four axle articulated vehicle or rigid vehicle and trailer	ART4	8	d(2) < 2.1m or d(1) < 2.1m or d(1) > 3.2m. axles = 5 and groups < 2	
	5	> 2	Five Axle Articulated Five axle articulated vehicle or rigid vehicle and trailer	ART5	9	axles = 6 and groups > 2 or axles 6 and groups = 3	
	>= 6	> 2	Six Axle Articulated Six (or more) axle articulated vehicle or rigid vehicle and trailer	ART6	10	axles = 6 and groups > 2 or axles > 6 and groups = 3	

Table 11 – Class of Vehicle

Class of vehicle	Total number of vehicles EB
Class 1	129
Class 2	13015
Class 3	50
Class 4	750
Class 5	25
Class 6	58
Class 7	6
Class 8	15
Class 9	18
Class 10	12
TOTAL	14078

Table 12 – Class of vehicle EB (Week 1)

Class of vehicle	Total number of vehicles EB
Class 1	130
Class 2	13423
Class 3	56
Class 4	623
Class 5	102
Class 6	58
Class 7	1
Class 8	12
Class 9	11
Class 10	8
TOTAL	14424

Table 13 – Class of vehicle EB (Week 2)

Class of vehicle	Total number of vehicles WB
Class 1	127
Class 2	14164
Class 3	60
Class 4	793
Class 5	74
Class 6	37
Class 7	9
Class 8	21
Class 9	12
Class 10	32
TOTAL	15329

Table 14 – Class of vehicle EB (Week 1)

Class of vehicle	Total number of vehicles WB
Class 1	129
Class 2	14902
Class 3	103
Class 4	955
Class 5	30
Class 6	44
Class 7	6
Class 8	19
Class 9	28
Class 10	34
TOTAL	16250

Table 15 – Class of vehicle EB (Week 2)

Table 16 provides a breakdown on class of vehicle for the eastern ATC survey over the total period of 14 days for eastbound traffic and table 17 provides a breakdown of the class of vehicle over the total survey period of 14 days for eastbound traffic for week 2. Tables 18 and 19 provide the same information for westbound traffic.

Class of vehicle	Total number of vehicles EB
Class 1	60
Class 2	8949
Class 3	52
Class 4	583
Class 5	14
Class 6	14
Class 7	4
Class 8	18
Class 9	23
Class 10	8
TOTAL	9725

Table 16 – East ATC Class of vehicle EB (Week 1)

Class of vehicle	Total number of vehicles EB
Class 1	57
Class 2	8974
Class 3	41
Class 4	665
Class 5	36
Class 6	38
Class 7	1
Class 8	23
Class 9	21
Class 10	6
TOTAL	14424

Table 17 – East ATC Class of vehicle EB (Week 2)

Class of vehicle	Total number of vehicles WB
Class 1	66
Class 2	10185
Class 3	66
Class 4	716
Class 5	95
Class 6	26
Class 7	5
Class 8	28
Class 9	17
Class 10	30
TOTAL	11234

Table 18 – East ATC Class of vehicle WB (Week 1)

Class of vehicle	Total number of vehicles WB
Class 1	68
Class 2	10519
Class 3	65
Class 4	827
Class 5	17
Class 6	42
Class 7	6
Class 8	30
Class 9	16
Class 10	38
TOTAL	11628

Table 19 – East ATC Class of vehicle WB (Week 2)

Figures 8 and 9 below demonstrate the volume of traffic over each day of the week for week 1 and week 2 in the eastbound direction. As expected traffic flow is consistent over weekdays with a significant reduction over the weekend. This suggests that a large proportion of traffic is commuters using the route as part of their journey to work.

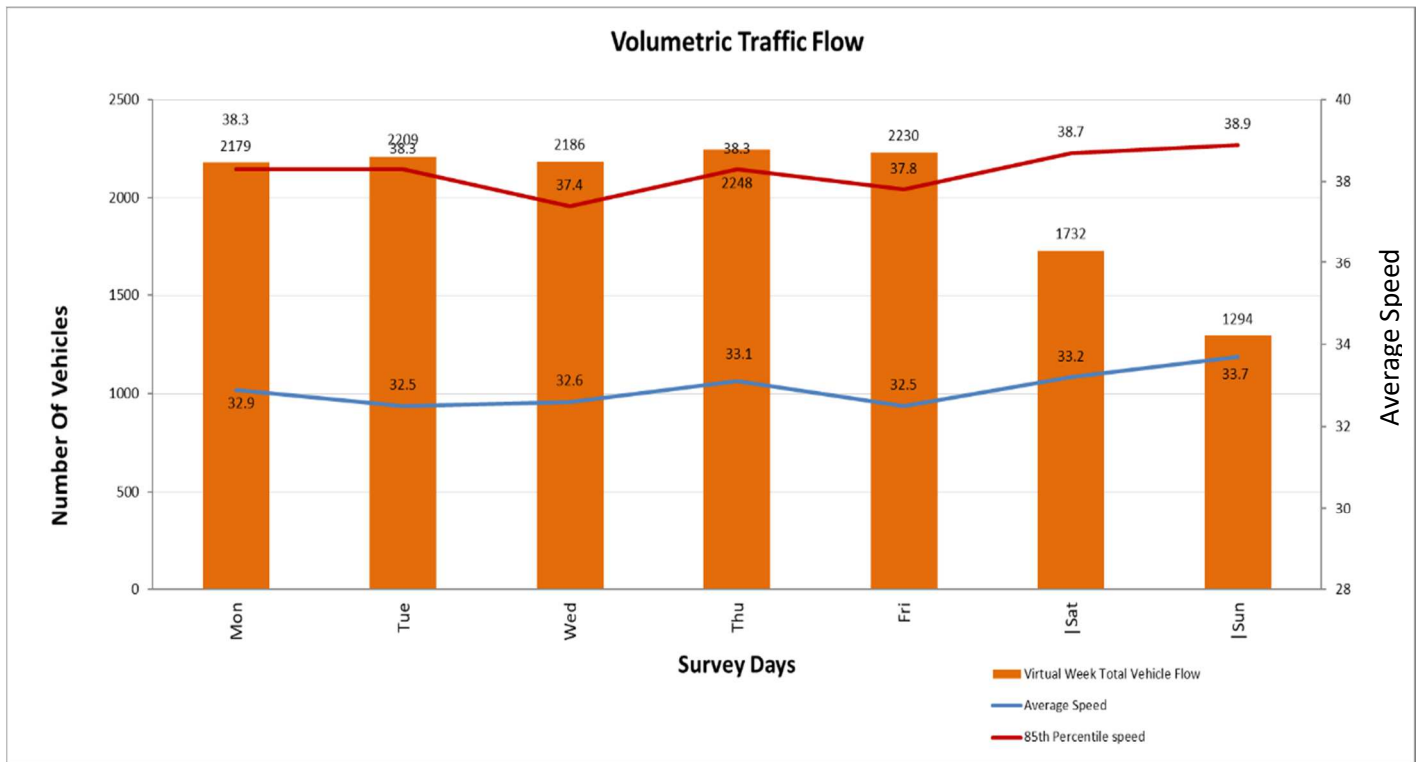


Figure 8 – Graph showing Western ATC traffic volume eastbound (week 1)

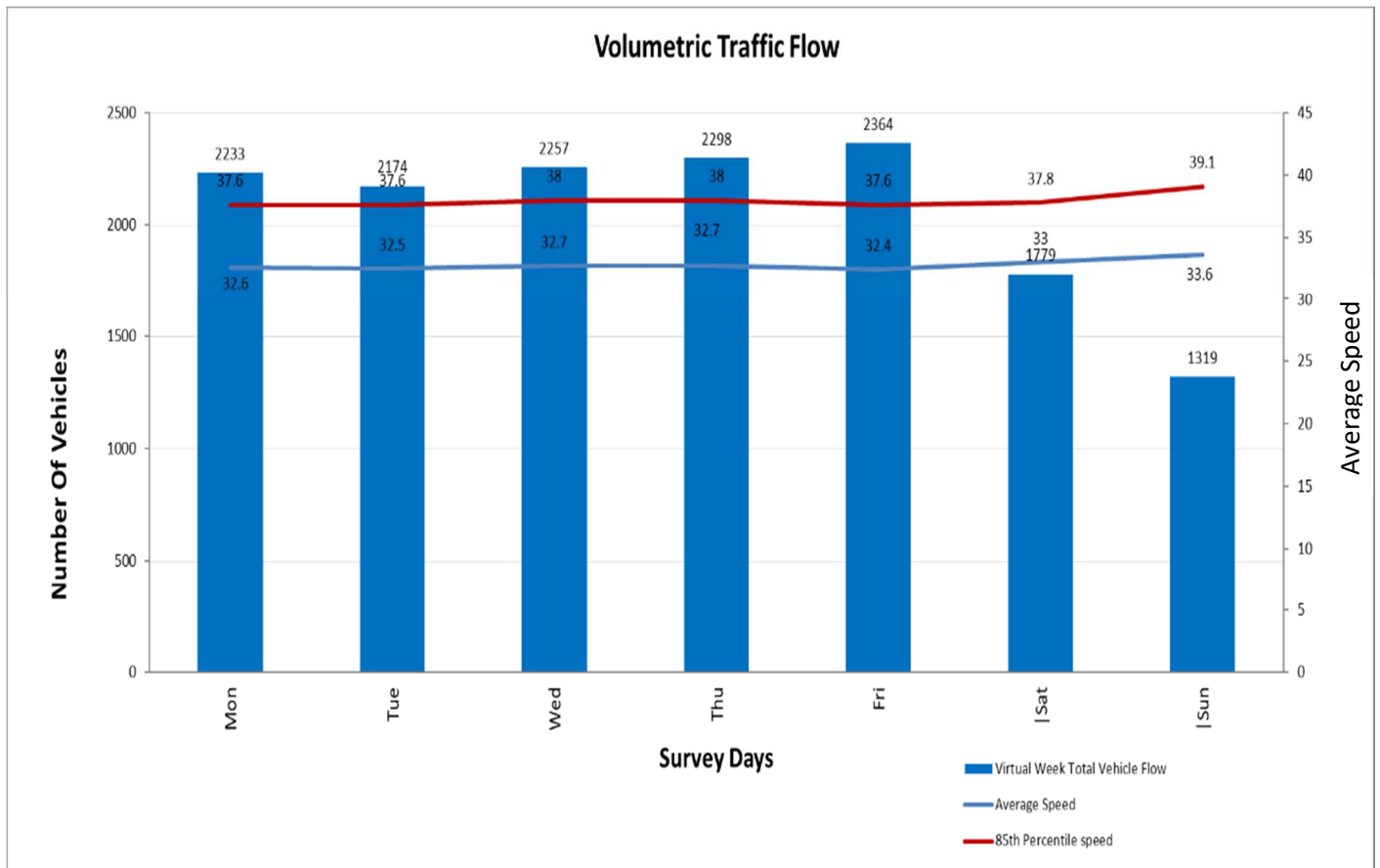


Figure 9 – Graph showing Western ATC traffic volume eastbound (week 2)

Figures 10 and 11 below demonstrate the volume of traffic over each day of the week for week 1 and week 2 in the eastbound direction. As expected traffic flow is consistent over weekdays with a significant reduction over the weekend. This suggests that a large proportion of traffic is commuters using the route as part of their journey to work.

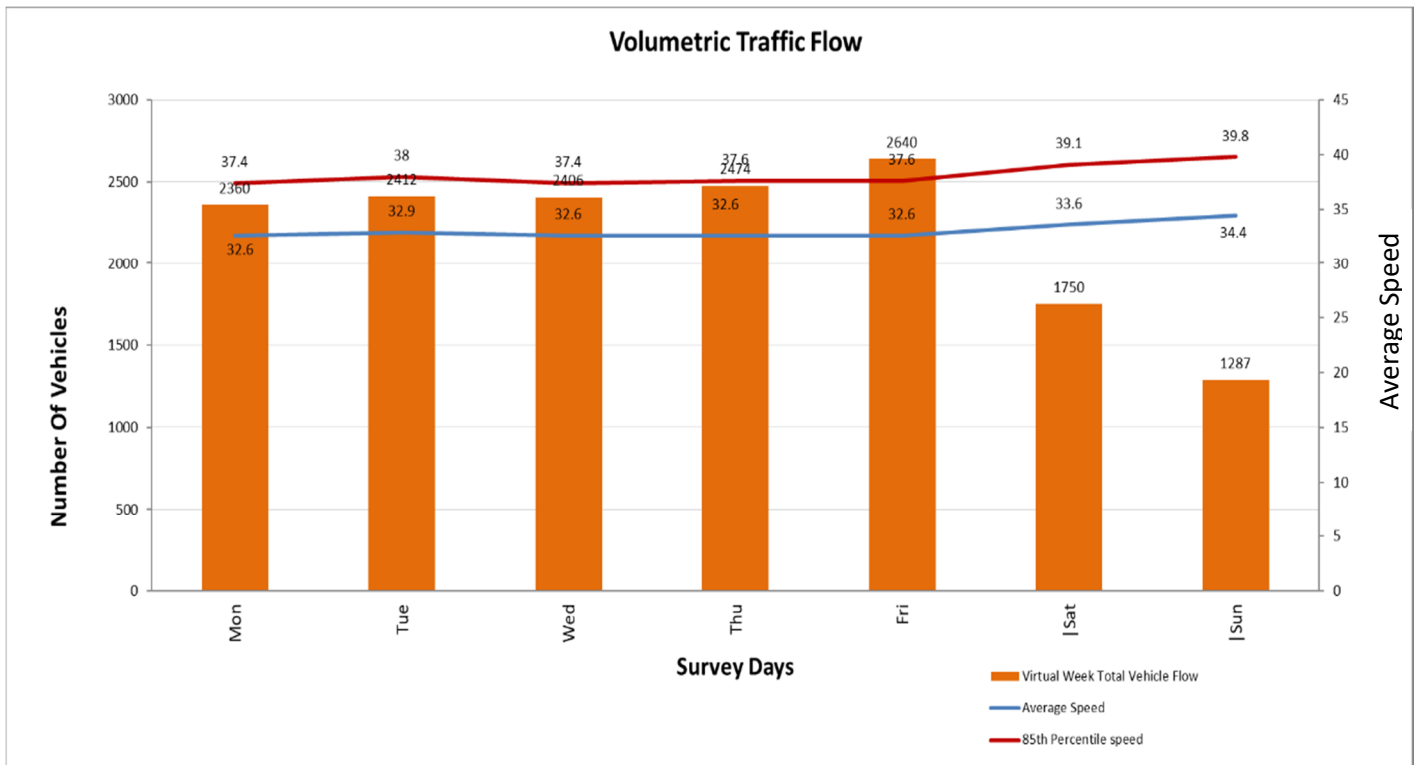


Figure 10 – Graph showing Western ATC traffic volume westbound (week 1)

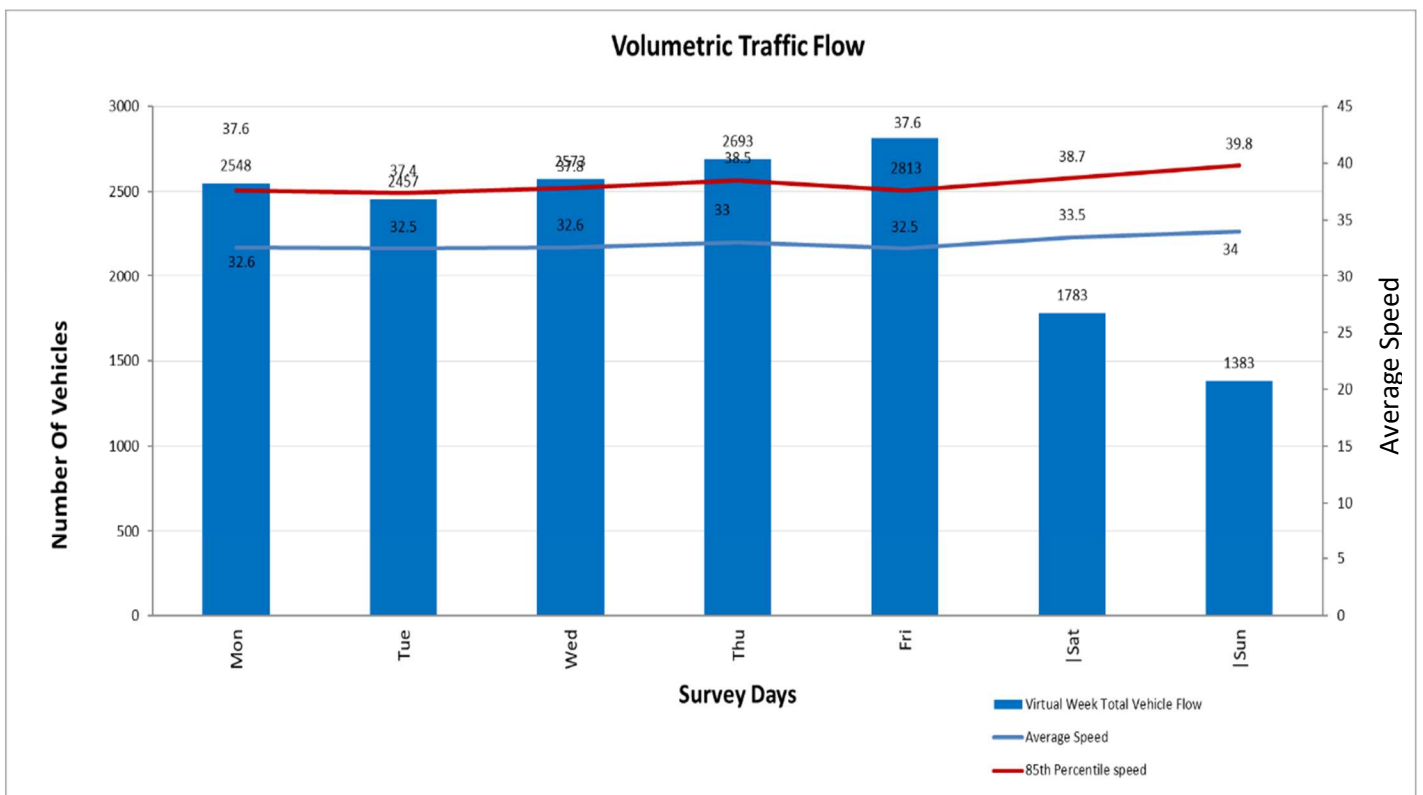


Figure 11 – Graph showing Western ATC traffic volume westbound (week 2)

These results demonstrate that on average there is greater traffic in the westbound direction as oppose to the eastbound direction. There is no obvious reason for this although it's widely acknowledged that drivers are more likely to use alternative routes during their journey after work.

Traffic volume peaked between 7:30am and 8:30am in the morning and 16:00 and 18:00 in the afternoon. This supports the assumption that a large proportion of traffic in the area is using the roads as part of their journey to work.

The ATC surveys also collected information on traffic speed. Mean speed is shown in the figures 8-11.

As expected traffic speed increases at the weekend when there is less traffic on the road network. There doesn't appear to be an issue with traffic speed within the area and the proposals considered within this report are made on the assumption that the speed limit will not be adjusted. However it would be recommended to reduce the speed limit on the approaches to the village if any large scale infrastructure measures were implemented on safety grounds.

3.3 Queue length surveys

Queue length surveys were undertaken at the three level crossings to enable the impact of the existing situation to be calculated. This included timing the barrier downtime over a 12 hour period (7am – 7pm). The results are shown in tables 20-22. These surveys were undertaken on a weekday and Saturday to ensure an appropriate representation of traffic in the area was captured and to gain a better understanding of the current level of train demand in the area.

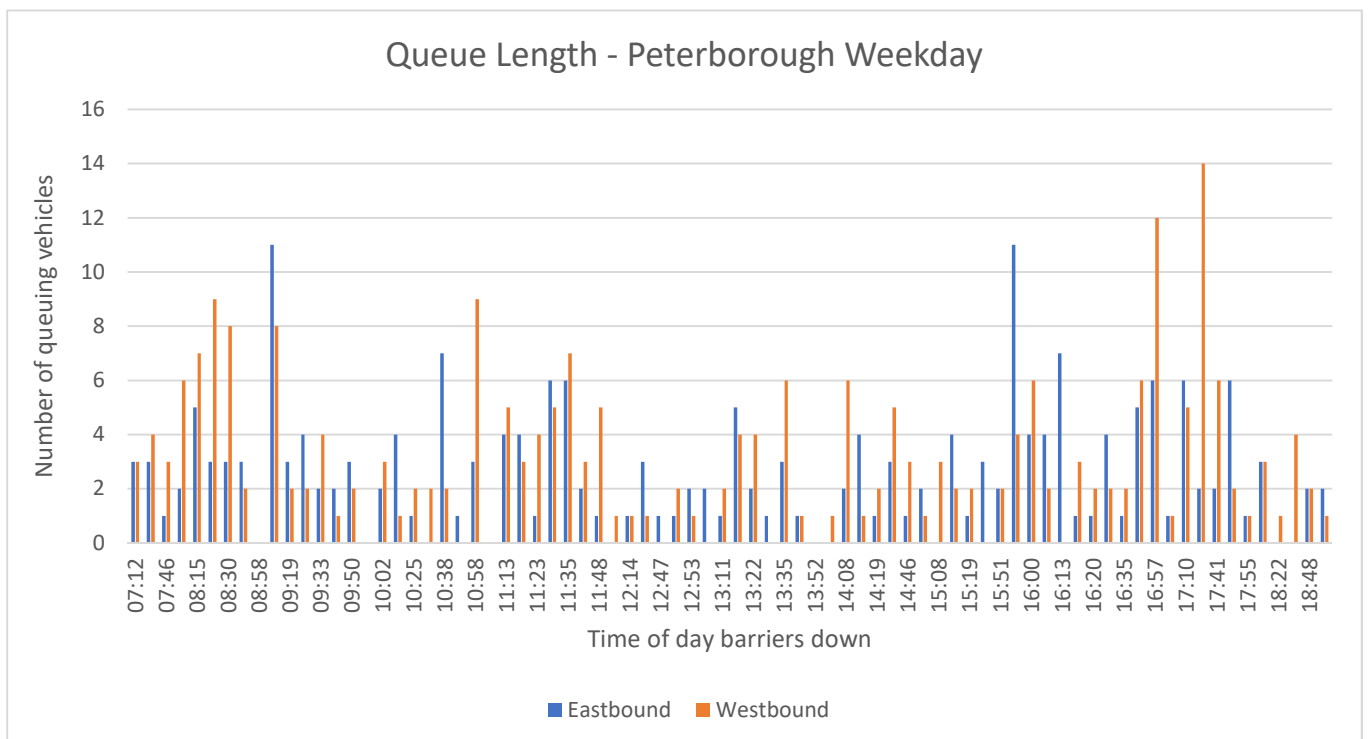


Table 20 – Queue Length – Peterborough Line Weekday

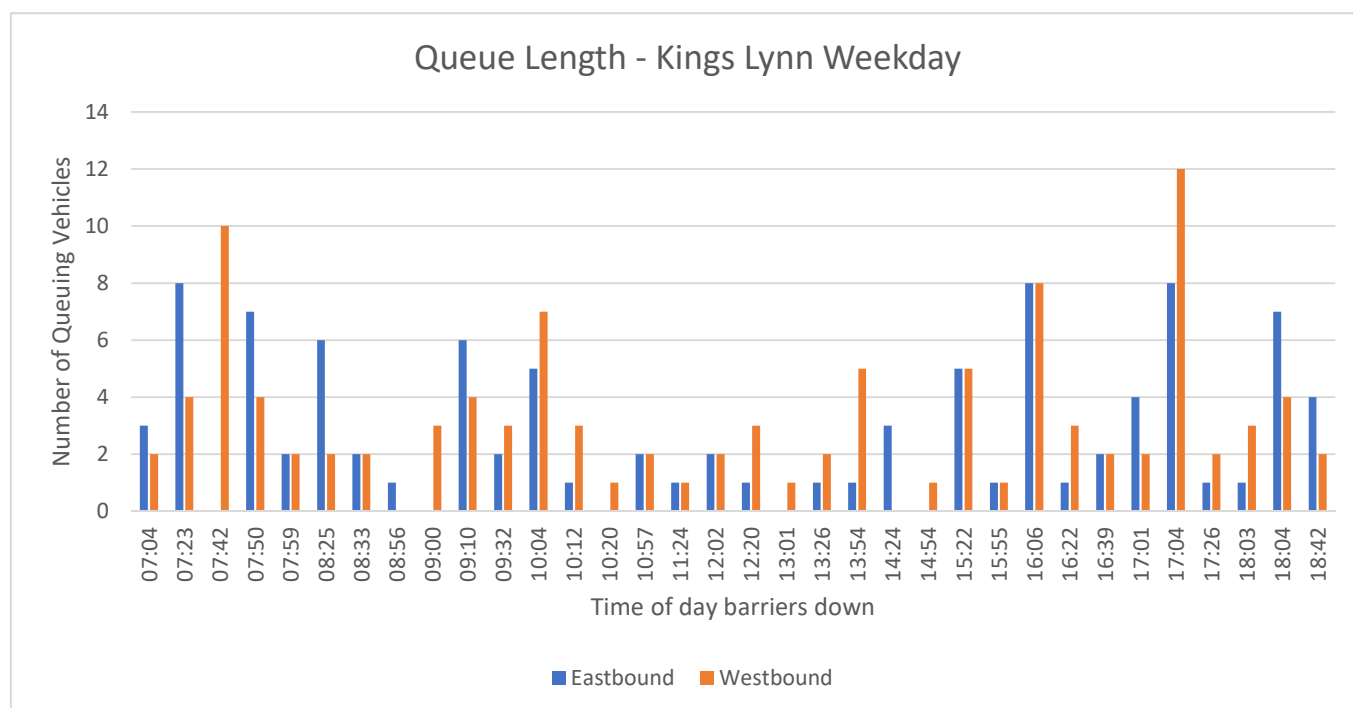


Table 21 – Queue Length – Kings Lynn Line Weekday

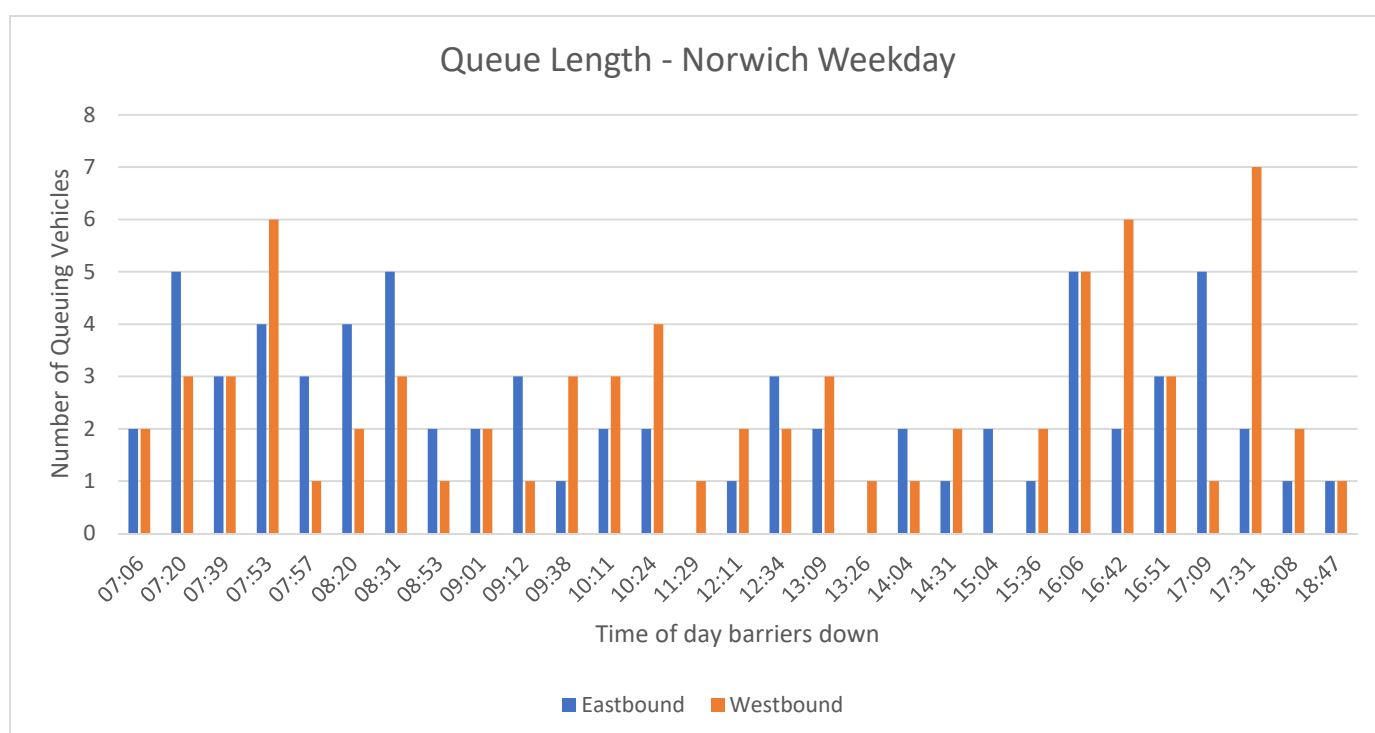


Table 22 – Queue Length – Norwich Line Weekday

The Peterborough line carries the most trains and freight. This means the barrier is down more frequently. There is also more likelihood of more than one train passing, meaning the barrier remains down longer. Therefore the average queue length is longer than the other two lines.

The average queue length on the Peterborough line is 2.9 each time the barriers are down. This increases to 4.9 during the morning peak and 4.3 during the afternoon peak. The average queue length is greater for traffic travelling westbound with a 3.1 average compared to a 2.6 eastbound average.

The average queue length on the Kings Lynn line is 3.0 each time the barriers are down. This increases to 3.6 during the morning peak and 4.4 during the afternoon peak. The average queue length is greater for traffic travelling westbound with a 3.2 average compared to a 2.8 eastbound average.

The average queue length on the Norwich line is 2.7 each time the barriers are down. This increases to 3.3 during the morning peak and 3.6 during the afternoon peak. The average queue length is greater for traffic travelling westbound with a 3.0 average compared to a 2.7 eastbound average.

On average it takes 47 seconds for the first train to pass on the Peterborough line once the barriers have gone down. This compares to 44 seconds for Kings Lynn and 43 seconds for Norwich. This additional time is likely due to the additional trains and freight that pass through.

On average it takes 1 minute 11 seconds for the barriers to raise on the Peterborough line. This compares to 59 seconds on the Kings Lynn line and 57 seconds on the Norwich line. Again, this additional time is likely due to the additional trains and freight that pass through.

3.4 Journey time comparison

As part of the traffic surveys, journey time comparison was carried out from origin's that can use Queen Adelaide and the three level crossings as part of the journey to destinations as far east as the Cambridgeshire / Norfolk boundary. Journeys were chosen that had an alternative route to demonstrate the impact to traffic if Ely Road in Queen Adelaide was restricted to through traffic.

The results of these comparisons demonstrated that a number of routes are actually quicker when avoiding the Queen Adelaide area. However the majority of these alternative routes did result in slightly greater distances.

Figure 12 – 14 below provides a summary of these routes that was calculated using Google maps.



Figure 12 – Journey Comparison (Ely to east of Queen Adelaide)

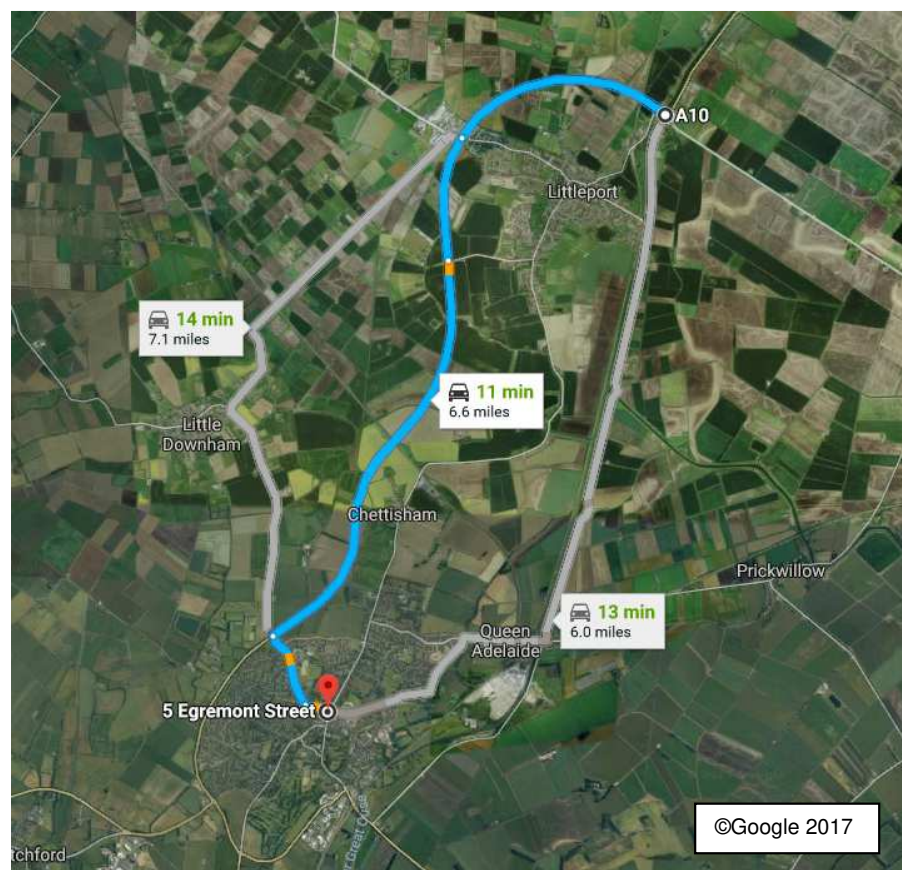


Figure 13 - Journey Comparison (Ely to A10 northeast of Littleport)

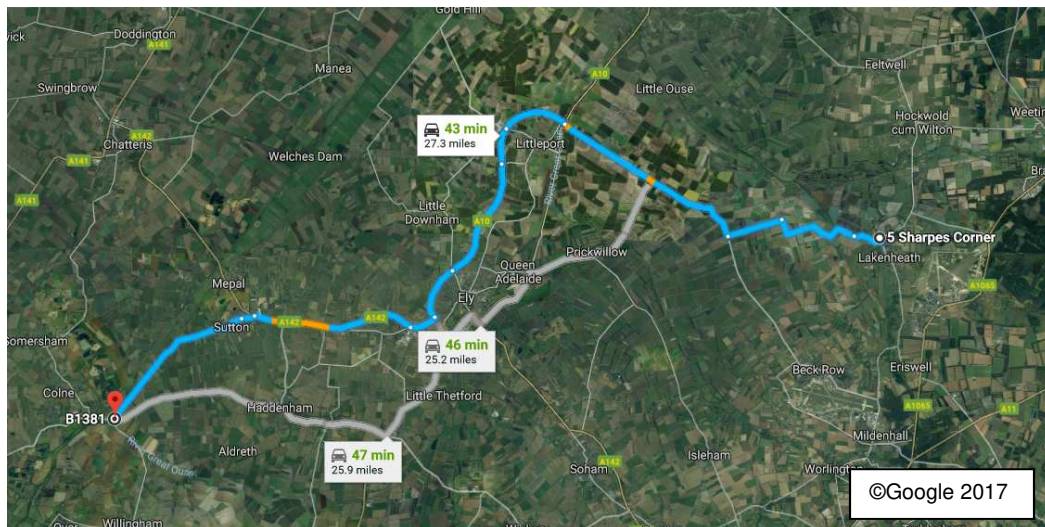


Figure 14 - Journey Comparison (Earith to Lakenheath)

3.4 Road Safety

There has been six recorded Killed or Seriously Injured (KSI) incidents within close proximity of the three level crossings in a five year period. Four of these were classified as slight and two were classified as serious. There was a further two recorded incidents within the proximity of the three level crossings although they have deemed to be outside of the radius of the project extents. One of these was a fatal collision along Queen Adelaide Way and the other was classified as a slight along Ely Road, east of the project extents near the junction with Swasedale Drove.

The six recorded KSI incidents within the extents of the three level crossings are described below.

1. 10/09/16 – Serious involving 2 vehicles, 1 car and 1 cyclist, 1 casualty
Ely Road at the junction with Branch Bank.
2. 07/09/16 – Slight involving 2 vehicles, 1 car and 1 Two Wheel Motor Vehicle (TWMV), 1 casualty
Queen Adelaide Way south of junction with Ely Road by the railway bridge.
3. 15/03/16 – Slight involving 1 vehicle, 1 pedestrian, and 1 child, 1 casualty
Prickwillow Road east of Ely Road
4. 19/01/16 – Slight involving 2 vehicles, 1 car, 1 cyclist, 1 casualty
Ely Road at the junction with Branch Bank.
5. 09/11/15 – Serious involving 2 vehicles, 2 cars, 1 pedestrian, 1 casualty
Branch Bank north of junction with Ely Road.
6. 30/06/15 – Slight involving 1 vehicle, 2 casualties one of which was a child
Branch Bank north of junction with Ely Road.

Please see figure 15 below for a location plan of these KSI incidents.



Figure 15 – Location plan for KSI incidents (5 year period)

4.0 Engagement with Local Residents and Businesses

To inform the more quantitative work that 2020 Consultancy are carried out, the County Council working with Network Rail led an engagement event in September. This work will feed into and inform the consultant's study.

4.1 Methodology

On 14 September 2017 the County Council and Network Rail ran an engagement event in Queen Adelaide Village Hall. The event was open to the public between 18:00 and 20:00. The local MP, Councillors and officers from County Council, District Council and Network Rail were present. The aim of this event was to have a conversation with local residents and businesses to understand more about the way residents and businesses use the roads and the impact three level crossings have now and may have in the future. This event allowed us to try and gain further insight which may not have been picked up from the traffic surveys and modelling work that were carried out.

A week or so before the engagement event all residents in Queen Adelaide and Prickwillow were sent a letter inviting them to the event in the Village Hall. On the day of the event comments cards were delivered to residents along with a freepost envelope. Following the event comments cards and freepost envelopes were posted out to residents. A phone number and email address was also provided so that comments could be sent in via phone or email.

Before the event businesses in Queen Adelaide and Prickwillow were telephoned and told about the event and offered a meeting. A number of meetings took place before the engagement event and notes were made summarising comments from businesses.

Whilst it is understood that people from a wide area use the level crossings the event was focused mainly on residents in Queen Adelaide and Prickwillow. The event was publicised using social media, a press release was issued, posters, comment cards and letters were delivered in the local area. The event was covered by local media, including local newspapers and an interview with BBC Radio Cambridgeshire was carried out on the day of the event. Screenshots below show examples of the above.

Cambridgeshire CC @CambsCC · Sep 14
 #QueenAdelaide engagement event has started, come and tell us how you use the roads and what the level crossings mean to you.



2

Cambridgeshire CC @CambsCC · Sep 8
 Come along to #QueenAdelaide Village Hall next Thurs to discuss traffic & level crossings in the area. More Info -->

Queen Adelaide – have your say

An engagement event is being held to understand more about the way residents and businesses use the roads in and around Queen Adelaide. Cambridgeshire County...

cambridgeshire.gov.uk

1

Cambridgeshire CC @CambsCC · Sep 12
 We are seeking your views... help us understand #QueenAdelaide join in our engagement event on 14 Sept. More info: ow.ly/1bVh30f0vU9



1 2

Some examples of the media coverage:

<http://www.elystandard.co.uk/news/a-village-community-would-be-cut-in-half-if-rail-crossings-at-queen-adelade-are-closed-warn-residents-1-5202827>

4.2 Results

In total 153 comment cards were sent to properties in Prickwillow and 80 in Queen Adelaide. 51 emails were received, 72 comment cards and five letters were sent back. This is an approximate response rate of 55 per-cent. It should be noted that this does not capture comments that were made to officers at the event, although this has been taken account, and it is also possible that people could have submitted both a comment card and an email.

A large number of comments were made and as a way to summarise these they have been grouped into key themes and topics that emerged as the comments were being analysed. It should be noted that most of the comments received related to the impact that level crossing closures would have.

4.3 Use of the level crossing

The vast majority of people who contacted us use the level crossings regularly, at least once or twice a day. The main reason given for their use of the crossing was access to services and facilities in Ely and places of employment and education. Other reasons that were given include:

- Access to services- (more detail is provided on this topic below)
- Accessing farm land and farm yard- at harvest time this can be at least 30 trips a day
- Customers accessing businesses
- Accessing business location- some businesses with sites in Queen Adelaide and Prickwillow have other locations and use the level crossing to access these
- Ellgia waste transfer access location in Witchford and Prickwillow and also collecting skips and the transfer of waste
- An alternative route to access the A10 for people living further north of Ely e.g. Littleport who want to avoid traffic in Ely
- General deliveries and postal deliveries
- Refuse collection
- Access to employment
- Use the crossing as part of a commuter route- Lakenheath, Mildenhall, Newmarket and access to Ely from Norfolk and other villages close by
- Used as a way to avoid the level crossing at Ely Station which often causes delays

- The internal drainage board have equipment in Prickwillow that is sometimes used in Queen Adelaide and Ely
- Access to customers who are based around the country
- Visiting friends and relations
- Wheelchair user access to Ely
- Providing at home care.

4.4 Services that people access using the crossings

- Mentioned that both Queen Adelaide and Prickwillow have very minimal services so using the level crossing is vital to access almost all services
- Shops in Ely
- Church
- Supermarkets in Ely
- Banks in Ely
- Solicitors
- Land Agent
- Vehicle maintenance
- Agricultural stockist
- Leisure facilities including the new Leisure Village
- Community facilities
- Council Offices in Ely
- Access to health care services including doctors, Princess of Wales Hospital, Dentist, Chiropodist
- Education- schools and colleges- there are no schools in Queen Adelaide or Prickwillow
- Hiam club in Prickwillow- mainly used for dances
- Walks along the river
- Village hall
- Numerous businesses mentioned that if access to their business was affected it would have a major detrimental impact on them
- Visiting friends and relatives
- There is very limited public transport in the area so a heavy reliance on cars and taxis - if crossings are changed access to services will become much harder
- Ely Station
- General access to Ely
- Access to farm yard and land which is either side of the crossings.

4.5 Time

A large number of people who responded to the engagement event mentioned that changes to the level crossings would lead to an impact on their travel time. It was

stated that greater barrier downtime would increase the waiting time at the crossings and would increase congestion through Queen Adelaide. It was also mentioned that it would become hard for residents to access their properties if there was an increase in the number of vehicles queueing along the road outside properties.

If the level crossings were closed people responded saying that diversion routes were much longer in mileage and therefore would take much longer in journey time, (people stated times of between 10 to 40 minutes). Respondents stated that it could take three times longer than it currently does to access Ely. This is significant given that current journey times are short. Farmers highlighted their slower moving machinery would create additional time and would have a greater impact than on cars.

Some respondents mentioned the impact when the crossings are closed for maintenance and the additional time this adds to their journeys.

4.6 Community and isolation

Due to the locations of the crossings respondents highlight that it would create real isolation for people in Prickwillow which at the moment have easy access to Ely. It was also highlighted that due to the location of the crossings in Queen Adelaide it has the potential to “cut the community in two”.

Respondents highlighted that it could have a greater impact on the young and elderly. At the moment access to Ely is fairly easy by bike or walking, if the crossings were closed to pedestrians and cyclists as well as motor vehicles diversions would take much longer. The schools in Ely could no longer be accessed via bike or walking. The impact on the elderly who receive at home help or visitors could be negative as it would become hard to access their homes, they may receive fewer visitors and care costs could increase.

4.7 School transport

A large number of respondents mentioned the impact on school transport. Many spoke about the impact on the time for school buses would be significant. It was also highlighted that school buses could not use the route down Queen Adelaide Way due to the low bridge under the Norwich line. A similar impact on school taxi transport was mentioned. Some respondents suggested that long bus journeys may lead to more residents using cars as this could be quicker.

4.8 Cost and potential compensation

Numerous residents mentioned that the increased distance travelled would increase fuel use and lead to increased costs for both personal mileage and business trips. Increases in taxi fare were also highlighted- it was mentioned that a lot of people use taxis in this area due to limited public transport.

Business owners in the area highlighted that anything that makes it hard for people to access their business premises will have a negative impact on their income and has the potential to make their business unviable. Many customers travel from Ely it was stated that if it became hard to get to their business they would become a lot less competitive. Residents were also concerned about the potential impact on business. Compensation for the negative impacts on businesses were mentioned by several respondents.

The potential impact on house prices were mentioned by several respondents and fears that house prices would be negatively impacted due to additional journey time to access Ely. A couple of people mentioned more trains would reduce house prices.

4.9 Environment

Many respondents mentioned the negative impact on the environment closing the level crossings may have. It was stated that increased vehicle mileage would increase vehicle emission, fuel usage and have a detrimental impact on air quality. It was also mentioned that alternative routes could potentially lead to more traffic through Ely resulting in a negative environmental impact on this area.

It was highlighted that if the crossings were closed the alternative routes are a lot less attractive for sustainable modes of transport so there use might decrease. Examples of no pavement and lighting along Queen Adelaide Way were highlighted.

Residents also warned of the potential impact on wildlife.

Another comment mentioned by a smaller number of respondents was the potential environmental impact of additional trains through the area- mainly these were related to noise and vibration, but emissions from diesel trains were also mentioned.

4.10 Alternative routes/impact on other areas

Numerous comments were made regarding the impact on alternative routes:

- Re-routing farm machinery on alternative routes potentially through Ely would not be practical particularly with large harvesting equipment
- A large number of people commented on the A142/Queen Adelaide Way junction being congested and difficulties turning right from Queen Adelaide Way on to the A142 towards Ely
- Congestion around Ely station area was highlighted and it was stated that this was particularly bad when there was a problem at the level crossing or a bridge strike (both this point and the above will be resolved with the opening of Ely Southern Bypass in 2018)
- The poor condition of Queen Adelaide way and Branch Bank was highlighted including the lack of pedestrian and cycling facilities, street lighting, poor road surface condition and narrow carriageway width
- Alternative routes would be much worse for walkers and cyclists

- Farmers mentioned that as undulating fen roads would be used as alternative routes crops they are moving would be more likely spilt
- The staggered junction of Branch Bank, Ely Road, Queen Adelaide Way was mentioned as having poor visibility
- People commented on the high number of accidents on the alternative routes in particular the junction of Queen Adelaide Way and the A142 and Branch Bank Road
- Respondents highlighted that Ely centre could become a lot more congested, areas of highest concern were Broad Street, Lisle Lane and Kings Avenue.

4.11 Emergency services

A large number of respondents highlighted their concerns around emergency vehicle access to Queen Adelaide and Prickwillow. Concerns were around longer call out times for the emergency services to reach people. There are a number of higher risk jobs in the area and longer response times were of concern to them. Respondents stated that longer response times could 'cost lives'.

4.12 Potential solutions

A number of respondents mentioned potential solutions:

- Potential for a traffic regulation order to restrict traffic to local access only
- Improve options for walking and cycling to reduce the need to travel by car
- Provide a cycling and pedestrian route from Prickwillow to Ely
- A better option to increase the number of trains would be to increase the number of carriages/wagons and increase capacity this way rather than with additional train services
- A bridge over the railway could be a solution
- A tunnel/underpass for the road
- A tunnel for the railway
- Potential to upgrade other roads/tracks beside the B1382 in the area to provide alternative routes such as Dairy Farm track, Low Road, Barn Farm Track, Willow/Waterden Farm and link to the new housing development
- New route that bypasses two of the three rail lines as an upgrade to the old Clayway track / Second Drove with a new bridge over the Ouse to the north
- Potential route through the Potters group site on to Kiln Lane to the south
- Use the loop line that goes under the bridge to a greater extent
- Potential for a rail flyover
- Improve Queen Adelaide Way including the junction with the A142 Stuntney Causeway
- Join the Peterborough and Kings Lynn lines together

- Leave the level crossings as they currently are, it is not that bad and longer wait times would be less inconvenient than alternative routes. There are not any current issues
- Warning signs to stop blocking, people won't mind waiting longer
- Look into re-routing trains
- Divert the Peterborough line onto the Ely West Curve meaning a change at Ely North Junction and the doubling of the track to the Ely West Junction, this would have the benefit of reducing the amount of time road traffic is stopped at the busiest of the three crossings
- Investigate a fully gated crossing rather than the cheaper option of closing the road
- Average speed cameras are required to stop people speeding to "catch up" after being stopped at the crossing
- Trial the additional usage of the crossings first without closing the crossings
- Run freight trains at off peak times so they do not cause problems.

4.13 Rail services

Several respondents mentioned that they were against any rail services improvement. A few said they were for improved services and some caveated this by saying only if it does not impact on the level crossings.

4.14 Objections to level crossing closures

The majority of respondents highlighted they were against any level crossing closures and several wanted their formal objections to be noted.

4.15 Comments regarding engagement process

A number of respondents had comments on how the engagement event was run a summary of these are below:

- Concerns that decisions had already been made and this was a formal consultation event rather than an informal discussion
- People felt the event should have been published more widely and not just focused on Queen Adelaide and Prickwillow
- If the event had been promoted more widely more people would have attended
- Suggested that other estates in Ely should have received information about the event
- It was felt that posters or signs at the level crossings would have been useful
- A letter sent out by a local resident approximately six months before the event saying the level crossings were going to be closed caused a lot of confusion and raised anxiety amongst residents

- People wanted more information about what was planned for the level crossings
- The timing of the event 18:00 to 20:00 was not convenient for some people.

4.16 Conclusion

It is clear from the above that residents and businesses in Queen Adelaide and Prickwillow and further afield have concerns regarding any changes to the level crossings on the B1382. This road provides a vital link to Ely for a variety of key services, employment and education. The road also provides access for customers to businesses in the area and provides farms access to fields and farm yards.

The B1382 is also used by a wider population than just those who live in the villages of Queen Adelaide and Prickwillow as part of a wider commuter route both into and out of Ely. There was a fear that Queen Adelaide and Prickwillow could be isolated from Ely which could result in house prices decreasing and businesses would find it harder to operate.

5.0 Potential Options for Consideration

As part of this study eight potential options have been considered and reported upon to enable a greater understanding of the impact closing or restricting traffic through the Queen Adelaide area will have on the local and wider road network. These options have been summarised below including the justification for their inclusion.

The options that have been considered involve either a physical intervention or a restriction that requires infrastructure but no physical restriction. Physical intervention are the large scale infrastructure works, in this case either a bridge over the railway line or the construction of a northern by-pass as shown below.

5.1 Traffic Regulation Order

Any restriction will require the implementation of a Traffic Regulation Order. Highway authorities can place temporary, experimental or permanent restrictions on traffic within their areas by way of a Traffic Regulation Order (TRO). A TRO is carried out under Parts I, II and IV of the Road Traffic Regulation Act 1984, as amended.

Section 1(1) states that permanent orders may be made for the following purposes:

- (a) for avoiding danger to persons or other traffic using the road or any other road or for preventing the likelihood of any such danger arising, or
- (b) for preventing damage to the road or to any building on or near the road, or
- (c) for facilitating the passage on the road or any other road of any class of traffic (including pedestrians), or
- (d) for preventing the use of the road by vehicular traffic of a kind which, or its use by vehicular traffic in a manner which, is unsuitable having regard to the existing character of the road or adjoining property, or
- (e) (without prejudice to the generality of paragraph (d) above) for preserving the character of the road in a case where it is specially suitable for use by persons on horseback or on foot, or
- (f) for preserving or improving the amenities of the area through which the road runs.

A TRO can be implemented using a number of techniques. Regardless of what measures are implemented it requires a legal order that is subject to statutory consultation and signed off by a suitable officer within Cambridgeshire County Council. During statutory advertisement members of public have the right to provide a formal objection to the order which has to be done in writing or by email during the appropriate time period, which is usually 21 days.

To restrict traffic on a particular route the highway through a TRO, the traditional method is to install a bollard or gate at the restriction. Traffic that has the authority to pass through the restricted zone will have some device or sensor that will trigger the release of the feature. This is common for routes that is only accessible for public transport such as buses and taxis. However bollards are no longer used in Cambridge. Therefore the TRO would work independently without any physical

measures protecting the route. Drivers are unlikely to risk passing through the restriction as enforcement will be carried out.

Figure 16 below provides an example of a typical independent TRO gateway.



Figure 16 – Example of typical independent TRO

An alternative to a physical restriction is to utilise modern technology and ANPR cameras. Cameras are installed at the restriction and identify any vehicles that are in contravention of the TRO through number plate recognition. This then results in a Penalty Charge Notice issued. It is possible to have exemptions to a TRO to permit certain traffic to continue to use the route. This is usually public transport, and deliveries. However it is possible to permit local residents and business owners to continue to use the route.

There is a requirement for local residents to supply a list of registration plate details to the local authority who will create a spreadsheet that is cross referenced for each contravention. Visitor details can be provided although this can become time consuming. It isn't very common and further investigation is recommended if this option is progressed.

Figure 17 provides an example of a TRO restriction utilising ANPR cameras and the type of signage required.



Figure 17 – Example of ANPR TRO Restriction

As part of the options considered as part of this study, we have explored a TRO restriction for one direction. This would restrict traffic in one direction, creating a one-way system. This would result in considerably less traffic on the road network. This option has benefits and drawbacks that are described below.

One-Way TROs are common across the country in residential and rural areas. There isn't usually an ongoing enforcement commitment although few motorists take the risk of travelling through a one-way system in the wrong direction for the fear of consequences such as being caught or causing a collision.

Figure 18 provides an example of a one-way TRO restriction.



Figure 18 – Example of a One-Way TRO restriction

Please find the options considered as part of this study below.

5.1 Option 1 - Restricting ALL traffic through the Peterborough and Kings Lynn level crossings

The most western and the central lines are the two busiest routes and it would be Network Rails priority to restrict traffic through these two crossings. Due to the close proximity and existing road layout it isn't possible to restrict traffic at only one of these crossings. Restricting all traffic through these two crossings would enable Network Rail to increase the passenger services and freight as much as desired as the road would be stopped up. However the Peterborough or Kings Lynn level crossing would be required to allow local residents and businesses that are located between the two crossings the ability to access their properties. There would be a need for pedestrians and cyclists to pass through the other crossings so some infrastructure improvements would be necessary. This is likely to cost in the region of £100,000 which involves removing existing infrastructure and replacing with new. This cost is based on previous work that has been identified across the country.

Benefits

Network Rail could use both the Peterborough and Kings Lynn routes to maximum capacity which would benefit the regions and improve the rail links from London. The

only cost outlay would be some infrastructure to enable pedestrians and cyclists to cross the rail lines safely. As all traffic would be restricted there would be no ongoing costs involved relating to the enforcement of the crossings. There would also be no Network Rail level crossing maintenance or operational costs involved along with no level crossing risk, which are all benefits to Network Rail.

Issues

Local traffic would be impacted the most as there would be an increase in journey time of potentially 7-14 minutes each journey. This could mean an extra 14-28 minutes a day. This would also result in additional fuel use. The village would feel very isolated and cut off from the wider community. Local businesses that rely on passing trade or from customers that can access their sites easily will see a sharp reduction of turnover. For some businesses this may result in them going out of business altogether. The local authority and Network Rail may be subject to compensation claims as a result of this. There will be greater traffic on the wider road network which already experiences congestion at peak times. Traffic from further afield that uses this route on a regular basis would be impacted with higher journey times.

5.2 Option 2 - Allow local traffic through the Peterborough and Kings Lynn level crossings

An alternative to restricting the Peterborough and Kings Lynn to all traffic is to allow local traffic to by-pass any restriction. This can be done either by using a physical barrier system or using ANPR cameras that will determine if a car registration plate is permitted through the restriction. There are a number of ways this can be done including one site being the restriction such as the Kings Lynn line or two sites such as west of the Peterborough line and east of the Kings Lynn line. Restricting traffic to only allow local traffic to pass through the crossings will result in significantly lower traffic passing the lines. This means that queue lengths will not become a concern as a result of full barrier systems as oppose to the half barrier systems currently in operation. Network Rail would be able to increase the passenger lines and freight as required without the negative impact for residents. Pedestrian and cycle access over the level crossings could remain which is a sustainable travel benefit. The cost of this option is low initially as the cost of the ANPR equipment is likely to be in the region of £100,000. The legal aspect is likely to cost approximately £20,000. However there will be a requirement for commuted sums to cover the maintenance of the equipment. These costs are based on previous work undertaken on ANPR systems.

Benefits

Network Rail could use both the Peterborough and Kings Lynn routes to maximum capacity which would benefit the regions and improve the rail links from London. Local traffic wouldn't be affected and wouldn't require to make considerable detours as part of their journey. This would also see minor capacity benefits on the wider road network. Local businesses would be able to keep the majority of their trade as it would only be passing trade that would diminish although this will still be a concern

for business owners. This option wouldn't involve any major infrastructure investment meaning the cost of implementation will be low.

Issues

Local businesses would still see a reduction in trade as passing trade would diminish. There is also a concern that due to the requirements involved for local businesses to register customer vehicles the businesses will become less attractive and customers would look elsewhere. Local residents may feel slightly cut off with their area becoming a no through road. Some residents may feel visitors will be less inclined to visit. Whilst the cost of implementation will be low there will be an ongoing commitment to fund the enforcement method such as physical barrier or ANPR camera. Cambridgeshire County Council would be required to gain approval from the Police for any enforcement solution. The logistics of the enforcement may be difficult. If local traffic is permitted entry through the crossings, difficulties will arise with visitors and deliveries and how that will be enforced. It is unlikely residents will want to register visitors or deliveries in advance. It may be difficult to classify local traffic resulting in high numbers of PCNs issued and subsequent appeals which will require time and resource.

5.3 Option 3 - Implementation of a One-Way system with no exemptions

It is possible to virtually half the amount of traffic through the Queen Adelaide area by creating a Traffic Regulation Order (TRO) to create a section of one-way between the three crossings such as between the Peterborough and Kings Lynn lines. This can either be east to west or west to east, a decision that would be worth consulting with local residents on. The benefit of this option is the little impact on the wider road network and allowing through traffic to continue to use the area for their morning or afternoon journey. This is a low cost option with very little physical works required. The signage and road marking would cost in the region of £20,000 along with a further £20,000 for the legal work involved in the TRO.

Benefits

Network Rail can increase the passenger services and freight through all three lines as and when required without a big impact on traffic as the impact will only be approximately 50%. Local residents can travel as existing for half their journey meaning the impact will be reduced. Local businesses will still receive passing trade. This option wouldn't involve any major infrastructure investment meaning the cost of implementation will be low. Contra flow cycle lanes along with footways will ensure pedestrian and cycle access can remain in both directions.

Issues

Local residents and businesses will still be negatively impacted each journey as their opposing journey will require a lengthy detour. Local businesses will still miss out on the level of trade opportunities currently experienced. Businesses could become less attractive to customers as a result of this. As a rural area this option may also impact

local farms. Whilst no major infrastructure will be required there will be an ongoing commitment to enforce the TRO as without enforcement there is a high likelihood vehicles will abuse the TRO. Alternatively the TRO can be enforced through a physical barrier or ANPR camera. Cambridgeshire County Council would be required to gain approval from the Police for any enforcement solution. The logistics of the enforcement may be difficult. This option may not be accepted as a viable solution as issues surrounding blocking back will still occur. It will also result in uneven trip distribution as only one direction will be subject to a reduction.

5.4 Option 4 - Implementation of a One-Way system with exemption for local traffic

An alternative to having a one-way system is to create a one-way system with an exemption to allow local traffic to utilise their existing journeys. The TRO can be located in the same location as the above option suggests and the only obvious difference would be a need for an exemption plate to advise drivers who is permitted to travel and who isn't permitted to travel. The benefit of this option is local residents are not impacted at all as it's only through traffic that will be restricted. However local businesses will see a reduction in passing trade. There will be a greater impact on the wider road network although far less than a permanent restriction for both directions. This is a low cost option with very little physical works required. The signage and road marking would cost in the region of £20,000 along with a further £20,000 for the legal work involved in the TRO.

Benefits

Network Rail can increase the passenger services and freight through all three lines as and when required without a big impact on traffic as the impact will only be approximately 50%. Local residents will not be adversely affected at all as they will be able to travel in both directions with no restrictions. Local businesses will still receive passing trade. This option wouldn't involve any major infrastructure investment meaning the cost of implementation will be low.

Issues

Local businesses will still be negatively impacted as they will miss out on the level of trade opportunities currently experienced. Businesses could become less attractive to customers as a result of this. It is also possible that some traffic will avoid the area altogether. Whilst no major infrastructure will be required there will be an ongoing commitment to enforce the TRO as without enforcement there is a high likelihood vehicles will abuse the TRO. Alternatively the TRO can be enforced through a physical barrier or ANPR camera. Cambridgeshire County Council would be required to gain approval from the Police for any enforcement solution. The logistics of the enforcement may be difficult. If local traffic is permitted entry through the crossings, difficulties will arise with visitors and deliveries and how that will be enforced. It is unlikely residents will want to register visitors or deliveries in advance. Road safety will also need to be considered as drivers may not expect to see oncoming traffic

and the signage may be confusing. Early engagement with Road Safety Auditors is recommended.

5.5 Option 5 - Restricting ALL traffic through the Norwich line

Due to the location of the Norwich line it is possible to restrict traffic through this line without disrupting traffic in Queen Adelaide. However it will have a major impact for traffic travelling from Prickwillow to Ely with significant journey time increases. As highlighted in the ANPR surveys only 11% of traffic pass through the Norwich line and therefore the impact on the wider road network will be minimal. Restricting all traffic through this crossing would enable Network Rail to increase the passenger services and freight as much as desired as the road would be stopped up meaning no crossings would be required. There would be a need for pedestrians and cyclists to pass through the crossing so some infrastructure improvements would be necessary. However it is worth remembering that this is the lowest priority line out of the three crossings. Therefore Network Rail would need to revisit their ambitions to determine how to achieve their requirements for the Peterborough and Kings Lynn lines. This is a low cost option that is likely to cost in the region of £100,000 for the ANPR equipment and a further £20,000 for the legal costs involved in the TRO.

Benefits

As shown in the ANPR surveys the impact on closing this crossing is minimal and this option will result in the lowest disruption of all potential options that consider all traffic. The only cost outlay would be some infrastructure to enable pedestrians and cyclists to cross the rail lines safely. As all traffic would be restricted there would be no ongoing costs involved relating to the enforcement of the crossings.

Issues

Local traffic would be impacted the most as there would be an increase in journey time. This would also result in additional fuel use. Local businesses that rely on passing trade or from customers that can access their sites easily may see a reduction of trade. There would also be a significant impact on Prickwillow and surrounding villages. The benefits that Network Rail could gain with the Peterborough or Kings Lynn lines may not be possible with the closure of the Norwich Line as it's the lowest priority of the three crossings. For this option to be worthwhile to Network Rail they may need to adjust the track alignment and routes which could become extremely costly.

5.6 Option 6 - Allow local traffic through the Norwich line

An alternative to restricting the Norwich line to all traffic is to allow local traffic to bypass any restriction. This can be done either by using a physical barrier system or using ANPR cameras that will determine if a car registration plate is permitted through the restriction. The restriction would only be required at one location as only one crossing is impacted. Restricting traffic to only allow local traffic to pass through the crossings will result in significantly lower traffic passing through the line. This

means that queue lengths will not become a concern as a result of a full barrier system as oppose to the half barrier system currently in operation.

Benefits

Network Rail could use the Norwich line to maximum capacity which would benefit the region and improve the rail links. Local traffic wouldn't be affected and wouldn't require to make considerable detours as part of their journey. This would also see minor capacity benefits on the wider road network. Local businesses would be able to keep the majority of their trade as it would only be passing trade that would diminish although this will still be a concern for business owners as administration of the TRO would be a disincentive. This option wouldn't involve any major infrastructure investment meaning the cost of implementation will be low.

Issues

Local businesses would still see a reduction in trade as passing trade would reduce slightly. Local residents may feel slightly cut off with their area becoming a no through road. Some residents may feel visitors will be less inclined to visit. Whilst the cost of implementation will be low there will be an ongoing commitment to fund the enforcement method such as physical barrier or ANPR camera. Cambridgeshire County Council would be required to gain approval from the Police for any enforcement solution. The logistics of the enforcement may be difficult. If local traffic is permitted entry through the crossing, difficulties will arise with visitors and deliveries and how that will be enforced. It is unlikely residents will want to register visitors or deliveries in advance. Due to the wider reaching impact of closing the Norwich line it may be difficult to determine the area of local traffic such as Prickwillow. Network Rail may prefer to see the Peterborough and Kings Lynn lines restricted as the logistics to increase passenger lines and freight through the Norwich line may be too great or costly.

5.7 Option 7 - Implementing a Bridge over the Peterborough line

Implementing a bridge over the Peterborough line would result in the least impact on the road network whilst allowing as much passenger services and freight along the line as Network Rail require. However this option will be extremely costly and is likely to cost at least £40 million. Due to the layout of the Peterborough and Kings Lynn lines it will not be possible to have a bridge over both lines. However with the complete removal of the Peterborough level crossing it isn't envisaged a problem occurring with Kings Lynn becoming full barrier as the queue lengths will not be great enough. However this option would need further investigation as the available room is tight and there may be insufficient room to construct a bridge.

Benefits

Constructing a bridge over the Peterborough line will allow all traffic to continue using the area without impacting Network Rail's desire to increase usage along this line. As the level crossing will be removed there will actually be a reduction in journey time. Local businesses wouldn't lose any passing trade. There would be no

impact on the wider road network as no traffic will be diverted. This option doesn't require any TRO or restriction meaning there are no enforcement issues to consider. This option also removes all level crossing risks resulting in greater safety benefits and removes maintenance and operation cost involved in level crossings.

Issues

This option will be expensive to implement with a cost at least £20 million+. A Benefit Cost Ratio (BCR) assessment may result in this option not delivering the results expected with the capital outlay required. There may be a need for compulsory purchases of properties within close proximity of the line which may be extremely upsetting for the property owners and may create disharmony in the village. This option will only allow for the Peterborough line to be increased without the need to restrict traffic. There will also be an ongoing maintenance requirement and whilst this will almost certainly be in the long term only, this will need consideration. Any necessary maintenance will require traffic management. Road safety would need consideration as queuing traffic may not be seen due to the bridge.

5.8 Option 8 - Constructing a Ely Northern By-Pass north of Queen Adelaide

Along with the implementation of a bridge over the Peterborough line, the construction of a Ely northern by-pass north of Queen Adelaide will result in the least impact on the road network whilst allowing as much passenger services and freight along the line as Network Rail require. However this option will be by far the most costly and is likely to cost at least £100 million depending on the nature of structures used for the bridges. Due to the Peterborough and Kings Lynn lines merging shortly after Ely Road it may be possible to construct one bridge to cover the span of the Peterborough and Norwich lines. However this is considered an extreme option due to the large costs involved. This highlights that more detail investigation into this option is required.

Benefits

Constructing Ely northern by-pass will allow all traffic to continue using the area with minimal journey time disruption without impacting Network Rail's desire to increase usage along this line. Network Rail would be able to increase passenger services and freight through all three crossings as much as necessary. This option doesn't require any TRO or restriction meaning there are no enforcement issues to consider. This option also removes all level crossing risks resulting in greater safety benefits and removes maintenance and operation cost involved in level crossings. There would be no level crossing risk or operational and maintenance costs which would be a positive for Network Rail.

Issues

This option will be by far the most expensive to implement with a cost in the region of £100 million. The high costs of this scheme highlight the need for further

investigation. There will be an ongoing maintenance requirement and whilst this will almost certainly be in the long term only, this will need consideration.

5.9 Consideration of all Proposals

Table 23 below provides a list of all eight proposals discussed above along with the Network Rail impact, and a summary of the pro's and con's.

Table 23 – Summary of traffic study proposals

Proposal	Rail impact	Benefits	Issues
Option 1 - Restricting ALL traffic through PBO & KLN	PBO & KLN lines increased capacity 100%	PBO & KLN lines increased capacity, low cost, no enforcement	Local traffic impacted, increased journey times, negative impact on businesses, extra traffic on wider road network
Option 2 - Local traffic only through PBO & KLN	PBO & KLN lines increased capacity from existing	PBO & KLN lines increased capacity, low cost, local traffic not impacted	Increased journey times, negative impact on businesses, extra traffic on wider road network, enforcement required
Option 3 - Implementation of a One-Way system with no exemptions	PBO & KLN lines increased capacity from existing	PBO & KLN lines increased capacity, low cost, local businesses still receive passing trade	Local traffic impacted on return journey, increased journey times, extra traffic on wider road network, enforcement required
Option 4 - Implementation of a One-Way system with exemption for local traffic	PBO & KLN lines increased capacity from existing	PBO & KLN lines increased capacity, low cost, local businesses still receive passing trade, local traffic not impacted	Increased journey times, extra traffic on wider road network, enforcement required, uncertainty over TRO
Option 5 - Restricting ALL traffic through Norwich line	NRW line increased capacity 100%	NRW line increased capacity, low cost, no enforcement	Local traffic impacted, particularly Prickwillow, Increased journey times, negative impact on businesses, extra traffic on wider road network
Option 6 - Allow local traffic through Norwich line	NRW line increased capacity from existing	NRW line increased capacity, low cost, local traffic not impacted	Increased journey times, negative impact on businesses, extra traffic on wider road network, no benefit to PBO or KLN line, enforcement required
Option 7 - Implementing Bridge over PBO	PBO & KLN lines increased capacity 100%	PBO & KLN lines increased capacity, no impact to any traffic, local businesses not impacted, no TRO	High cost, possible need for compulsory purchase of property, potentially poor BCR score, maintenance
Option 8 - Constructing a Queen Adelaide Northern By-Pass	PBO, KLN & NRW lines increased capacity 100%	All lines increased capacity, minor impact for local traffic, no TRO	High cost, negative impact businesses, poor BCR score, maintenance

6.0 Modelling Methodology

6.1 Introduction

This document covers the development of the Queen Adelaide Highway assignment model developed for 2020 Consultancy from April-December 2017.

6.2 Model Inputs

The traffic modelling was based upon survey data and readily available electronic data sources that included:

- One-day MCC count data from 2015/2016 provided by Cambridgeshire County Council (see Figure 15 and Table 5);
- TEMPRO demand estimates for the base year (2016) and forecast year (2036);
- OpenStreetMap network data used as the basis for highway network development
- Middle Layer Super Output Areas (MSOAs) zoning, consistent with the smallest level of detail output by TEMPRO, used as the start point for the model zoning system.

Figure 19 Queen Adelaide Count locations



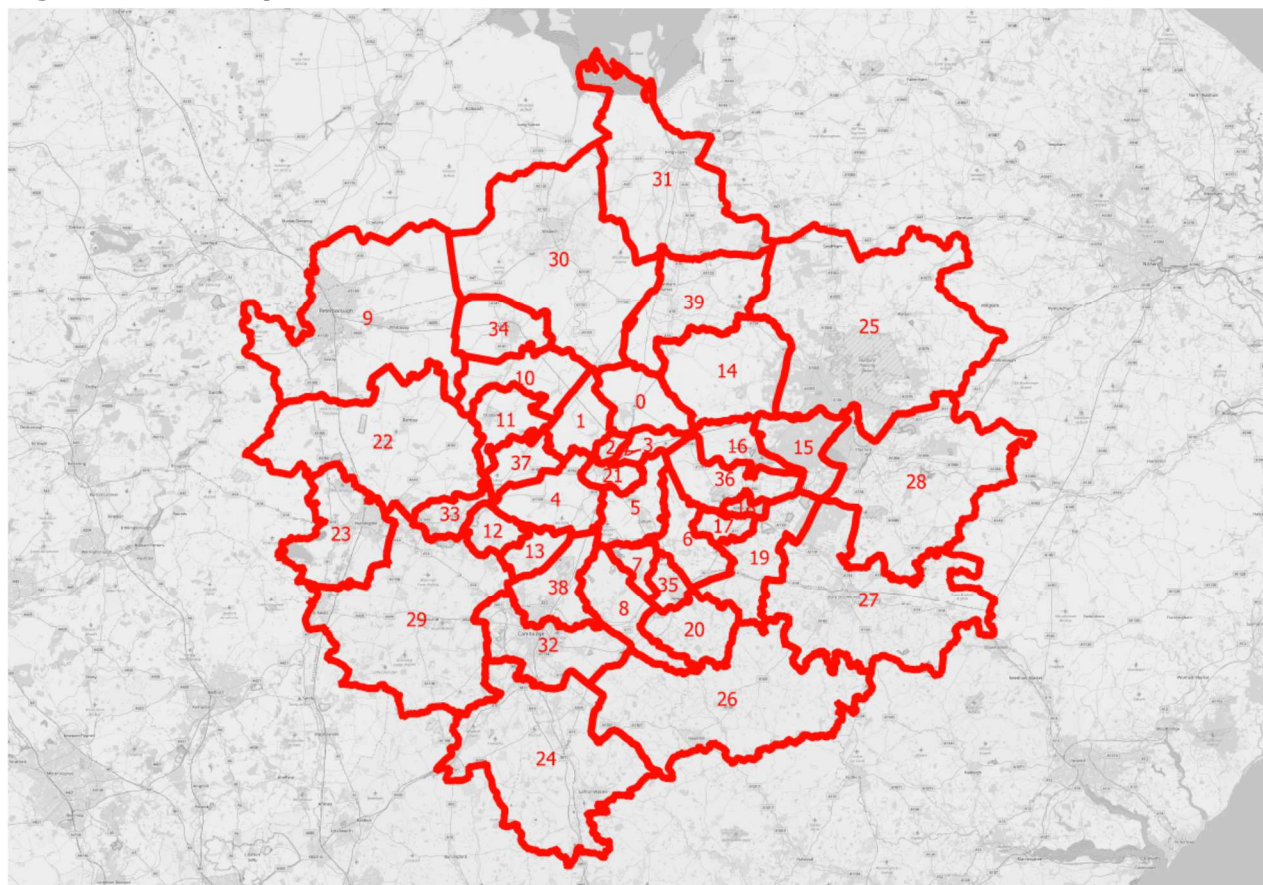
Table 24 Queen Adelaide Highway Model Calibration/Validation counts

No	Type	Start date	Location	Number
1	QA MCC	29/11/2016	Branch Bank	-
2	QA MCC	29/11/2016	Queen Adelaide Way	-
3	QA MCC	29/11/2016	Prickwillow Road	B1382
4	QA 2-week ATC	29/11/2016	Ely Road, E of Railway	B1382
5	QA 2-week ATC	29/11/2016	Ely Road W of Railway	B1382
6	County Screenline	06/05/2015	Ely - Little Downham	B1411
7	County Screenline	06/05/2015	Ely Littleport Bypass	A10
8	County Screenline	06/05/2015	Chettisham	C315
9	County Screenline	06/05/2015	East of Littleport	A1101
10	Ely Annual Monitoring	20/10/2016	Cambridge Road	C315
11	Ely Annual Monitoring	20/10/2016	Witchford Road	C316
12	Ely Annual Monitoring	20/10/2016	Downham Road	B1411
13	Ely Annual Monitoring	20/10/2016	Station Road	C318

6.3 Study area

The extent of the Queen Adelaide modelled region was initially defined as an area up to King's Lynn in the North, Thetford in the East, Peterborough in the West and Cambridge in the South. An initial 144-zone model zoning system, based on the Middle Layer Super Output Areas (MSOAs) zoning was aggregated to 40 final model zones. The final highway model zoning is shown in figure 20.

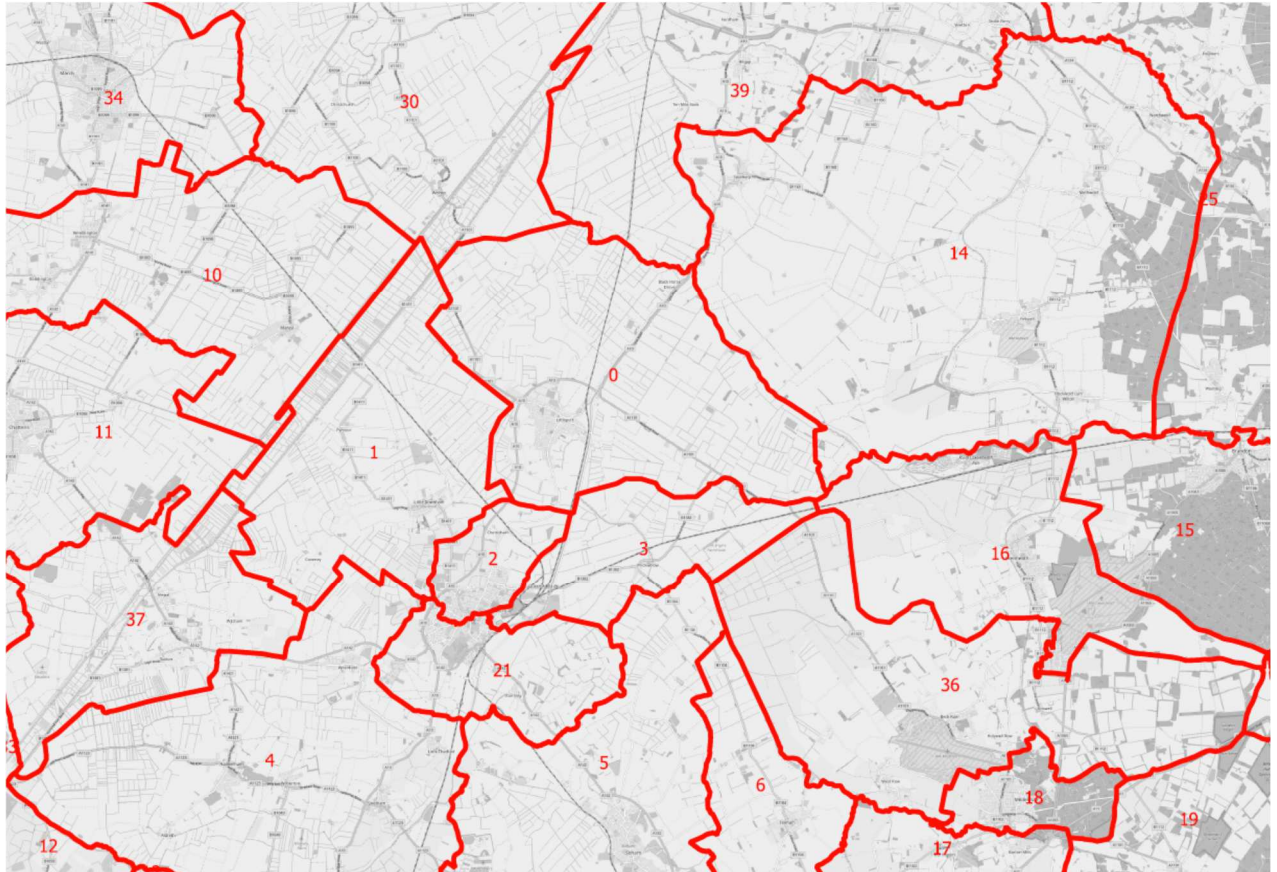
Figure 20 Zone System – Full extent



The core area of zoning detail covers the vicinity of Queen Adelaide and Ely with a few larger external zones around the periphery of the model. The smaller more detailed zoning within the city centre is shown in Figure . To achieve this zoning hierarchy, MSOAs were aggregated in the outer zones as shown in

Figure . 3 MSOAs were also disaggregated in the inner region of the model as the zones were deemed too large and irregular for the detailed study area as shown in Figure . In order to disaggregate these zones, the smaller Lower Layer Super Output Areas (LSOAs) administrative boundaries that are subsets of the MSOA layer. Rather than using the area to disaggregate the model data, population data at the LSOA level was used to give a more representative split.

Figure 21 Zone System – Ely and Queen Adelaide centre



The network extent is smaller than the zone extent reflecting that the external areas are not modelled in detail and are present to provide a representation of longer distance travel.

Figure 22 NTEM zone Aggregations (green) to QA model zones (red)

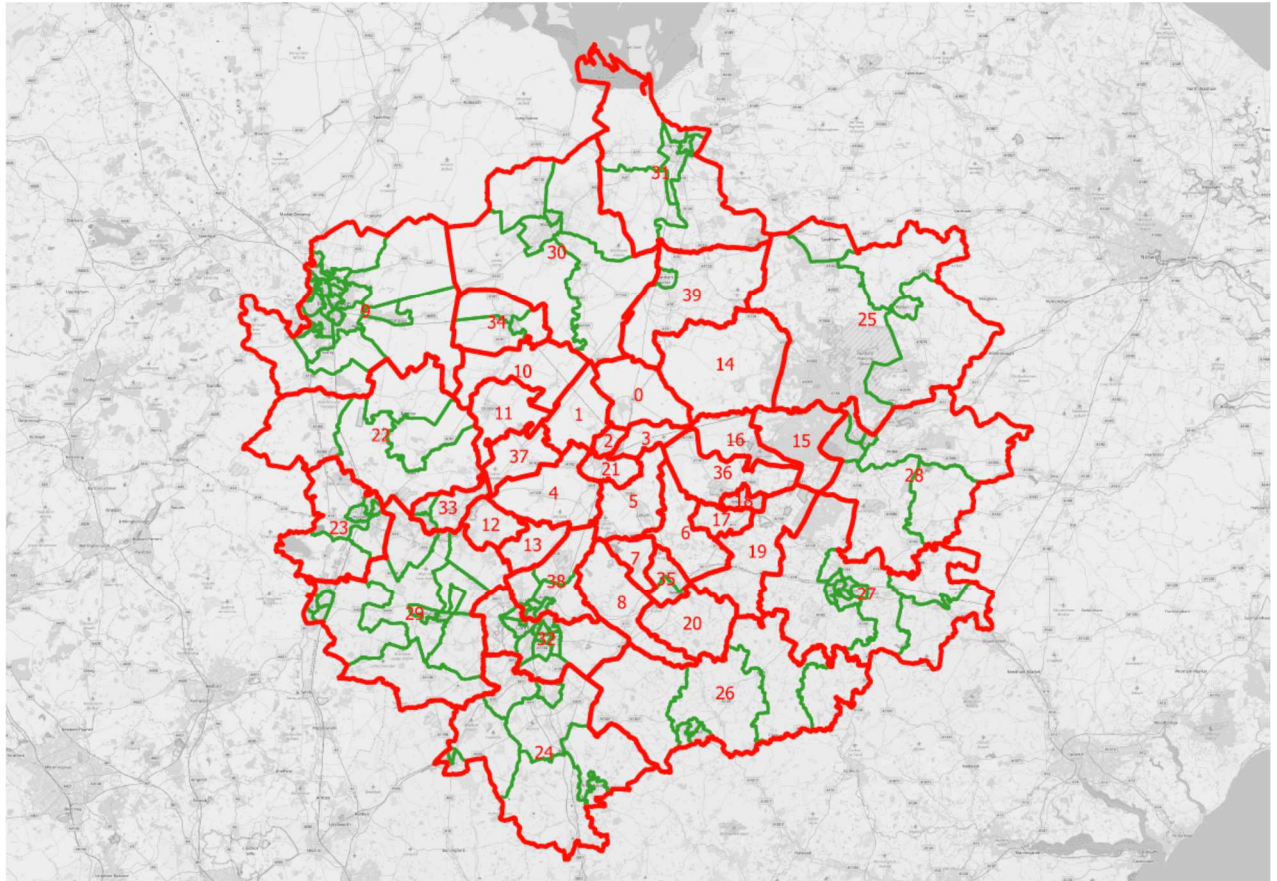
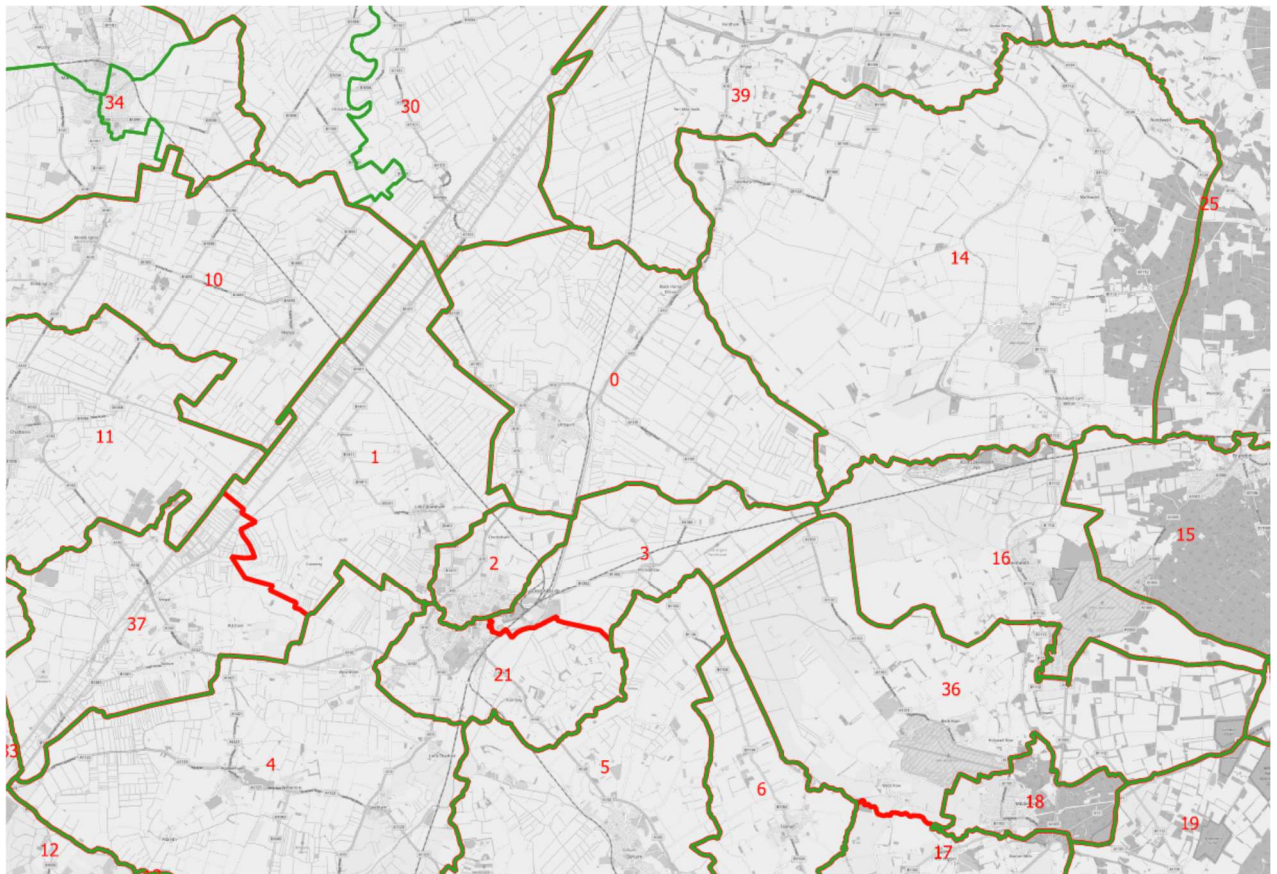


Figure 23 QA model zone disaggregation (red) from NTEM zones (green)



6.4 Model Variables

The model was built to a 2016 base year for three time periods; morning peak (AM), average inter-peak hour 1000-1600 (IP) and evening peak (PM). The ATC count data at the two locations in the vicinity of Queen Adelaide (counts 4 and 5 in 4 and 6) were analysed to identify the busiest hour within each time period based on 30-minute time slices. Based on this analysis 0730—0830 was chosen as the AM peak hour and 1630-1730 as the PM peak hour.

6.4 Base Year Traffic Model development

The traffic model development followed the principles of well-established four stage modelling process

- Trip Generation, estimates the level of transportation demand within each zone based upon land use and socio-economic factors;
- Trip Distribution, allocates the end point for the demand calculated in the trip generation model by a gravity function;
- Mode Choice, calculates the mode of travel for each trip; and
- Assignment, allocates the demand to the highway network with routings determined by costs such as time and distance.

6.5 Trip Generation Model

The trip generation process for the base year demand used the DfT's TEMPRO 7 software with NTEM Planning data v7.2. For simplicity, this provided a ready-made start point for the base demand creation and subsequently the forecasting process. TEMPRO is a modelling tool designed to allow users to look at the growth in trip ends, using actual and forecast data supplied by the Department for Transport, but also provides estimates that are suitable for use in the 2016 base year of the model. As the TEMPRO software provides outputs at the MSOA level, this data would be readily compatible with the model zoning. The correspondence between the model zoning and the MSOAs is shown in Table .

In order to extract the necessary trip end data that would underpin the model matrix data, the following options were selected from TEMPRO:

- Data Selections
 - Select Dataset version: 72
 - Result type: Trip ends by time period
 - Set Area definition: The 144 MSOA zones in Table were selected
 - Enter base year: 2016
 - Enter future year: 2036
- Trip end selections
 - Trip purpose definition: All purposes – individually
 - Transport mode: Car driver
- Trip end by time period selections
 - Select time period: (in turn)
 - Weekday AM peak period (0730 – 0830)
 - Weekday Inter peak period (1000 – 1559)

- Weekday PM peak period (1630 – 1730)
- Trip end type: Origin/Destination

Data from the 2 ATC locations in proximity to Queen Adelaide (counts 4 and 5 in Figure 1 and Table) were analysed to derive the conversion from AM/PM peak period to peak hour, resulting in the factors shown in Table . The IP factor was just taken as one sixth to represent a flat profile, and the counts were processed accordingly. The factors were applied to the TEMPRO outputs to convert them from period to hour.

Table 25 Peak period to peak hour conversion factors

Purpose	Peak period to peak hour		
	AM	IP	PM
All purpose	0.415	0.167	0.401

6.6 Trip Distribution Model

The trip ends (origins/destination row/column totals) for each zone were allocated to origin-destination pairs based upon a gravity model with a curve fitted to the trip length distribution derived from the survey data and readily available DfT statistics. These allowed gravity model curve parameters to be derived for two purposes: Commuting and Non-commuting.

For the commuting data, census journey to work data was downloaded from the Nomis website (<https://www.nomisweb.co.uk/census/2011/wp702ew>) from Table ID WP702EW - Distance travelled to work (Workplace population). This dataset provides 2011 Census estimates that classify the workplace population in England and Wales by distance travelled to work. The estimates are as at census day, 27 March 2011. As this data is provided nationally at the MSOA level, the subset of the 144 MSOAs that underpin the model zoning were isolated as the basis for the data from which to derive the commuting gravity model curve. The columns included in the data table are as follows (those of interest highlighted in red):

- 2011 super output area - middle layer
- All categories: Distance travelled to work (total)
- Less than 2km
- 2km to less than 5km
- 5km to less than 10km
- 10km to less than 20km
- 20km to less than 30km
- 30km to less than 40km
- 40km to less than 60km
- 60km and over
- Work mainly at or from home
- No fixed place
- Total distance (km)
- Average distance (km)

The data was aggregated across all the MSOAs, and using a suitable mid-point for each distance range a distance-weight profile was created.

For the non-commuting data information was taken from the National Travel Survey (NTS) data table NTS0308 from its website (<https://www.gov.uk/government/statistical-data-sets/nts03-modal-comparisons>) for the average number of trips by trip length and main mode in England. The most up-to-date year at the time of download (2015) was used and the cumulative percentages by distance for the “car/van driver” were used to derive a distance-weight profile that would be applicable for non-commuting purposes.

In order to fit a gravity model curve to the trip length distribution the total demand was factored down until it represented a probability distribution. Once this was achieved, a Tanner function was fitted to the trip length distribution by using a Gamma distribution (the same functional form as a Tanner function). In order to find the parameters for which the curve fitted the distribution best, an Excel macro was developed to iteratively calculate the overall error for each curve with the best curve minimising it. After several iterations refining the numerical ranges for the alpha and beta parameters the curves illustrated in Figure and Figure were derived. The functional form of the Tanner function is:

$$x^{\alpha} e^{\beta x}$$

Where:

$$\alpha = 0.65, \beta = 0.065 \text{ for Commuting}$$

$$\alpha = 1.2183, \beta = 0.1801 \text{ for Non – commuting}$$

Figure 24 Tanner function fitted to observed trip length (Commuting)

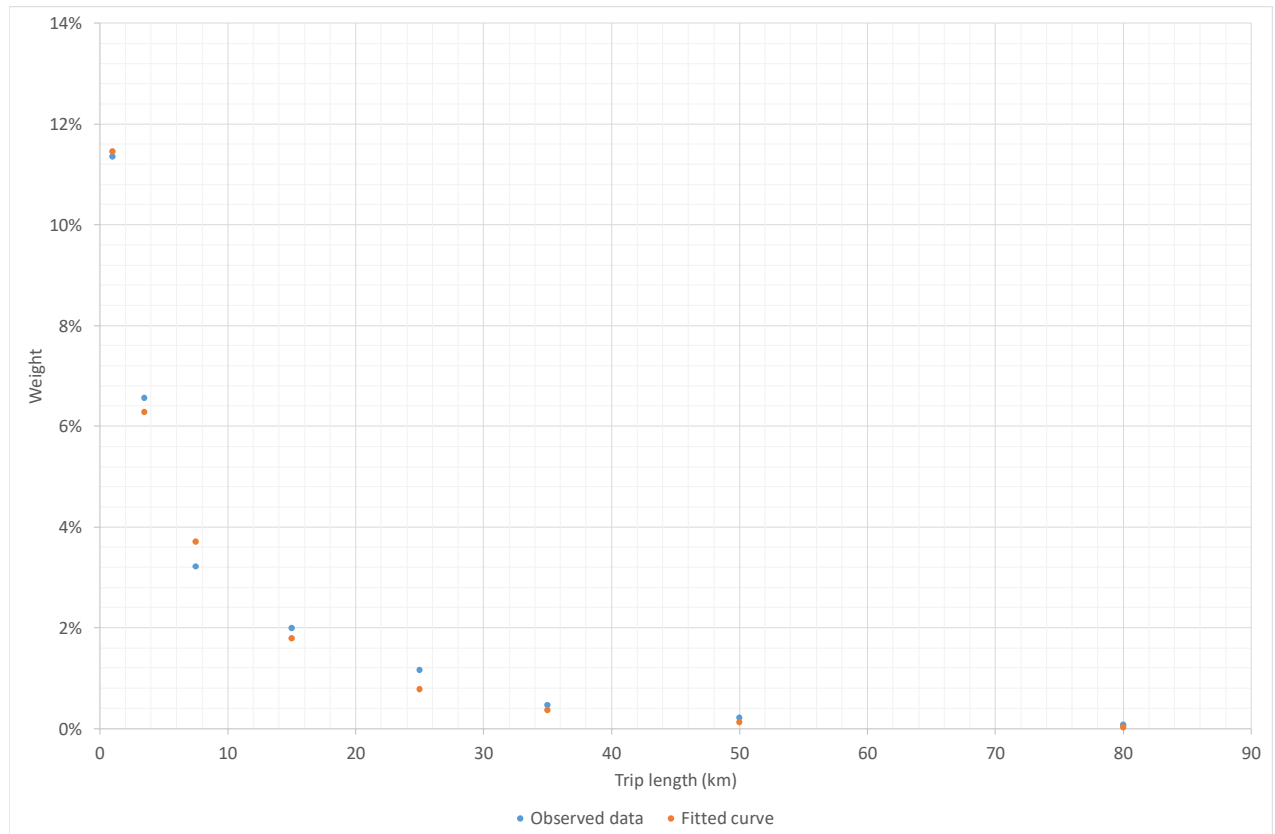
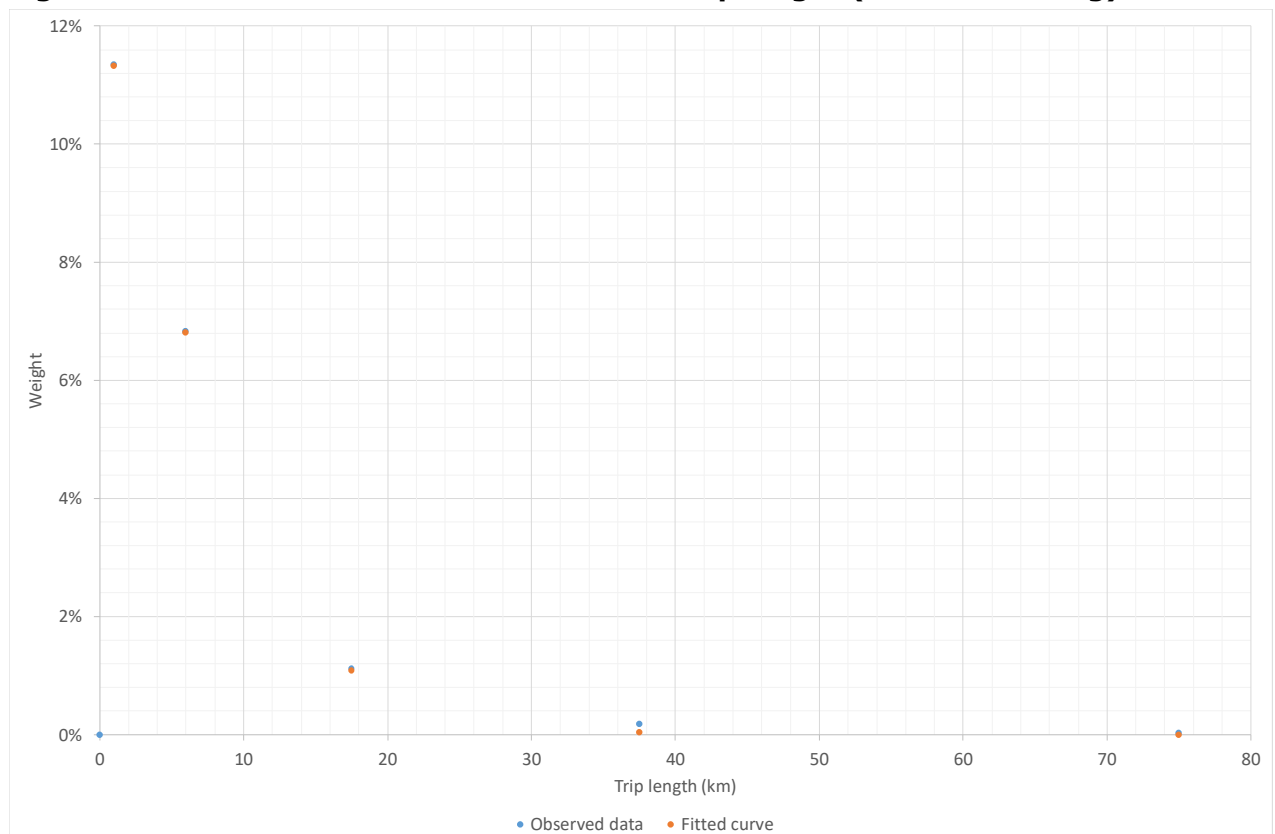


Figure 25 Tanner function fitted to observed trip length (Non-commuting)



Distance skims with the path choice dependent on impedance (the linear combination of value of time and the value of distance components) were extracted from the model for each mode so that the gravity model curve could be applied to these representative OD distances to get the relative zone to zone weights (attractiveness based on distances).

The final stage of the trip distribution process was to apply the fitted gravity model curve to the weighted distance matrix and balance to the AM / PM peak hour production and attraction trip ends totals using a Furness.

6.7 Mode Choice and vehicle composition

The TEMPRO NTEM outputs were aggregated into 3 separate Car user classes using the correspondence shown in Table .

Table 26 TEMPRO purpose to Model User class correspondence

Model User Class	TEMPRO purpose
Commuting	HB Work
Employers' business	HB Employers Business
Commuting	HB Education
Other	HB Shopping
Other	HB Personal Business
Other	HB Recreation/Social
Other	HB Visiting Friends and Relatives
Other	HB Holiday/Day Trip
Commuting	NHB Work
Employers' business	NHB Employers Business
Commuting	NHB Education
Other	NHB Shopping
Other	NHB Personal Business
Other	NHB Recreation/Social
Other	NHB Holiday/Day Trip

As LGV and HGV estimates are not produced by TEMPRO, estimates were derived using the same non-commuting gravity model parameters and derived from a proportion of the Other and Employers' business trip ends derived from the MCC count data collected for Queen Adelaide. For LGV, a weight of 88% and 12% of Other and Employers' business trip ends was used reflecting the observed LGV trip purpose composition. For HGV a weight of 100% of Employers' business was used. As the overall level of LGV and HGV was relatively small compared to car in the MCC counts in the vicinity it was not deemed necessary to provide a more complex approach and the level of LGV and HGV would be representative for the Queen Adelaide area.

The following user classes were therefore used in the assignment model:

- Car (Employers' business);
- Car (Commuting);
- Car (Other);

- Light Goods Vehicles (LGV);
- Heavy Goods Vehicles (HGV);

These user classes represented the demand segments within the demand matrix. A factor of 2 was applied to the HGV matrix to convert it from vehicles to PCU.

6.8 Traffic Assignment

The assignment model was built within a spreadsheet so that it could be self-contained easily and avoid excessive amounts of data processing from/to proprietary software. In order to create the assignment model in a spreadsheet the links, nodes, link types, matrices and parameters needed to be stored within the spreadsheet. As the assignment process requires numerous iterations it was only viable to undertake this in Visual Basic for Applications (VBA) in a similar fashion to other software's processing.

The implementation of the assignment in the spreadsheet was comparable to a "buffer" assignment in SATURN or VISUM. Therefore, without representation of node delays and turns such as at signals or roundabouts. Despite this limitation, a few limited nodes were modelled at roundabouts experiencing significant observed delays, and at the level crossing nodes at Queen Adelaide that required special consideration.

In order to create the assignment model, the Frank-Wolfe algorithm was implemented, as it is one of the most widely used and well understood. The algorithm is as follows:

1. Assign all demand to OD paths to produce an initial set of link flows $V_a^{(n)}$ where $n=1$ is the iteration number and a is the link number. Usually the first assignment is an all-or-nothing assignment with the link times set to their "free-flow" values.
2. Calculate link times based on the current flows $V_a^{(n)}$; i.e., set: $T_a^{(n)} = T_a(V_a^{(n)})$.
3. Build a new set of shortest paths based on $T_a^{(n)}$ and assign all demand D_{ij} to them to produce a set of "auxiliary" all-or-nothing flows $F_a^{(n)}$.
4. Generate the next iteration's set of link flows $V_a^{(n+1)}$ as a linear combination of the old and the auxiliary flows (where $0 < \lambda < 1$ is chosen so that the "new" flows $V_a^{(n+1)}$ minimise the objective function):

$$V_a^{(n+1)} = (1-\lambda) V_a^{(n)} + \lambda F_a^{(n)}$$

5. Return to step 2 and keep looping until the convergence criteria are satisfied.

To implement this within VBA, arrays were used to store all the model inputs and outputs were written to output worksheets within the spreadsheet. To implement the Frank Wolfe algorithm, other complementary algorithms were also required including the Dijkstra algorithm to calculate the shortest paths between each OD pair and the Secant Method to find the value of λ that minimised the objective function. Once the Frank Wolfe algorithms had been implemented it was tested using known networks

and demand against known optimal solutions. To similar convergence levels, the spreadsheet returned comparable results to software such as SATURN or VISUM.

In order to bring the AM / PM OD matrices in line with the volume of observed traffic, global demand factors were used to factor the demand matrices to reflect the level of trip making within the modelled area. To achieve this the set of counts were considered in full and the demand was adjusted so that the total modelled demand was equivalent to the total observed demand. The global factors are shown in Table . This could reflect trip rates being slowly low within the TEMPRO software, which has been identified in other studies.

Table 27 Global Demand uplifts by time period

Purpose	Demand uplift factor		
	AM	IP	PM
All purposes	1.1000	1.5000	1.1935

No matrix estimation was undertaken as the majority of the counts were only 1 day MCC counts, and therefore it was not considered appropriate to rely on them for matrix adjustment, but to use them solely to inform the model validation instead. Although matrix estimation was not undertaken, one count was used to help calibrate the model. Count 9 (as shown in Figure 1 and Table) was analysed and it showed significantly higher modelled flow than its corresponding counts. This could have been caused by the trip distribution process predicting demand between zone pairs based on their proximity. In reality although the zones are nearby this demand does not appear to exist. In order to correct for this demand (that would otherwise result in too much traffic on the A10 and A1101 north of Ely and Queen Adelaide) the zone pairs using the specific links were identified and adjusted. The factors are shown in Table . This could be perceived as a single link matrix estimation or a sector to sector matrix reduction.

Table 28 OD pairs (all combinations of AB and BA) with global calibration factor of 0.25 applied

OD	Zones		
A	2	10	11
	31	35	40
B	16	17	18
	19	20	26
	28	29	37

7.0 Network Model Development

The base and forecast models consists of approximately 730 links, 240 nodes (including 40 zones) and 8 modelled junctions (3 level crossings and 5 congested roundabouts)

7.1 Link representation

The highway network was developed using a GIS link vector dataset obtained from OpenStreetMap (<https://www.openstreetmap.org/copyright>). Other Sources such as Google Maps were used in order to classify the links into types based on visual inspection from aerial photography and based on the estimated journey times. The base year network coverage is shown in Figure 4. The characteristics of each of these link types, as used ifor the assignment, are detailed in Table .

In order to convert the speed flow characteristics as used in software such as VISUM and SATURN, the functional form of VISUM's "BPR3" speed flow curve was transferred to the spreadsheet assignment model so that SATURN/VISUM speed flow curves could be fully replicated. VISUM's "BPR3" speed flow curve has the following functional form:

$$t_{cur} = t_0 \cdot (1 + a \cdot S^b) \quad \text{when } V \leq C$$
$$t_{cur} = t_0 \cdot (1 + a \cdot C^b) + (V - C) \cdot d \quad \text{when } V > C$$

Where:

t_{cur} = link travel time

t_0 = link free flow travel time

V = link volume

C = link capacity

S = saturation (V / C)

a, b, c, d = parameters of the link type

The link characteristics in Table were converted into the parameters required in the spreadsheet for the BPR3 speed flow curve with units of seconds and metres. The derived parameters used for the base model network link types are shown in Table . Buffer links were introduced to handle excessive levels of demand loading onto a single point on the network for large external zones. The buffer network was designed to permit demand to dissipate to the wider network where more routing options were available. Figure and Figure show the link types applied to each link within the model.

Table 29 Spreadsheet assignment model link types and their characteristics

Link type	Capacity	Speed (kph)		Power
		Free flow	At capacity	
Dual 2 lanes (Trunk)	4520	100	40	3.66
Dual 2 lanes	4360	98	40	3.68
Single 2 lanes (Good A road)	3280	80	40	2.16
Single 1 lane (Good A road)	1640	78	40	2.16
Single 1 lane (Average A road)	1380	70	35	2.07
Village S1 40 mph (Low dev)	1300	56	24	3
Village S1 30 mph (High dev)	880	42	20	2.09
Village S1 20 mph (High dev)	450	32	15	1.87
Buffer	8000	72	72	0
Village S1 50 mph (Low dev)	1300	70	30	2.07

Table 30 Base model BPR3 parameters by link type

Link type	a	b	C	d
Dual 2 lanes (Trunk)	1.500	3.66	1	0.7965
Dual 2 lanes	1.450	3.68	1	0.826
Single 2 lanes (Good A road)	1.000	2.16	1	1.098
Single 1 lane (Good A road)	0.950	2.16	1	2.195
Single 1 lane (Average A road)	1.000	2.07	1	2.609
Village S1 40 mph (Low dev)	1.333	3.00	1	2.769
Village S1 30 mph (High dev)	1.100	2.09	1	4.091
Village S1 20 mph (High dev)	1.133	1.87	1	8.000
Buffer	0	1.00	1	0.000
Village S1 50 mph (Low dev)	1.333	2.07	1	2.769

Figure 26 Base Year (2016) Network (outer view)

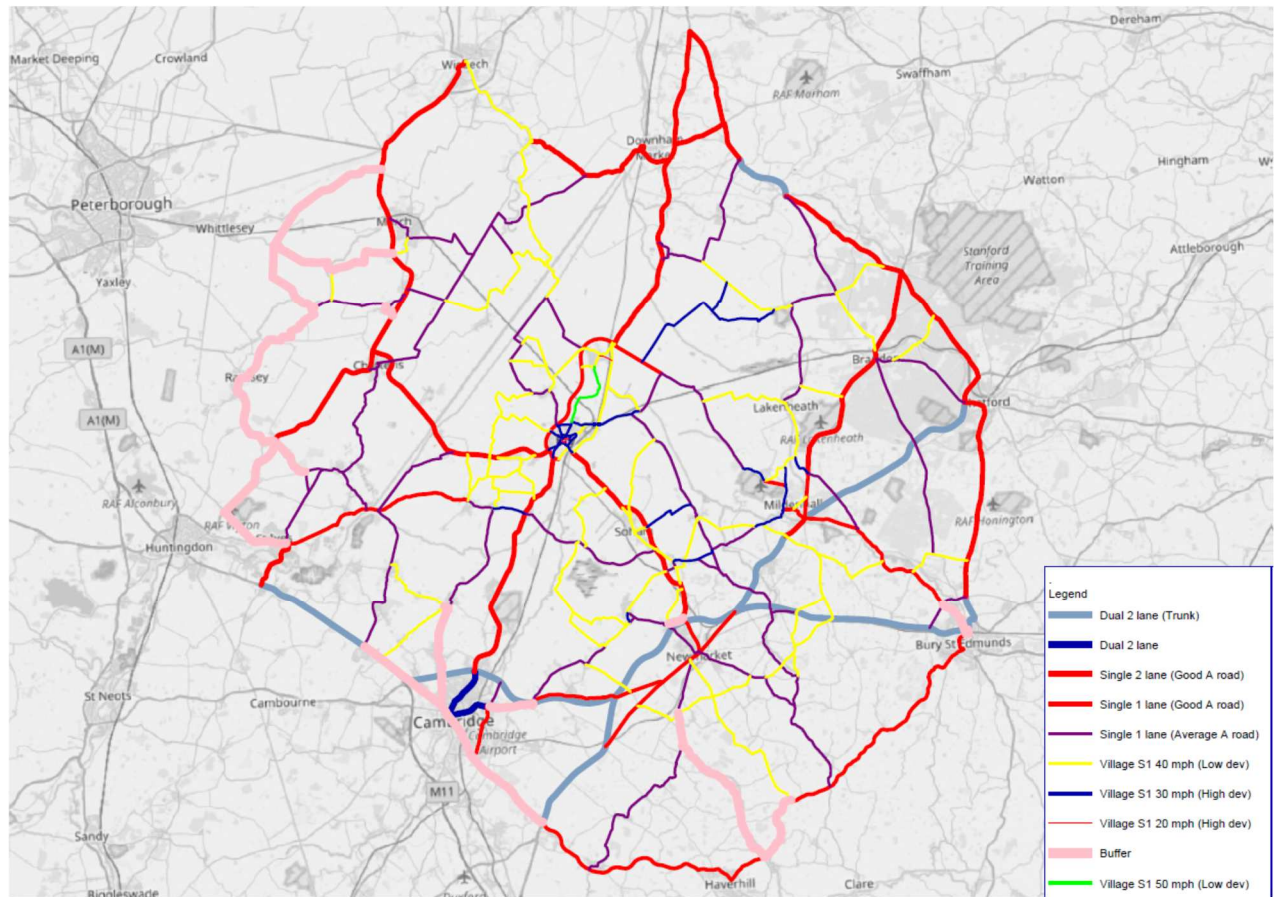
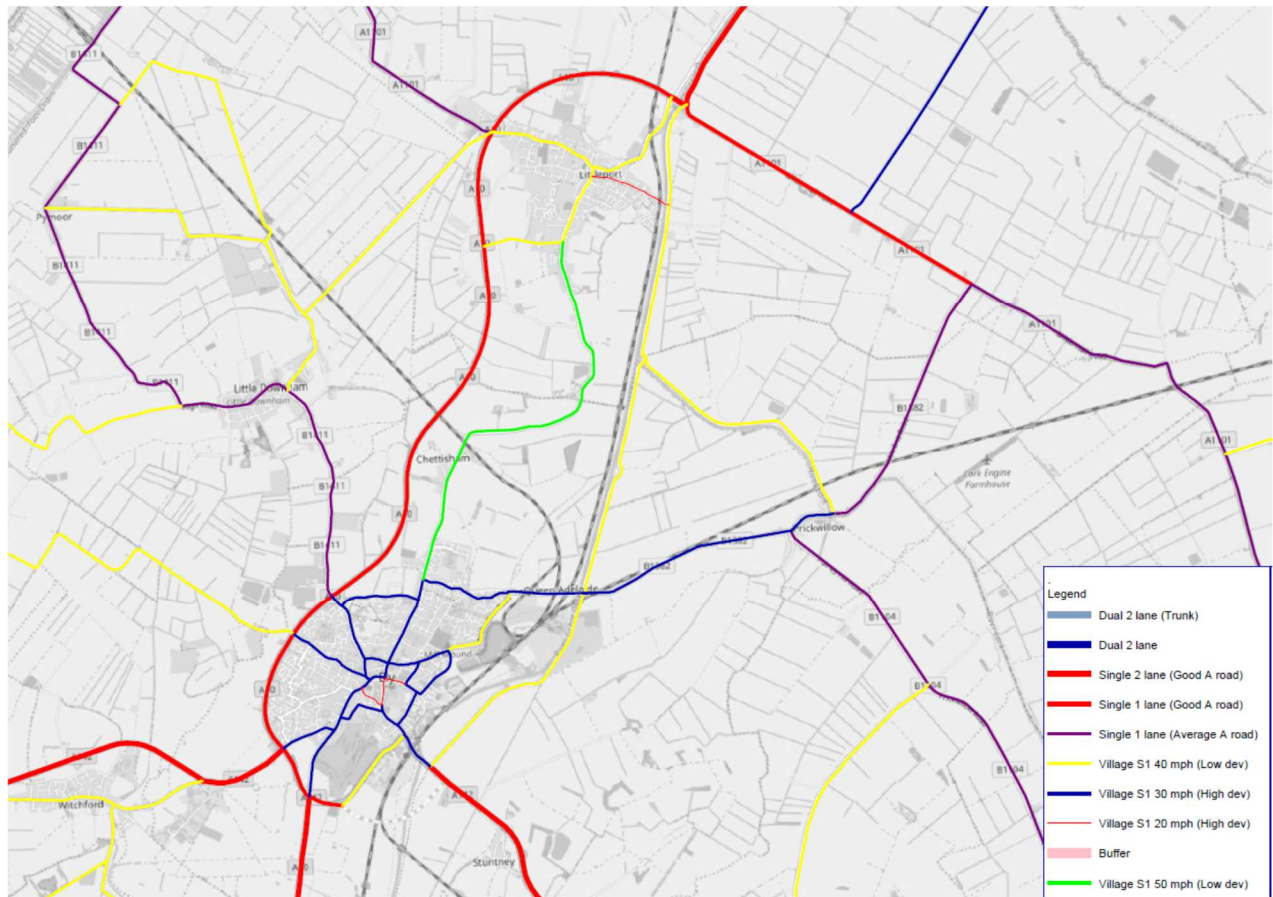


Figure 27 Base Year (2016) Network (inner view)



In addition to link speed flow curves an impedance function was applied that considered the relative weight of distance and time for each vehicle type for the choice of their shortest overall path through the network. The assignment would then consider the shortest path between origin and destination based on impedance. The general form of the impedance function was:

$$\text{Impedance} = \text{VoT} * \text{Time} + \text{VoD} * \text{Length}$$

Where:

VoT= Value of Time in Pounds (GBP) per second

T_{cur} = Link travel time in seconds

VoD = Value of Distance in Pounds (GBP) per metre

Length = Link length in metres

Table illustrates the base year VoT and VoD implemented in the assignment for each of the separate vehicle types modelled separately in the assignment. These values were derived using standard values taken from the WebTAG TAG databook. In addition to these assumptions it was also assumed that the HGV fleet was composed of 40% OGV1 and 60% OGV2 and an HGV Operator VoT multiplier of 2.3

in line with standard Highways England modelling practice. Due to slight variation in inputs, the VoTs varied by time period, however the VoD remained constant (for all time periods within each year).

Table 31 Base model VoT and VoD for impedance calculations by vehicle type in Pounds (GBP)

User Class	GBP per second			GBP per metre
	AM	IP	PM	All time periods
Car (EB)	0.5033	0.5157	0.5105	0.0122
Car (Commuting)	0.3375	0.343	0.3387	0.0056
Car (Other)	0.2328	0.248	0.2438	0.0056
LGV	0.3557	0.3557	0.3557	0.0127
HGV	0.8307	0.8307	0.8307	0.0469

In order to model the Option tests within the assignment model it was necessary to add additional functionality to deal with local traffic; such as where local vehicles movements are allowed to use the level crossings but other longer distance trips are not. Without creating additional user classes and network subsets, it was considered pragmatic to run separate assignments with local vehicle subsets only (with level crossing open for example) and then “preload” these flows on the network with another matrix subset excluding the local trip (and with the appropriate level crossings then closed for the other vehicles). This preloaded demand would then be static within the assignment but the volumes would make an impact on the speed flow curves and the journey times of the local traffic would also be representative.

7.2 Node representation

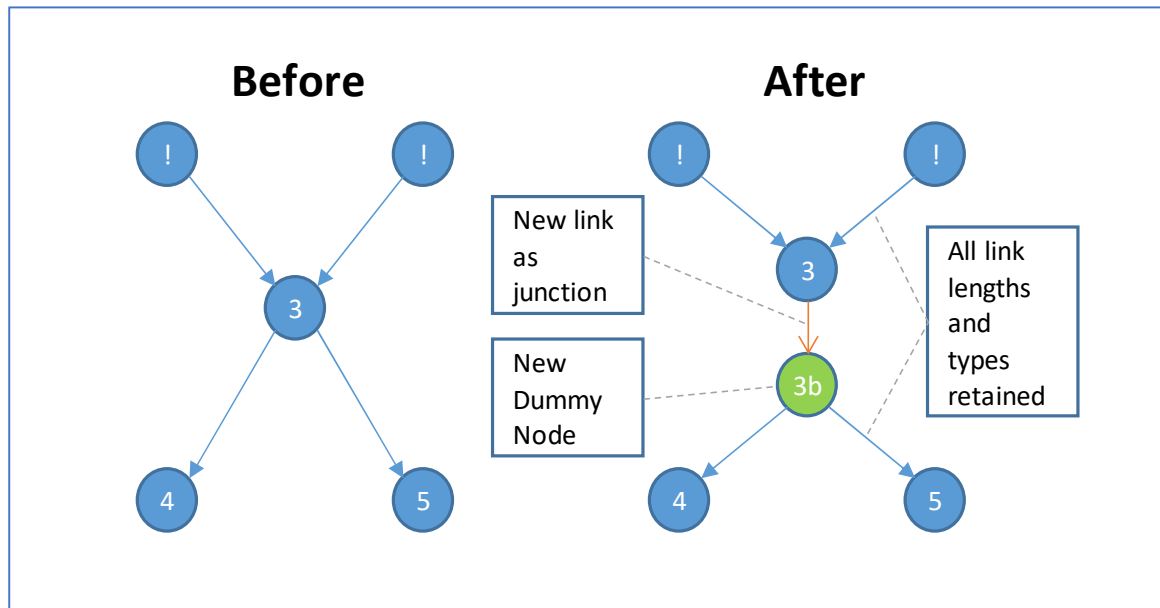
8 junctions were identified that were significant for the model validation and scenario testing. Figure 21 illustrates the locations of the 3 level crossings at Queen Adelaide and 5 roundabouts where significant delay was identified by the journey time validation.

Modelling junctions within the spreadsheet model was challenging as there was no representation of turns for modelling simplicity and to improve runtimes. In order to circumvent this limitation, it was assumed that the junctions would be represented by links instead. The one issue with this assumption however, was that the same junction delay would apply to all turning movements. This assumption would be appropriate for a level crossing, though for roundabouts the assumption is less appropriate.

As the delays at the identified roundabouts seemed to occur predominantly on the major flows, it was deemed the “lesser of two evils” that the minor arms would also experience a similar delay. To model this within the spreadsheet, additional dummy junction nodes were added on top of the existing node and links were used to connect the original node to the new node. The links from the original nodes were then transferred to the new dummy junction nodes but their other characteristics such as link type and length were left unchanged. The links between the original node and the new dummy junction nodes did not have an actual physical length

associated with them; the link type was to reflect the average junction delay. The modification made to the modelled junctions is illustrated in Figure .

Figure 28 Visual representation of node delay implementation



For the level crossing nodes, the junction delay link type was designed to include an estimate of the average delay experienced by each vehicle (PCU) during the modelled hour, taking into account the average random delay of being caught by the barriers being down and also the likelihood or the queue not clearing between consecutive train passes and the corresponding delay incurred by the average vehicle. The equation takes the following functional form:

$$t_{cur} = INT \left(\frac{Vol}{Cap \left(1 - \frac{W}{Y} \right)} \right) \cdot Y + (W^2) / (2 \cdot Y)$$

Where:

INT() = Integer part of the resultant value (rounded down)

Vol = Link Volume in PCU

Cap = turn capacity (assumed to be 1800 PCU)

Y= Barrier downtime in seconds

W=Total cycle length (intergreen + barrier downtime) = 3600* H / T

H= Total hours of operation

T= Trains per day

$$t_{cur} = t_0 + \exp[(a.C)]/b + (V - C).d \text{ when } V > C$$

C = roundabout effective capacity (assumed to be 2657 PCU)
S = saturation (V / C)
a,b,d = 4.8, 4, 0.06 are parameters

The map shows the Ely area in Cambridgeshire. The Ely Prison is marked with a yellow circle in the center. Other locations marked with green circles include Sutton, Chatteris, and Ely. The map includes labels for towns like Ely, Sutton, Chatteris, and Ely. The map also shows roads like A10, A142, and B1093. The map is a grayscale map with green circles highlighting specific locations.

7.3 Base Model Validation – Link validation

The base year model was validated against the traffic counts shown in Figure 1 and Table . Without the use of matrix estimation, in excess of eighty percent of the traffic flows were within fifty percent of the observed flows (85%, 88% and 81% for the AM, IP, and PM respectively). Given that the majority of the counts used were one day MCC counts with a lower than usual numbers of PCUs compared to typical strategic models, these results, although less stringent than WebTAG guidance, were deemed suitable. The cumulative differences between observed and modelled links is shown in more detail in Table . Figure , Figure and Figure show scatter plots of the observed and modelled PCU values where a noticeable correlation can be seen without any significant outliers.

Table 32 Cumulative distribution of observed vs modelled flow percentage differences

Difference observed vs modelled	% of modelled flows meeting criterion		
	AM	IP	PM
15%	23%	46%	31%
25%	42%	58%	54%
50%	85%	88%	81%
75%	96%	96%	96%
100%	100%	100%	96%

Figure 30 Scatterplot Observed vs. Modelled link volumes AM peak hour

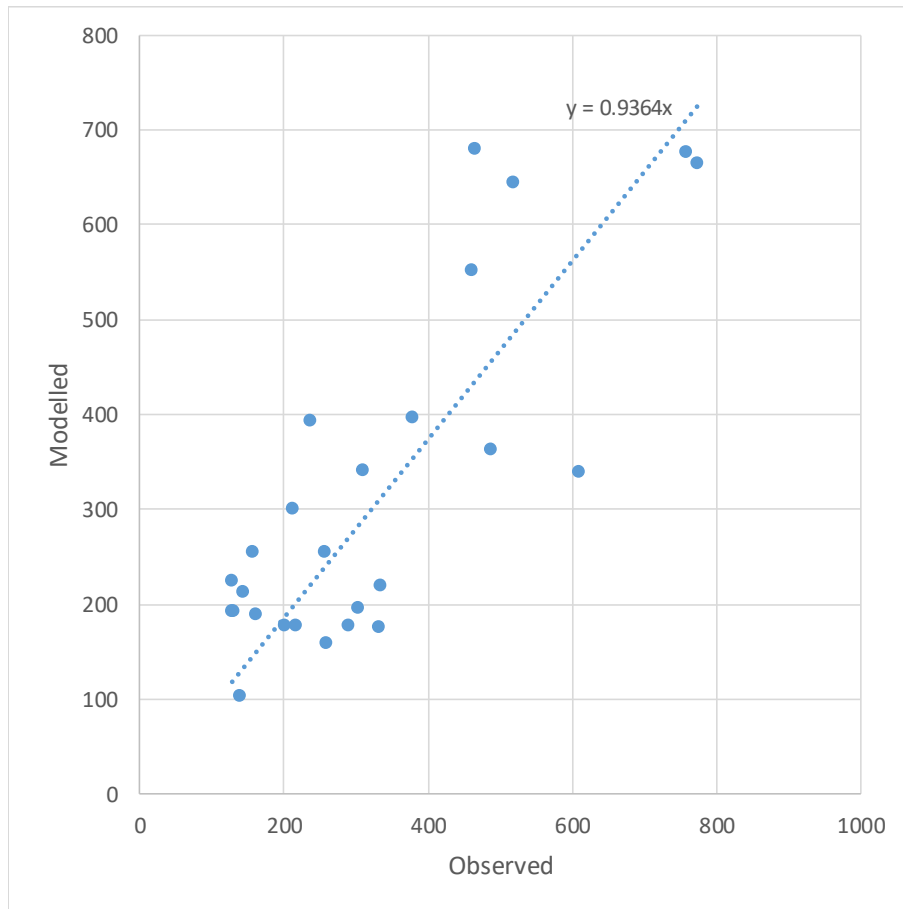


Figure 31 Scatterplot Observed vs. Modelled link volumes Inter peak hour

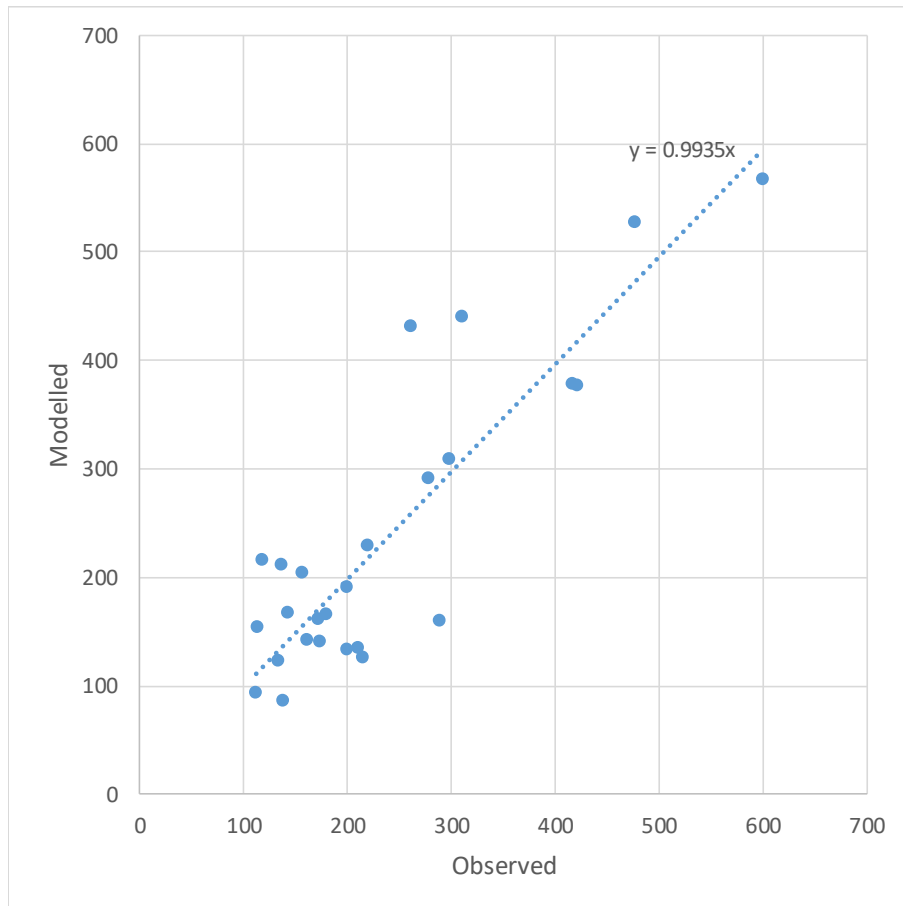
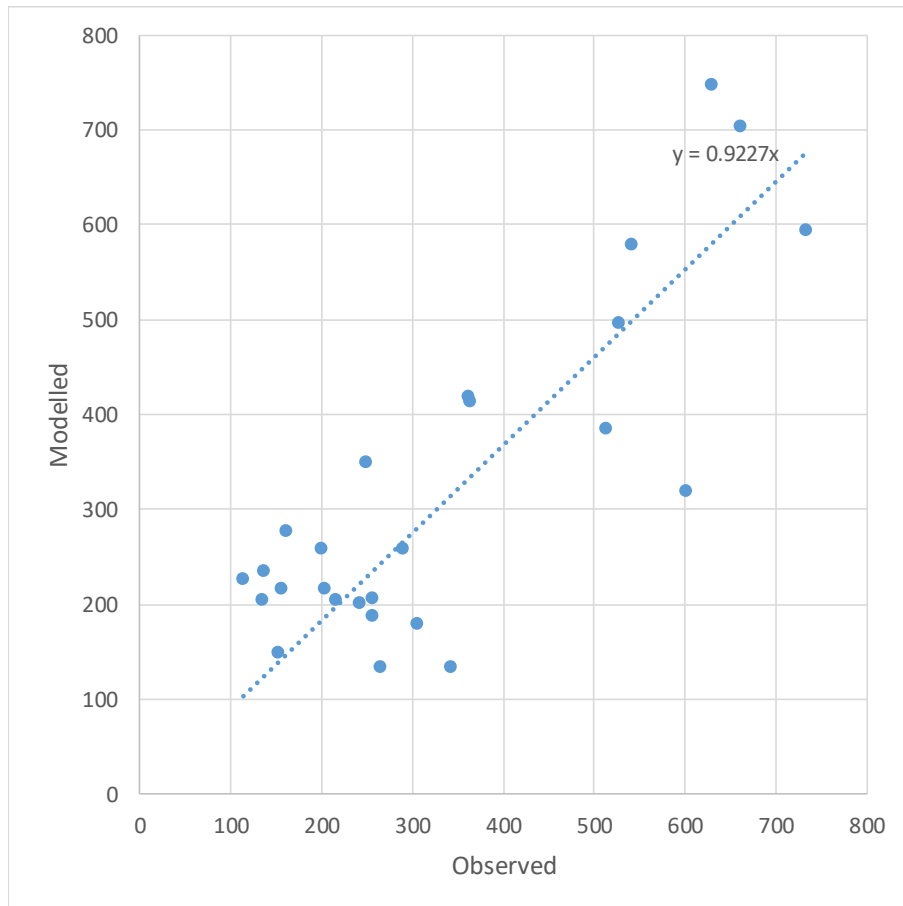


Figure 32 Scatterplot Observed vs. Modelled link volumes PM peak hour



7.4 Journey time validation

Google Maps was used as the basis for the journey time validation. Using the date selection, equivalent time periods were selected to the modelled time periods. The start/end points were matched to the models zones and the searches returned either ranges of expected journey times (from min to max), or a typical value. Where a range of values was given the average was taken. Free flow journey times were analysed using 2am as the representative time, to check the robustness of the model's uncongested journey times.

In total 13 journey time routes were analysed for each direction (26 routes in total). These routes traversed the vicinity of Ely and Queen Adelaide and also adjacent routes were also reviewed. Figure illustrates a selection of the Google Maps journey times used for the AM peak with a corresponding set for the other time periods.

The comparison of modelled and observed journey times overall saw a general trend of modelled journey times being slightly quicker than the observed data, suggesting a slight bias in the model towards faster journeys. However, in aggregate, in excess of three quarters the journey times were within 15% of the observed totals (81%, 85% and 77% for the AM, IP and PM respectively) and in excess of 95% within 25% of the observed totals (96%, 100% and 96% for the AM, IP and PM respectively).

This level of journey time validation was considered appropriate to form the basis of the forecasting; given the simplified node representation and the average values

chosen within the output range values. Table illustrates the cumulative distribution of modelled journey times against observed journey times.

Table 33 Cumulative distribution of observed vs modelled journey time differences

Difference observed vs modelled	% of journey times less than or equal to criterion		
	AM	IP	PM
7.5%	35%	35%	35%
15%	81%	85%	77%
25%	96%	100%	96%
40%	100%	100%	100%

8.0 Model Forecasting

8.1 Introduction

The 2036 forecast model was derived directly from the 2016 model with updated impedance parameters and a limited number of forecast year network changes.

8.2 Forecast Demand

In an identical fashion to the 2016 base matrices, TEMPRO demand was used to create the Origin and Destination trip ends. For simplicity this was processed in an identical fashion to the 2016 demand with the same gravity model curve applied.

8.3 Forecast Network

The only highway schemes added to the 2036 model to create the Do-Minimum (DM) network were the Ely Southern Bypass shown in red in Figure . Another link representing the Ely Northern bypass was also added to the modelling for the representation of Option 8, as shown in blue in Figure . The link types used in the 2036 forecast model were also unchanged from 2016. No changes were made either to the node representation of node (delays) in the forecast model.

For the 2036 forecast year impedances, the 2016 base year values were updated to values appropriate for the 2036 model. The standard WebTAG approach of updating the Values of time (VoT) was applied. For the Value of Distance, the normal considerations are the change in the cost of fuel combined with the improvements in vehicle efficiency, reflected in the changes from the corresponding 2016 values.

Table 34 2036 Forecast model VoT and VoD for impedance calculations by vehicle type in Pounds (GBP)

User Class	GBP per second			GBP per metre
	AM	IP	PM	All time periods
Car (EB)	0.7263	0.7443	0.7368	0.0115
Car (Commuting)	0.4872	0.495	0.4888	0.005
Car (Other)	0.336	0.358	0.352	0.005
LGV	0.5133	0.5133	0.5133	0.0128
HGV	1.1986	1.1986	1.1986	0.0556

Figure 33 Additional highway network in 2036

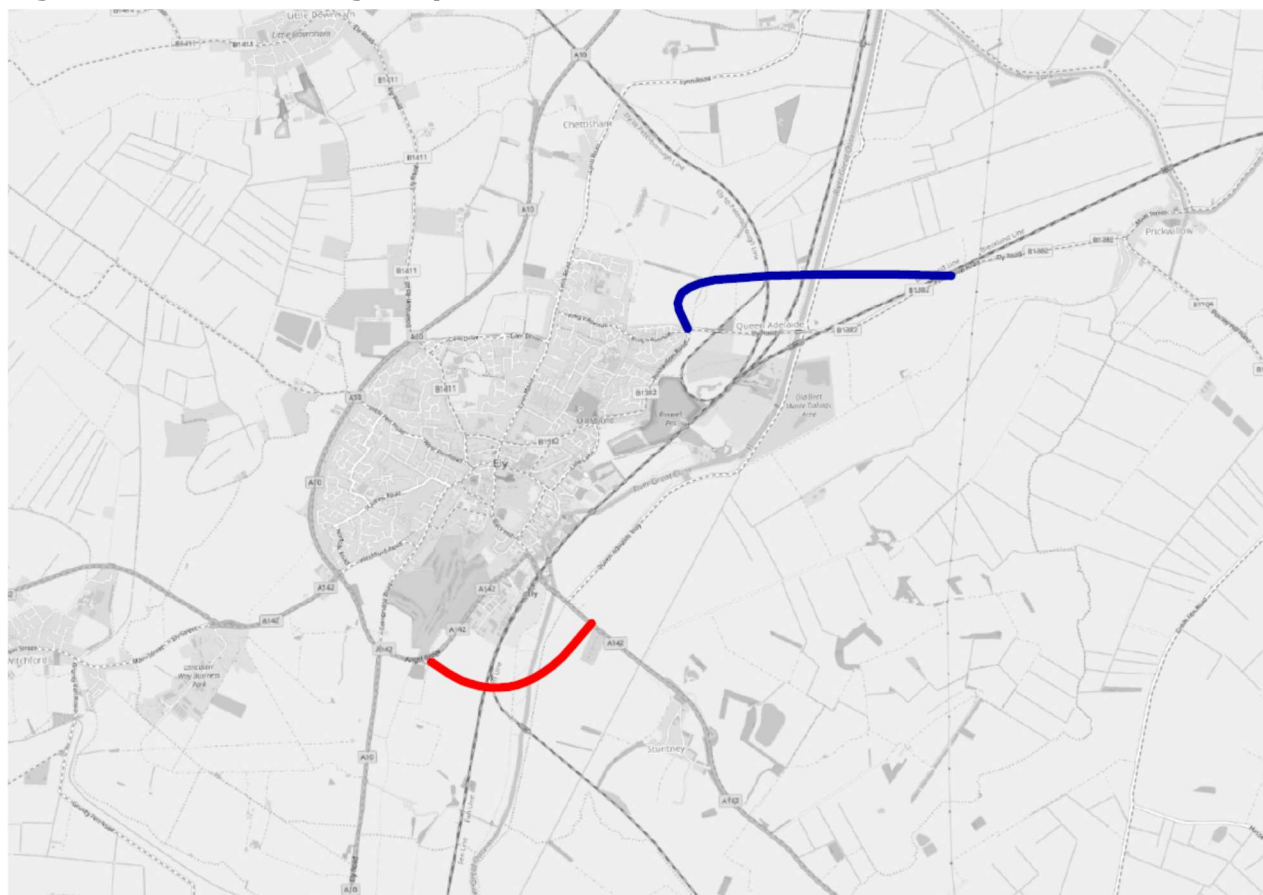


Table 35 Middle Layer Super Output Areas (MSOAs) to Model Zone correspondence with split factors

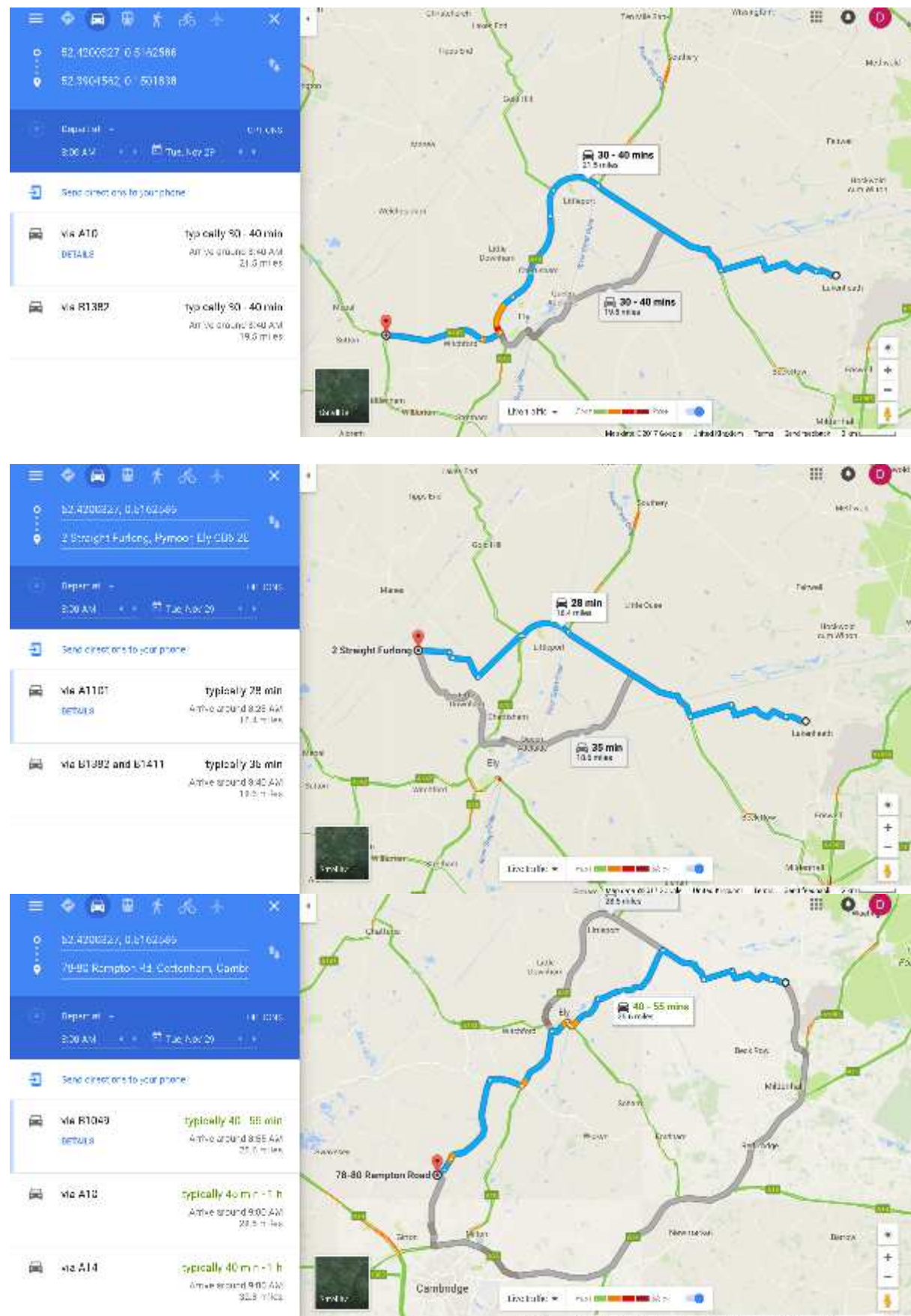
MSOA	Name	Local Authority	Model Zone	Split Proportion
E02003732	East Cambridgeshire 001	East Cambridgeshire	0	100%
E02003733	East Cambridgeshire 002	East Cambridgeshire	1	36%
E02003734	East Cambridgeshire 003	East Cambridgeshire	2	100%
E02003735	East Cambridgeshire 004	East Cambridgeshire	3	13%
E02003736	East Cambridgeshire 005	East Cambridgeshire	4	100%
E02003737	East Cambridgeshire 006	East Cambridgeshire	5	100%
E02003738	East Cambridgeshire 007	East Cambridgeshire	6	100%
E02003739	East Cambridgeshire 008	East Cambridgeshire	7	100%
E02003740	East Cambridgeshire 009	East Cambridgeshire	8	100%
E02003238	Peterborough 002	Peterborough	9	100%
E02003239	Peterborough 003	Peterborough	9	100%
E02003241	Peterborough 005	Peterborough	9	100%
E02003242	Peterborough 006	Peterborough	9	100%
E02003243	Peterborough 007	Peterborough	9	100%
E02003244	Peterborough 008	Peterborough	9	100%
E02003245	Peterborough 009	Peterborough	9	100%
E02003246	Peterborough 010	Peterborough	9	100%
E02003247	Peterborough 011	Peterborough	9	100%

E02003248	Peterborough 012	Peterborough	9	100%
E02003249	Peterborough 013	Peterborough	9	100%
E02003250	Peterborough 014	Peterborough	9	100%
E02003251	Peterborough 015	Peterborough	9	100%
E02003252	Peterborough 016	Peterborough	9	100%
E02003253	Peterborough 017	Peterborough	9	100%
E02003255	Peterborough 019	Peterborough	9	100%
E02003257	Peterborough 021	Peterborough	9	100%
E02003747	Fenland 006	Fenland	9	100%
E02003749	Fenland 008	Fenland	9	100%
E02003753	Huntingdonshire 001	Huntingdonshire	9	100%
E02003754	Huntingdonshire 002	Huntingdonshire	9	100%
E02006877	Peterborough 022	Peterborough	9	100%
E02006878	Peterborough 023	Peterborough	9	100%
E02003751	Fenland 010	Fenland	10	100%
E02003752	Fenland 011	Fenland	11	100%
E02003775	South Cambridgeshire 001	South Cambridgeshire	12	100%
E02003776	South Cambridgeshire 002	South Cambridgeshire	13	100%
E02005569	King's Lynn and West Norfolk 019	King's Lynn and West Norfolk	14	100%
E02006238	Forest Heath 001	Forest Heath	15	100%
E02006239	Forest Heath 002	Forest Heath	16	100%
E02006240	Forest Heath 003	Forest Heath	17	22%
E02006241	Forest Heath 004	Forest Heath	18	100%
E02006242	Forest Heath 005	Forest Heath	19	100%
E02006825	East Cambridgeshire 011	East Cambridgeshire	20	100%
E02003735	East Cambridgeshire 004	East Cambridgeshire	21	87%
E02003755	Huntingdonshire 003	Huntingdonshire	22	100%
E02003756	Huntingdonshire 004	Huntingdonshire	22	100%
E02003757	Huntingdonshire 005	Huntingdonshire	22	100%
E02003758	Huntingdonshire 006	Huntingdonshire	22	100%
E02003760	Huntingdonshire 008	Huntingdonshire	23	100%
E02003761	Huntingdonshire 009	Huntingdonshire	23	100%
E02003762	Huntingdonshire 010	Huntingdonshire	23	100%
E02003764	Huntingdonshire 012	Huntingdonshire	23	100%
E02003766	Huntingdonshire 014	Huntingdonshire	23	100%
E02003769	Huntingdonshire 017	Huntingdonshire	23	100%
E02003788	South Cambridgeshire 014	South Cambridgeshire	24	100%
E02003789	South Cambridgeshire 015	South Cambridgeshire	24	100%
E02003791	South Cambridgeshire 017	South Cambridgeshire	24	100%
E02003792	South Cambridgeshire 018	South Cambridgeshire	24	100%
E02004591	Uttlesford 001	Uttlesford	24	100%
E02004592	Uttlesford 002	Uttlesford	24	100%
E02004593	Uttlesford 003	Uttlesford	24	100%
E02004909	North Hertfordshire 001	North Hertfordshire	24	100%
E02004910	North Hertfordshire 002	North Hertfordshire	24	100%
E02005509	Breckland 007	Breckland	25	100%
E02005510	Breckland 008	Breckland	25	100%
E02005511	Breckland 009	Breckland	25	100%
E02005512	Breckland 010	Breckland	25	100%

E02005514	Breckland 012	Breckland	25	100%
E02003790	South Cambridgeshire 016	South Cambridgeshire	26	100%
E02006228	Babergh 002	Babergh	26	100%
E02006282	St Edmundsbury 010	St Edmundsbury	26	100%
E02006283	St Edmundsbury 011	St Edmundsbury	26	100%
E02006284	St Edmundsbury 012	St Edmundsbury	26	100%
E02006285	St Edmundsbury 013	St Edmundsbury	26	100%
E02006286	St Edmundsbury 014	St Edmundsbury	26	100%
E02006264	Mid Suffolk 004	Mid Suffolk	27	100%
E02006266	Mid Suffolk 006	Mid Suffolk	27	100%
E02006275	St Edmundsbury 003	St Edmundsbury	27	100%
E02006276	St Edmundsbury 004	St Edmundsbury	27	100%
E02006277	St Edmundsbury 005	St Edmundsbury	27	100%
E02006278	St Edmundsbury 006	St Edmundsbury	27	100%
E02006279	St Edmundsbury 007	St Edmundsbury	27	100%
E02006280	St Edmundsbury 008	St Edmundsbury	27	100%
E02006281	St Edmundsbury 009	St Edmundsbury	27	100%
E02005516	Breckland 014	Breckland	28	100%
E02005517	Breckland 015	Breckland	28	100%
E02005518	Breckland 016	Breckland	28	100%
E02005519	Breckland 017	Breckland	28	100%
E02006273	St Edmundsbury 001	St Edmundsbury	28	100%
E02006274	St Edmundsbury 002	St Edmundsbury	28	100%
E02003768	Huntingdonshire 016	Huntingdonshire	29	100%
E02003770	Huntingdonshire 018	Huntingdonshire	29	100%
E02003771	Huntingdonshire 019	Huntingdonshire	29	100%
E02003772	Huntingdonshire 020	Huntingdonshire	29	100%
E02003773	Huntingdonshire 021	Huntingdonshire	29	100%
E02003774	Huntingdonshire 022	Huntingdonshire	29	100%
E02003777	South Cambridgeshire 003	South Cambridgeshire	29	100%
E02003779	South Cambridgeshire 005	South Cambridgeshire	29	100%
E02003784	South Cambridgeshire 010	South Cambridgeshire	29	100%
E02003787	South Cambridgeshire 013	South Cambridgeshire	29	100%
E02006873	South Cambridgeshire 020	South Cambridgeshire	29	100%
E02006874	South Cambridgeshire 021	South Cambridgeshire	29	100%
E02003742	Fenland 001	Fenland	30	100%
E02003743	Fenland 002	Fenland	30	100%
E02003744	Fenland 003	Fenland	30	100%
E02003745	Fenland 004	Fenland	30	100%
E02005563	King's Lynn and West Norfolk 013	King's Lynn and West Norfolk	30	100%
E02005566	King's Lynn and West Norfolk 016	King's Lynn and West Norfolk	30	100%
E02005556	King's Lynn and West Norfolk 006	King's Lynn and West Norfolk	31	100%
E02005557	King's Lynn and West Norfolk 007	King's Lynn and West Norfolk	31	100%
E02005558	King's Lynn and West Norfolk 008	King's Lynn and West Norfolk	31	100%

E02005559	King's Lynn and West Norfolk 009	King's Lynn and West Norfolk	31	100%
E02005560	King's Lynn and West Norfolk 010	King's Lynn and West Norfolk	31	100%
E02005561	King's Lynn and West Norfolk 011	King's Lynn and West Norfolk	31	100%
E02005564	King's Lynn and West Norfolk 014	King's Lynn and West Norfolk	31	100%
E02005565	King's Lynn and West Norfolk 015	King's Lynn and West Norfolk	31	100%
E02003723	Cambridge 005	Cambridge	32	100%
E02003724	Cambridge 006	Cambridge	32	100%
E02003725	Cambridge 007	Cambridge	32	100%
E02003726	Cambridge 008	Cambridge	32	100%
E02003727	Cambridge 009	Cambridge	32	100%
E02003728	Cambridge 010	Cambridge	32	100%
E02003729	Cambridge 011	Cambridge	32	100%
E02003730	Cambridge 012	Cambridge	32	100%
E02003731	Cambridge 013	Cambridge	32	100%
E02003783	South Cambridgeshire 009	South Cambridgeshire	32	100%
E02003785	South Cambridgeshire 011	South Cambridgeshire	32	100%
E02003786	South Cambridgeshire 012	South Cambridgeshire	32	100%
E02003759	Huntingdonshire 007	Huntingdonshire	33	100%
E02003763	Huntingdonshire 011	Huntingdonshire	33	100%
E02003765	Huntingdonshire 013	Huntingdonshire	33	100%
E02003746	Fenland 005	Fenland	34	100%
E02003748	Fenland 007	Fenland	34	100%
E02003750	Fenland 009	Fenland	34	100%
E02006243	Forest Heath 006	Forest Heath	35	100%
E02006826	Forest Heath 008	Forest Heath	35	100%
E02006240	Forest Heath 003	Forest Heath	36	78%
E02003733	East Cambridgeshire 002	East Cambridgeshire	37	64%
E02003719	Cambridge 001	Cambridge	38	100%
E02003720	Cambridge 002	Cambridge	38	100%
E02003721	Cambridge 003	Cambridge	38	100%
E02003722	Cambridge 004	Cambridge	38	100%
E02003778	South Cambridgeshire 004	South Cambridgeshire	38	100%
E02003780	South Cambridgeshire 006	South Cambridgeshire	38	100%
E02003781	South Cambridgeshire 007	South Cambridgeshire	38	100%
E02005567	King's Lynn and West Norfolk 017	King's Lynn and West Norfolk	39	100%
E02005568	King's Lynn and West Norfolk 018	King's Lynn and West Norfolk	39	100%

Figure 34 Selection of AM peak hour Google Map journey times used for validation



53 The St, Watlington, Rugby, CV36 6AZ
 Isle of Ely Way, Charnock, PE16 6AZ

Depart at: 8:30 AM
 Take A147

Send directions to your phone

via A147
 DETAILS

typically 40 - 55 min
 Arrive around 9:05 AM
 32.2 miles

via A1101 and A142

typically 50 min - 1 h 5 min
 Arrive around 9:05 AM
 33.7 miles

via A1123

typically 50 min - 1 h 5 min
 Arrive around 9:05 AM
 33.7 miles

23 Church St, Loding, Newark NG24 6JF
 1 Pontefract Hill, Lillington, LE16 1P2

Depart at: 8:30 AM
 Take A147

Send directions to your phone

via A147
 DETAILS

typically 26 - 35 min
 Arrive around 8:55 AM
 17.1 miles

via B1104

typically 30 min
 Arrive around 8:55 AM
 15.1 miles

via A147

typically 26 - 35 min
 Arrive around 8:55 AM
 17.1 miles

94 A10, Milton, Cambridgeshire CB24 6UL
 A10, Downham Market, PE38

Depart at: 8:30 AM
 Take A147

Send directions to your phone

via A10
 DETAILS

typically 40 - 55 min
 Arrive around 8:50 AM
 30.5 miles

via A14 and A10

typically 50 min - 1 h 5 min
 Arrive around 9:05 AM
 33.0 miles

via B1090 and A10

typically 55 min - 1 h 15 min
 Arrive around 9:10 AM
 40.5 miles



2 Manes Rd, Wimbington, Flegg ABB2
 5 Chippenham Rd, Fordham, Ely CB2 3

Depart at: 8:00 AM Tue Nov 29

Send directions to your phone

- via A142**
 typically 40 min - 1 h
 Arrive around 9:00 AM
 25.5 miles
- via B1104**
 typically 50 min
 Arrive around 9:00 AM
 21.5 miles
- via A10 and A12**
 typically 50 min - 1 h 5 min
 Arrive around 9:00 AM
 32.5 miles



Pools Rd, Wiboston, Ely CB6 3P2
 4 Ennswell Rd, Bury Saint Edmunds IP2

Depart at: 8:00 AM Tue Nov 29

Send directions to your phone

- via A10 and A1101**
 typically 35 - 45 min
 Arrive around 9:45 AM
 20.5 miles
- via A1123 and B1102**
 typically 35 - 45 min
 Arrive around 9:45 AM
 20.5 miles
- via A1101**
 typically 35 - 45 min
 Arrive around 9:45 AM
 21.5 miles



b22993649, 0.2776675
 The Toll House, 38 Moth St, Pickwilton

Depart at: 8:00 AM Tue Nov 29

Send directions to your phone

- via B1102**
 typically 24 - 28 min
 Arrive around 8:25 AM
 17.5 miles
- via B1102 and B1104**
 typically 30 min
 Arrive around 8:25 AM
 17.5 miles
- via A142**
 typically 20 - 35 min
 Arrive around 8:25 AM
 13.5 miles



52.3143064, 0.0079441
 Long Ln, Feltham, Bedfordshire

Depart at: 8:00 AM Tue, Aug 29

Send directions to your phone

via A10 typically 40 min - 1 h
 DETAILS
 Arrive around 9:00 AM
 31.8 miles

via A10 and Southey Rd typically 40 min - 1 h 6 min
 Arrive around 9:00 AM
 34.0 miles

via A14 typically 55 min - 1 h 25 min
 Arrive around 9:20 AM
 42.0 miles

52.3904662, 0.1007688
 52.4200217, 0.5162593

Depart at: 8:00 AM Tue, Aug 29

Send directions to your phone

via A10 typically 30 - 40 min
 DETAILS
 Arrive around 9:40 AM
 21.0 miles

via B1392 typically 30 - 40 min
 Arrive around 9:40 AM
 19.4 miles

via A142 typically 45 min - 1 h
 Arrive around 9:50 AM
 22.5 miles

52.4506627, 0.5162586
 52.4506627, 0.5162586

Depart at: 9:00 AM Tue, Aug 29

Send directions to your phone

via A10 typically 28 min
 DETAILS
 Arrive around 9:28 AM
 12.4 miles

via B1411 and B362 typically 35 min
 Arrive around 9:31 AM
 16.2 miles



70-80 Rampton Rd, Cottonbury, Cambs
52.4200827, 0.5162559

Depart at: 8:00 AM Tue 5 Nov 29 12:16

Send directions to your phone

via A10 typically 40 - 50 min
Active around 8:00 AM
28.5 miles

via B1049 typically 40 - 50 min
Active around 8:00 AM
25.5 miles

via A14 details typically 40 min - 1 h
Active around 8:00 AM
32.5 miles



Isle of Ely Way, Chatteris PE16 6AZ
53 The Ct, Worlington, Dury Soard Cam

Depart at: 8:00 AM Tue 5 Nov 29 12:16

Send directions to your phone

via A142 details typically 40 min - 1 h 5 min
Active around 9:00 AM
25.2 miles

via A142 and A1101 typically 50 min - 1 h 10 min
Active around 9:10 AM
33.2 miles

via A1123 typically 55 min - 1 h 15 min
Active around 9:15 AM
33.2 miles



1 Pont's Hill, Littleport, LY26 1P2
23 Church St, Eving, Newmarket CO9

Depart at: 8:00 AM Tue 5 Nov 29 12:16

Send directions to your phone

via A142 details typically 28 - 40 min
Active around 8:45 AM
13.7 miles

via B1104 typically 30 - 45 min
Active around 8:45 AM
15.1 miles



A10, Downham Market PC38
 94 A10, Milton, Cambridgeshire CB24 6ZE

Depart at: 8:00 AM Tue 5 Jun 29 10:15

Send directions to your phone

via A10 typically 45 min - 1 h 10 min
 DETAILS
 Arrive around 9:10 AM
 30.5 miles

via A14 and A10 typically 50 min - 1 h 15 min
 DETAILS
 Arrive around 9:15 AM
 40.5 miles



6 Chesham Road, Epping, Essex S87 8
 2 Manor Rd, Wimpington, Fife AB11

Depart at: 8:00 AM Tue 5 Jun 29 10:15

Send directions to your phone

via A142 typically 40 - 55 min
 DETAILS
 Arrive around 8:55 AM
 25.5 miles

via B1101 typically 50 min
 DETAILS
 Arrive around 9:05 AM
 31.5 miles

via A142 and A10 typically 50 min - 1 h 5 min
 DETAILS
 Arrive around 9:05 AM
 32.5 miles



4 Ennells Rd, Bury Saint Edmunds CO
 Pools Rd, Wimpington, Fife AB11

Depart at: 8:00 AM Tue 5 Jun 29 10:15

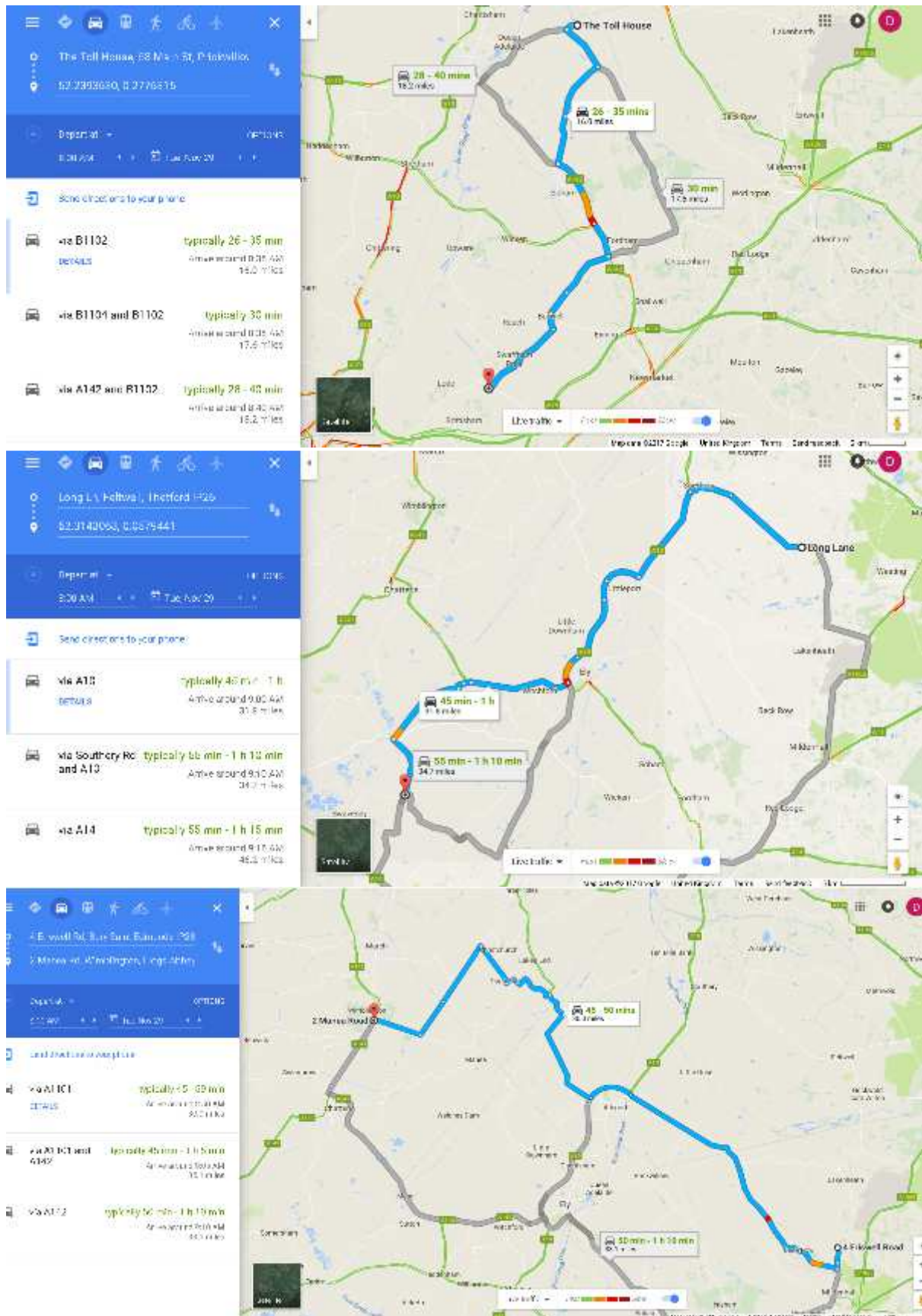
Send directions to your phone

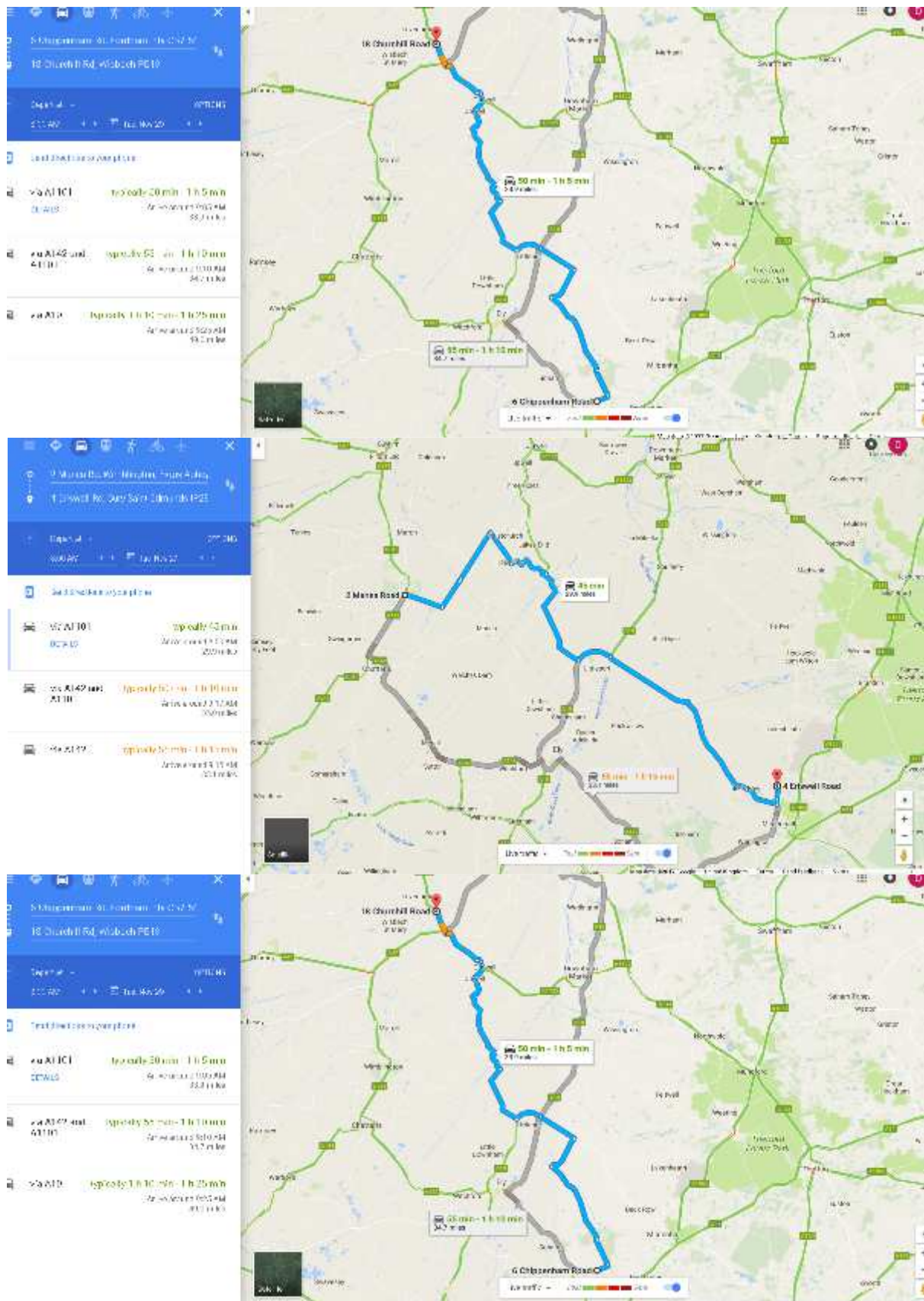
via A1101 and A10 typically 30 - 50 min
 DETAILS
 Arrive around 8:50 AM
 25.5 miles

via B1102 and A1123 typically 30 - 40 min
 DETAILS
 Arrive around 8:45 AM
 20.0 miles

via A1101 typically 35 - 45 min
 DETAILS
 Arrive around 8:45 AM
 21.0 miles







9.0 Traffic Modelling Output

Table 36 below provides the summary of the traffic modelling output for each of the eight options that have been considered as part of this study. This is the change in PCU hours and kilometres compared to the base figures.

Table 37 provides the summary of the traffic modelling output for each of the eight options for the change in PCU hours and kilometres compared to the demand matrix.

Figure 35 and figure 36 provides graphs to represent the summary of the traffic modelling output for each of the eight options that have been considered as part of this study. This is the change in PCU hours and kilometres compared to the base figures.

Figure 37 and figure 38 provides graphs to represent the summary of the traffic modelling output for each of the eight options for the change in PCU hours and kilometres compared to the demand matrix.

Appendix C provides all the maps that relate to the table.

Year	Option	Time period	Demand Case	Change PCU hours vs Base			Change PCU kilometres vs Base		
				AM	IP	PM	AM	IP	PM
2016	Option 1	AM	Central	32	14	70	1206	443	1407
2016	Option 2	AM	Central	20	6	28	951	285	1006
2016	Option 3a	AM	Central	23	8	46	706	204	630
2016	Option 3b	AM	Central	9	7	27	517	235	793
2016	Option 4a	AM	Central						
2016	Option 4b	AM	Central						
2016	Option 5	AM	Central	23	10	28	1449	1314	1673
2016	Option 6	AM	Central						
2016	Option 7	AM	Central	-1	0	-1	-14	4	2
2016	Option 8	AM	Central	0	0	-3	545	442	495

Table 36 – Summary output for change in PCU hours and Kilometres vs base

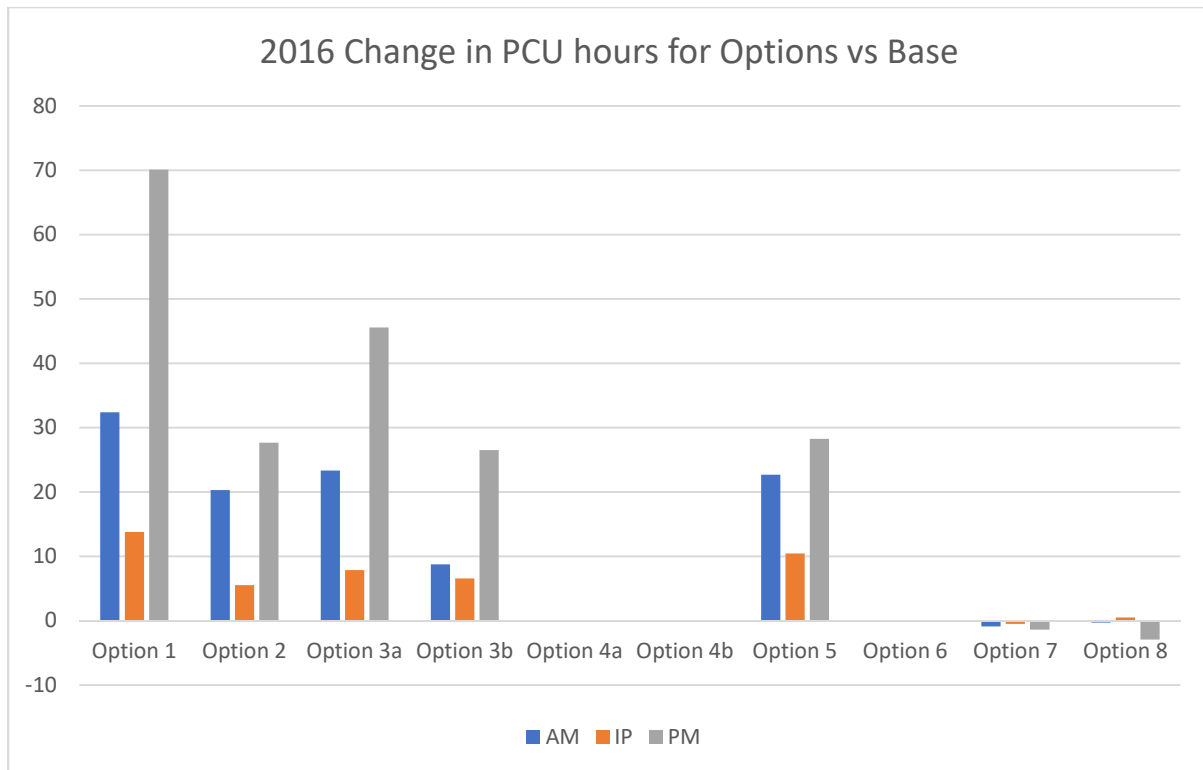


Figure 35 – Summary output for change in PCU hours vs base

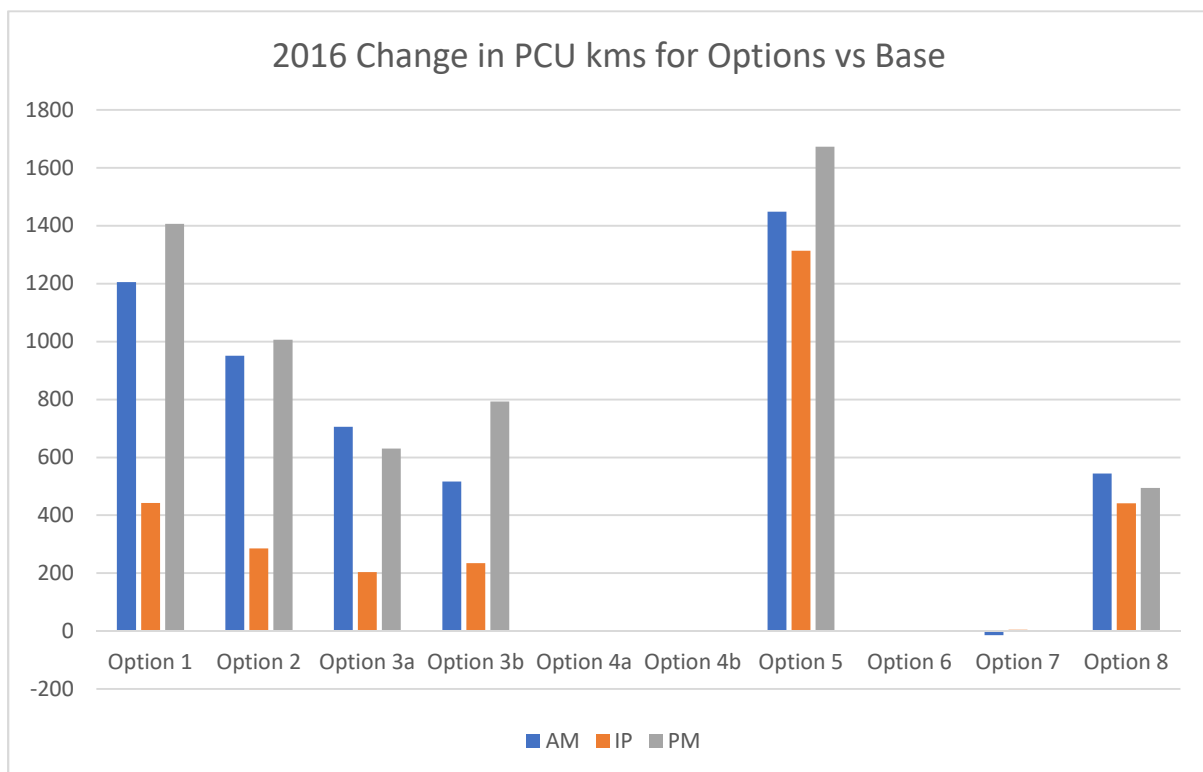


Figure 36 – Summary output for change in PCU Kilometres vs base

Year	Option	Time period	Demand Case	Change PCU hours vs DM			Change PCU kilometres vs DM		
				AM	IP	PM	AM	IP	PM
2036	Option 1	AM	Central	44	15	61	1170	712	1313
2036	Option 2	AM	Central	22	6	31	743	406	823
2036	Option 3a	AM	Central	25	7	21	705	433	517
2036	Option 3b	AM	Central	20	9	43	452	329	847
2036	Option 4a	AM	Central						
2036	Option 4b	AM	Central						
2036	Option 5	AM	Central	28	13	36	2177	1770	2215
2036	Option 6	AM	Central						
2036	Option 7	AM	Central	-2	0		-1	4	
2036	Option 8	AM	Central	1	2	2	844	629	617

Table 37 – Summary output for change in PCU hours and Kilometres vs DM

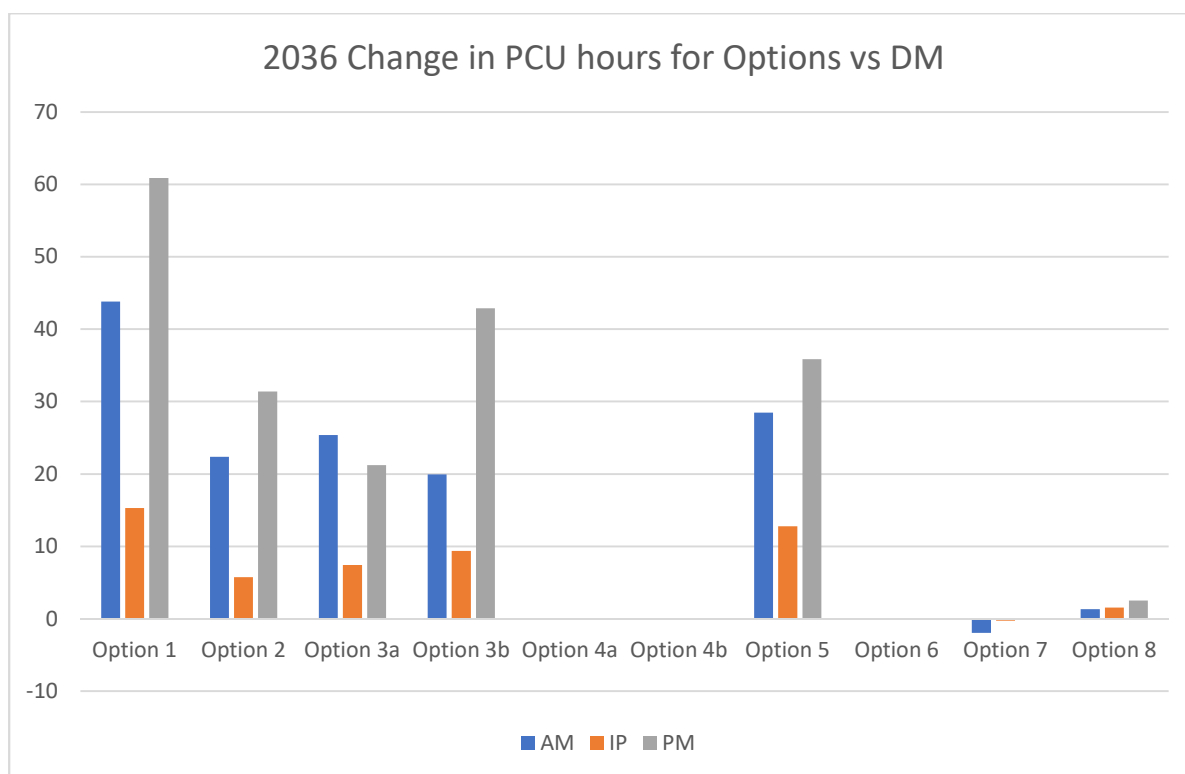


Figure 37 – Summary output for change in PCU hours for options vs base

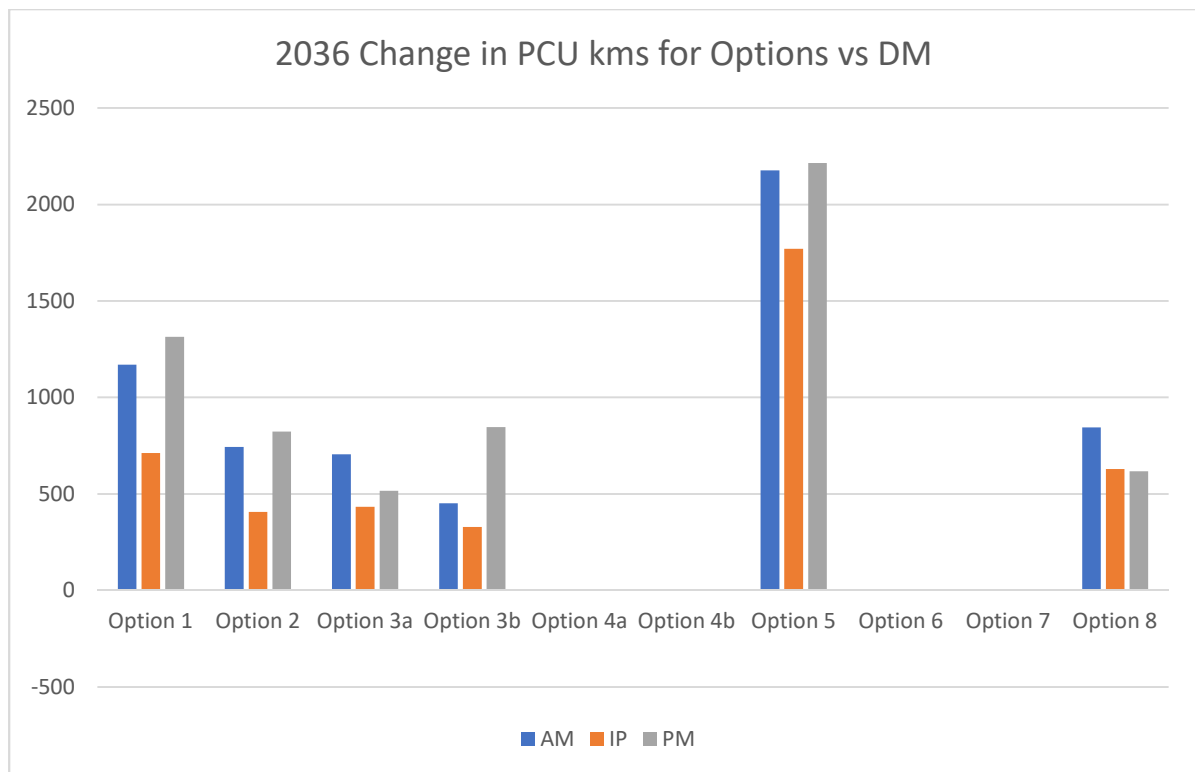


Figure 38 – Summary output for change in PCU Kms for options vs base

10.0 Recommendations

Having analysed all the data collected on the existing situation along with the comments received during the stakeholder engagement task, it is our opinion that any option taken forward by Cambridgeshire County Council and Network Rail requires a provision for local residents and businesses. This is due to the location of the area and the increase in journey time for any option outlined in this report that doesn't provide an exemption.

It isn't viable to introduce full barrier level crossings at this location without restricting traffic in some capacity due to the close proximity of the three level crossings and the increase in barrier down time. Therefore it is our recommendation that either Option 2 - Allow local traffic through the Peterborough and Kings Lynn level crossings, Option 7 - Implementing a Bridge over the Peterborough line, or Option 8 - Constructing a Ely Northern By-Pass north of Queen Adelaide is implemented prior to any adjustments to the existing level crossing arrangements at the Peterborough, Kings Lynn, or Norwich lines.

The results of the strategic road modelling demonstrate that the impact on the wider road network with the additional vehicles as a result of implementing option 2 is negligible. Due to the contrast in cost of implementation option 2 appears to be more favourable. However this option requires the implementation of a TRO which requires ongoing enforcement and also work to determine what might be classed as local traffic which could be problematic. This highlights the need for further investigation.

Whilst there are a number of examples where local authorities have successfully implemented TRO's restricting traffic through a road or route, the examples found have all been the responsibility of the local authority to enforce. It is possible to tie this enforcement into ongoing enforcement strategies such as Yellow Box Junctions and bus lane enforcement.

It appears that under the existing Traffic Management Act in Cambridgeshire the responsibility of enforcing any TRO along Ely Road in Queen Adelaide would be the responsibility of the Police.

Therefore it is vital that consultation with the Police is undertaken on any proposal to implement a TRO at a very early stage.

It is worth noting that option 2 may result in local businesses losing trade as passing trade is likely to diminish as a result of the restriction along Ely Road. This is reinforced by comments provided during the stakeholder engagement task.

Results of the queue length surveys demonstrate that restricting traffic through the level crossings to only local traffic will not impact the level crossings. It is likely that no more than three of four vehicles will be queuing at any given time based on the existing queue length surveys providing an average of only three vehicles queueing at the Peterborough and Kings Lynn crossing, and between two and three vehicles queueing at the Norwich crossing.

Appendices

Appendix A- ATC Data

Appendix B- Queue Length Tables

Appendix C- Traffic Modelling Outputs

Appendices are available on request by emailing:

Transport.Plan@Cambridgeshire.gov.uk

Or available to view in Shire Hall Room 301 by appointment.

RECOMMENDATIONS FROM THE ELY-CAMBRIDGE TRANSPORT STUDY

To: Economy and Environment Committee

Meeting Date: 8th February 2018

From: Graham Hughes, Executive Director - Place and Economy.

Electoral division(s): Kings Hedges, Chesterton, Waterbeach, Histon & Impington, Cottenham & Willingham, Longstanton, Northstowe & Over, Ely North, Ely South, Soham South & Haddenham, Soham North & Isleham, Sutton, Littleport East

Forward Plan ref: n/a **Key decision:** No

Purpose: To note and comment on the recommendations from the Ely to Cambridge Transport Study

Recommendation: The Committee is asked to:

a) endorse the recommendations set out in the study; and

b) commend the package which includes the full dualling of the A10 between Ely and the Milton Interchange (option 5) to the Cambridgeshire and Peterborough Combined Authority for approval and further development.

<i>Officer contact:</i>		<i>Member contacts:</i>	
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Tel:	01223 715484	Tel:	01223 706398

1. BACKGROUND

- 1.1 The Ely to Cambridge Transport Study is a wide-ranging multi modal study which has made recommendations on the transport schemes needed to accommodate the major development planned at a new town north of Waterbeach, Cambridge Northern Fringe East (CNFE) and the Cambridge Science Park (CSP). The study has three strands:
- Strand 1 looks at the overall transport requirements on the corridor
 - Strand 2 looks at the specific requirements for growth at Waterbeach
 - Strand 3 looks at the specific requirements for growth at CNFE/CSP
- 1.2 The commission has delivered:
- An options study and Strategic Outline Business Case for the overall package of interventions on the Ely to Cambridge corridor;
 - A transport study that identifies the infrastructure package and phasing of that package to provide for the transport demand of the development of a new town north of Waterbeach,
 - A transport study supported by modelling which provides evidence for the level of development which could be supported in the CNFE/CSP area and its phasing, in transport terms.
- 1.3 The scope of the study was drawn up to incorporate three separate, but interlinked issues; namely the need for a Strategic Planning Document or Area Action Plan for both Waterbeach New Town and the CNFE, hence providing a Transport Evidence Base for Plan Making as required by National Planning Practice Guidance. Early thinking was also required on the requirements of the whole corridor to inform Tranches 2 and 3 of delivering the Greater Cambridge City Deal.
- 1.4 The study is separate to, but links with the A10 Ely to King's Lynn Study which was reported to the Committee in September and to the M11-A47 Extension Study which has been commissioned by the Cambridgeshire and Peterborough Combined Authority and is due to report in summer 2018.

2 TECHNICAL WORK

- 2.1 Strategic modelling using Cambridgeshire County Council's Cambridge Sub Region model (CSRM2) forms an intrinsic part of the technical work and has taken place in two phases. The first phase tested the effect of development at land north of Waterbeach and new development at CNFE/CSP on the transport network with no mitigation measures except for the most basic enabling measures, such as site access. This phase of the modelling provided a 'red flag' for areas on the highway network that were of concern and where mitigation measures needed to be considered. It also provided a baseline against which the effect of various mitigation measures could be tested.
- 2.2 The second phase of modelling tested potential mitigation measures. As a starting point, schemes which were already broadly identified in policies set out in the Long Term Transport Strategy and the Transport Strategy for Cambridge and South Cambridgeshire were included, however this was not a constraint.

2.3 A series of mitigation packages were tested, starting with a public transport and active modes (cycling and walking) package which was then built upon with various levels of highway capacity. The tests are explained in more detail in section 4.

3. Key Issues from the technical work that have informed the study recommendations

- 3.1 The results from the first phase of modelling highlighted that unsurprisingly, the Milton interchange has an important influence on how traffic behaves on the A10. When all the development was included and based on other assumptions within the model, the results suggest that the following route choices and movements are likely:
- Between the Milton interchange and Waterbeach, traffic flows on the A10 remain relatively stable, confirming that this stretch of the road is already operating at capacity and is unable to carry significantly more traffic.
 - From Waterbeach village, and locations further north on the A10, from where people do have a route choice, flows on less appropriate routes south increase, for example through Clayhithe and Horningsea to the east, through Landbeach to the west, and along the B1049 Wilburton-Cottenham-Histon route, as traffic re-routes to avoid the congested A10.
 - From the new development north of Waterbeach where motorists don't have a route choice to travel south, vehicles are either joining the back of the queue on the A10, or turning right and heading north before turning west at Stretham then travelling south through Cottenham.
 - From Ely, traffic flows on alternative routes along the A142 west towards Sutton and east towards Newmarket increase, suggesting that some motorists try to avoid the A10 corridor altogether.
- 3.2 Further analysis of demand along the route was undertaken to help better understand the type of trips that the A10 is used for. This has shown that without the significant development at the new town north of Waterbeach and at the CNFE and CSP, some 24% of trips on the A10 have both their start and end points outside the study area and a further 55% have at least one end of the journey outside the study area, highlighting the strategic nature of the corridor. Even once these developments are included – which should encourage more local trip-making - this figure remains at about two-thirds. This has an implication for the ability to encourage a shift from car to non-car modes and consequently what proportion of trips might be able to be catered for by non-highway measures.
- 3.3 To the south of the study area at Cambridge Northern Fringe East and Cambridge Science Park, the modelling work suggests that to unlock further development on these sites a policy of radical parking restraint will be fundamental to making the sites work in transport terms.
- 3.4 Whilst a package of non-highway measures is necessary in policy terms and has some effect on mitigating the impacts of development, because of the strategic nature of trips on the A10 the modelling work suggests that this does not go far enough and as such, significant investment in highway capacity will also be required.

4 Options and emerging recommendations

Options modelled for mitigation

- 4.1 As indicated in section 2.3, six mitigation packages were modelled. Table 1 sets out these packages.

Table 1: Mitigation packages

Option	Composition of package
Option 1 Mode-shift	Significant investment in cycling/pedestrian routes Segregated public transport route between development north of Waterbeach and Cambridge Bus-based P&R at development north of Waterbeach Relocated railway station Parking restraint at CNFE/CSP
Option 2 Junction improvements	Option 1 PLUS Improvements to eight junctions along the A10, including Milton Interchange.
Option 3 North dual	Options 1 and 2 PLUS Dualling of A10 between Ely and development north of Waterbeach to encourage users to use new P&R site
Option 4 South dual	Options 1 and 2 PLUS Dualling of A10 between development north of Waterbeach and Milton Interchange to provide additional capacity on most congested section of route
Option 5 Full dual	Options 1, 2, 3 and 4 Dualling of length of A10 between Ely and Milton Interchange
Option 6 sensitivity test Offline alternative to A10	Options 1 and 2 PLUS New offline route to remove strategic traffic from the A10 and potentially form the southern section of an M11-A47 link

- 4.2 A separate study has been commissioned by the Combined Authority to consider whether there is a business case for extending the M11 northwards to connect with the A47. Whilst the full route is outside the scope of this study, option 6 has been included as a sensitivity test to investigate the principle of an offline link which could give strategic traffic an alternative to the A10, thus freeing up capacity on the route between Ely and Cambridge. Such a link could potentially form the southern section of a longer M11-A47 link. Due to the geographical limitations of the model, it has not been tested in the same way as the previous five options, however a commentary on the performance of this option is given in section 4.7.
- 4.3 Initially, each of the options was analysed using the three key metrics from the model outputs: – effect on mode-share, effect on traffic flow and delay, effect on journey time.

- 4.4 Considering mode-share, all options increase the number of trips on the corridor. The first two options reduce car mode share, however once more substantial highway improvements are made, the car mode share starts to increase, at the expense of other modes, predominantly rail and active modes. This suggests that new car trips are being induced onto the route. Bus and Park & Ride mode share increase in all options, although little additional benefit is seen beyond Option 2 for the investment that would be required.
- 4.5 In terms of the effect each option has on flow and delay, the options that provide an increase in highway capacity also result in an increase in the mode share of car trips, meaning there is more traffic on the network. This is because increased highway capacity induces more trips to be undertaken by car than was previously the case. As highway capacity increases, traffic increases principally on the A10 and the A14. This is accompanied in general by decreases in flows on parallel, less desirable routes suggesting that through traffic is being drawn back on to appropriate routes rather than rat-running through villages such as Horningsea, Clayhithe, Landbeach, Cottenham, Histon and Impington. However, as more highway capacity is introduced, more traffic not only arrives in Cambridge in the morning peak, but also in Ely in the evening peak. The modelling suggests that as highway capacity is increased in the study area, further delay starts to be introduced on certain junctions around Ely in the evening peak which will need consideration as options are developed. A full dual option also starts to present further delays at Milton Interchange.
- 4.6 None of the options returns traffic flow to free-flow conditions in the morning or evening peaks, however each of the highway options progressively improves upon the end to end journey time in relation to the scenario without any mitigation measures. In the am peak, where the predominant flow is south-bound, only the south dual, or full dual options improve upon the journey times predicted for the future scenario without development and this improvement is less than five minutes. In the pm peak where the predominant flow is north bound, all the highway options improve upon the journey times for this same scenario and are slightly greater than the am peak, between 5 and 10 minutes.
- 4.7 The results from the offline option (Option 6) do seem to show the scheme has some merit, in that flows decrease on the A10 and on most of the routes where rat running was seen in the first phase of modelling. This includes the B1047 through Clayhithe and Horningsea, the B1049 through Cottenham and Histon and also the B1050 from Bar Hill towards Earith. This seems to confirm the analysis that a significant proportion of traffic currently using the A10 is strategic in nature and has an origin and/or destination outside the study area. Further analysis has revealed that such a link could reduce the amount of traffic on the A10 by around 4%. Whilst this figure seems low, this link has the potential to have a much wider area of benefit than just the A10, for example on the A142, the A1123 and the A141 in addition to the B roads listed above.
- 4.8 Regarding journey times in the morning peak towards Cambridge, enough traffic appears to divert onto the alternative route to make journey times on the A10 comparable to the south dual option and better than options 1, 2 and 3, between the two points analysed. In the evening peak heading away from Cambridge however, the modelling suggests that journey times are better with the full dual and north dual options. If this option were to be considered further, more detailed analysis of the positive and negative effects of such a scheme would be needed to understand the impacts outside the modelled area.

Study recommendations

- 4.9 The study has confirmed the existing policy position that a multi-modal package of measures will be needed for the whole corridor. This will include a package of measures to encourage a mode shift away from car, including a high quality, segregated public transport route between Waterbeach and Cambridge, the relocation of Waterbeach station, significant investment in cycling and walking measures around the new development north of Waterbeach and a new Park and Ride facility.
- 4.10 Furthermore, whilst not being prescriptive about the level or type of development that is brought forward at CNFE or CSP, the study is clear that the transport characteristics of these significant sites will need to be very different to traditional housing, Science Park or office developments. These will be fundamentally driven by a policy of radical parking restraint complimented by investment in public transport, cycling and walking.
- 4.11 Evidence elsewhere in the city shows that where parking provision is limited, much better mode shares for non-car modes are achieved, especially when coupled with appropriate on-street parking controls and good alternative forms of transport. For example, car-driver mode share at Cambridge Science Park is currently around 58%. At Cambridge Biomedical Campus, where there are far fewer parking spaces per square metre of floorspace, the comparable mode share is 31%. The new CB1 development near Cambridge Station pushes this even further and is aiming to achieve a car driver mode share of 11%. Appendix A shows the location of CNFE, CSP and the new development north of Waterbeach in relation to existing and planned public transport and cycling infrastructure.
- 4.12 The study also confirms that smaller scale highway measures to discourage rat running will be required along parallel routes, as well as improvements to junctions along the A10 in the short term. Finally, the study recommends that to accommodate the significant proportion of strategic trips through the study area, major investment in additional highway capacity along the A10 is made. This would take a broadly online alignment to the existing A10, although it is acknowledged that some sections would of necessity need to be offline.
- 4.13 The study also recognises that an offline alignment that potentially forms the southern part of an M11-A47 link has some merit by providing an alternative route for the significant proportion of strategic traffic using the A10. The M11-A47 study will consider this particular scheme further, however more work would need to be undertaken to establish whether there is a business case for both schemes.
- 4.14 The study suggests that the package as a whole, including a full dual of the A10 could cost upwards of £500 million reflecting the level of investment that is considered necessary to accommodate the development aspirations in the area. This does not include a cost for the offline western option. Further work on each aspect of the recommendation will be required to progress any scheme through the next phases of feasibility, decision-making and delivery. Given the breadth of the recommendations and the level of investment required, a multi-agency approach is needed to progress the recommendations in a cohesive and joined up way.

5 Next steps and milestones

- 5.1 Since the Ely-Cambridge Transport Study was commissioned, the political structure in Cambridgeshire has changed significantly with the formation of the Cambridgeshire and Peterborough Combined Authority. Whilst the Greater Cambridge Partnership has substantially funded the study, given the geographic coverage of the recommendations, it is considered appropriate that from this point forward the Combined Authority should have the responsibility for approving the recommendations and taking them forward for consultation in the summer of 2018. However, in terms of delivery, some elements of the package may be best delivered by other bodies, including the Greater Cambridge Partnership, Cambridgeshire County Council, the district councils or the private sector.

Progression of business case work

- 5.2 The recommendations from the study conclude the research phase of the work. In order to conclude the DfT's WebTag Stage 1 Option Development, there is a need for work to roll forward into the feasibility phase, which includes:
- Consulting on initial options set out in this study
 - Developing options in further detail
 - Further consultation on the detail of developed options
- 5.3 Whilst the study does not recommend a specific option regarding the provision of highway capacity, it is recommended that the Committee commend option 5 to the Combined Authority for approval and further development. This would enable the impacts of dualling the full length of the A10 between Ely and the Milton Interchange to be fully understood and considered alongside an alternative route that potentially forms the southern section of an M11-A47 link.
- 5.4 If the proposal to consult on the recommendations from the study in the summer of 2018 is approved, the results from this will then be used to inform and shape the development of options in more depth. It is suggested that alongside preparations for the consultation, joint consideration is given to which bodies might be best placed to deliver the various elements of the package, in order that the next phase of feasibility work can begin once the consultation is complete.

6 ALIGNMENT WITH CORPORATE PRIORITIES

6.1 Developing the local economy for the benefit of all

The following bullet point sets out details of implications identified by officers:

- The study makes recommendations that will help to deliver two major development sites, namely a new town on land north of Waterbeach, as well as the significant area of land known as Cambridge Northern Fringe East.

6.2 Helping people live healthy and independent lives

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

- The study recommends significant early investment in active modes of transport such as cycling and walking between Ely, Waterbeach and Cambridge, as well as

neighbouring villages. The recommendations from the study therefore have positive implications for public health by making it easier and safer for people to incorporate active travel into their daily routines.

6.3 Supporting and protecting vulnerable people

There are no significant implications for this priority.

7 SIGNIFICANT IMPLICATIONS

7.1 Resource Implications

The study recommends a significant package of transport infrastructure. Should the Combined Authority request that the County Council progress the development of one or more elements of the package, given the scale of the schemes considerable demand could be placed on existing teams within the County Council. Consideration will need to be given in due course to ensure they are resourced appropriately.

7.2 Procurement/Contractual/Council Contract Procedure Rules Implications

There are no significant implications within this category. Procurement for the further development of individual options will take place in accordance with the Council's Contract Regulations.

7.3 Statutory, Legal and Risk Implications

All schemes taken forward will need to go through the appropriate statutory and legal processes as they are developed.

7.4 Equality and Diversity Implications

The package of measures recommended in the study will help improve access to services, jobs and educational opportunities not only by car but also by public transport and active modes. A Community Impact Assessment will be carried out and reviewed as appropriate as each scheme develops.

7.5 Engagement and Communications Implications

As the study has progressed, engagement with key stakeholders has been undertaken. Partner authorities have been part of both the Project Team and Project Board. The Boards of both the Greater Cambridge Partnership and the Cambridgeshire and Peterborough Combined Authority have been briefed and a local member briefing was undertaken on 8th January. As set out in paragraph 5.1, a wider public consultation exercise is recommended in the summer of 2018 on the recommendations from the study. Whilst the Combined Authority will need to lead on this, given the breadth of the recommendations, the consultation will need to be extensive and it is likely that the County Council will need to give significant support to this.

7.6 Localism and Local Member Involvement

Local Members whose divisions lie within the study area were all invited to a briefing on the study on 8th January.

7.7 Public Health Implications

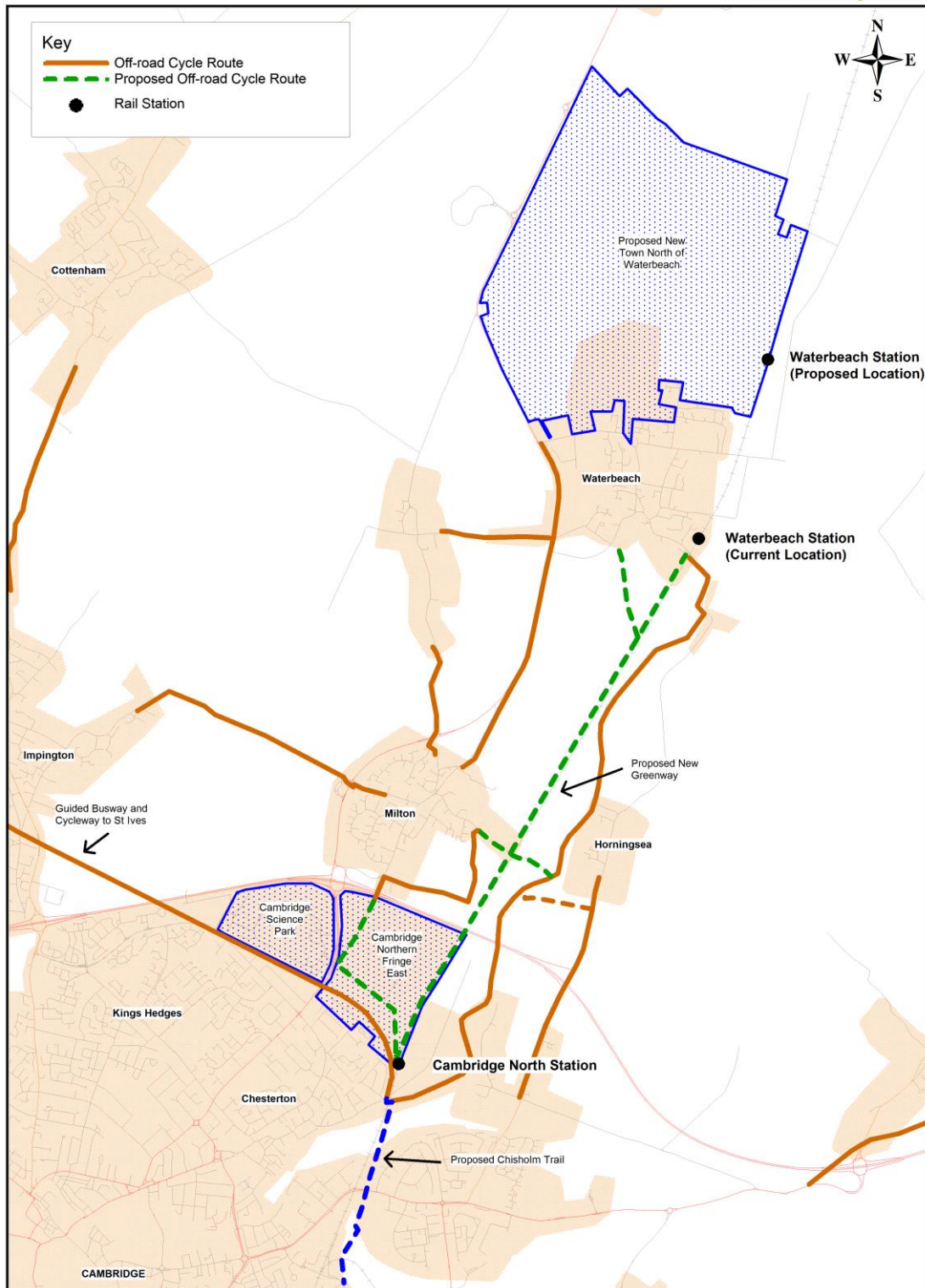
The study recommends significant early investment in active modes of transport such as cycling and walking between Ely, Waterbeach and Cambridge, as well as neighbouring villages. The recommendations from the study therefore have positive implications for public health by making it easier and safer for people to incorporate active travel into their daily routines.

Implications	Officer Clearance
Have the resource implications been cleared by Finance?	Yes Sarah Heywood:
Have the procurement/contractual/ Council Contract Procedure Rules implications been cleared by the LGSS Head of Procurement?	Yes Paul White
Has the impact on statutory, legal and risk implications been cleared by LGSS Law?	Yes Fiona McMillan
Have the equality and diversity implications been cleared by your Service Contact?	Yes Tamar Oviatt-Ham
Have any engagement and communication implications been cleared by Communications?	Yes Sarah Silk
Have any localism and Local Member involvement issues been cleared by your Service Contact?	Yes Tamar Oviatt-Ham
Have any Public Health implications been cleared by Public Health	Yes Tess Campbell

Source Documents	Location
Ely-Cambridge Transport Study Preliminary Strategic Outline Business Case and further technical reports to support the study	Please refer to the documents section on the following web page: https://www.greatercambridge.org.uk/transport/transport-projects/ely-to-cambridge-a10-transport-study

APPENDIX A – PLAN SHOWING LOCATIONS OF CAMBRIDGE NORTHERN FRINGE EAST, CAMBRIDGE SCIENCE PARK AND NEW DEVELOPMENT NORTH OF WATERBEACH TOGETHER WITH EXISTING AND PLANNED PUBLIC TRANSPORT AND CYCLING

Cycle Routes and Public Transport Connections in Vicinity of Cambridge Science Park and Cambridge Northern Fringe East



Scale (at A4): 1:86291 Centred at: 548910,269247 Date:12/12/2017 © Crown copyright and database rights 2017 OS 100023205

FINANCE AND PERFORMANCE REPORT – December 2017

To: **Economy and Environment Committee**

Meeting Date: **8th February 2018**

From: **Executive Director, Economy, Transport and Environment
and Chief Finance Officer**

Electoral division(s): **All**

Forward Plan ref: **For key decisions *Key decision:* No**

Purpose: **To present to Economy and Environment Committee the
December 2017 Finance and Performance report for
Economy, Transport and Environment (ETE).**

**The report is presented to provide Committee with an
opportunity to comment on the projected financial and
performance outturn position, as at the end of December
2017.**

Recommendations: **The Committee is asked to:-**

- **review, note and comment upon the report**

<i>Officer contact:</i>	
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Post:	Strategic Finance Manager
Email:	Sarah.Heywood@Cambridgeshire.gov.uk
Tel:	01223 699714

1. BACKGROUND

- 1.1 The appendix attached provides the financial position for the whole of the ETE Service, and as such, not all of the budgets contained within it are the responsibility of this Committee. To aid Member reading of the report, budget lines that relate to the Economy and Environment Committee have been shaded. Members are requested to restrict their questions to the lines for which this Committee is responsible.
- 1.2 The report only contains performance information in relation to indicators that this Committee has responsibility for.

2. MAIN ISSUES

- 2.1 The report attached as Appendix A is the ETE Finance and Performance report for December 2017.
- 2.2 **Revenue:** The only change since last month relates to Winter Maintenance which is the responsibility of H&CI Committee.
- 2.3 The forecast bottom line position across ETE is a £143K overspend.
- 2.4 **Capital:** The forecast spend on Huntingdon – West of Town Centre Link Road for 17/18 has slipped by an additional £105K and King' Dyke has slipped by £420K to reflect the latest planned profile of expenditure.
- 2.5 **Performance:** The Finance & Performance Report (Appendix A) provides performance information for the suite of key indicators for 2017/18. E&E Committee has twelve **performance indicators** reported to it in 2017-18 (following the transfer out of the two relating to Adult Skills & Learning transferring).
- 2.6 Of these twelve performance indicators, one is currently red, three are amber, and eight are green. The indicator that is currently red is:
 - The average journey time per mile during the morning peak on the most congested routes
- 2.7 At year-end, the current forecast is that none of the performance indicators will be red, five will be amber and seven green.

3. ALIGNMENT WITH CORPORATE PRIORITIES

3.1 Developing the local economy for the benefit of all

There are no significant implications for this priority.

3.2 Helping people live healthy and independent lives

There are no significant implications for this priority.

3.3 Supporting and protecting vulnerable people

There are no significant implications for this priority.

4. SIGNIFICANT IMPLICATIONS

4.1

- Resource Implications –The resource implications are contained within the main body of this report.
- Statutory, Legal and Risk – There are no significant implications within this category.
- Equality and Diversity – There are no significant implications within this category.
- Engagement and Communications – There are no significant implications within this category.
- Localism and Local Member Involvement – There are no significant implications within this category.
- Public Health – There are no significant implications within this category.

SOURCE DOCUMENTS

Source Documents	Location
None	

Economy, Transport & Environment Services**Finance and Performance Report – December 2017 for Economy & Environment Committee****1. SUMMARY****1.1 Finance**

Previous Status	Category	Target	Current Status	Section Ref.
Green	Income and Expenditure	Balanced year end position	Green	2
Green	Capital Programme	Remain within overall resources	Green	3

1.2 Performance Indicators – Predicted status at year-end: (see section 4)

Monthly Indicators	Red	Amber	Green	Total
Current status this month	1	3	8	12
Year-end prediction (for 2017/18)	0	5	7	12

2. INCOME AND EXPENDITURE**2.1 Overall Position**

Forecast Variance - Outturn (Previous Month) £000	Directorate	Current Budget for 2017/18 £000	Current Variance £000	Current Variance %	Forecast Variance - Outturn December £000	Forecast Variance - Outturn December %
+207	Executive Director	1,832	42	2	+207	11
+552	Infrastructure Management & Operations	58,570	-2,996	-7	+671	1
-740	Strategy & Development	9,881	-77	1	-735	-7
0	External Grants	-28,228	0	0	0	0
19	Total	42,055	-3,030	-6	+143	0

The service level budgetary control report for December 2017 can be found in [appendix 1](#).

Further analysis of the results can be found in [appendix 2](#).

2.2 Significant Issues

2.2.1 Waste Private Finance Initiative (PFI) Contract

We are currently forecasting the Waste PFI budget to be around £1.6m overspent. This is largely due to an increase in the quantity of waste collected compared to the forecast, lower levels of Third Party Income through the contract, an increase in the amount of bulky waste collected that is sent direct to landfill, an increased quantity of material rejected from the In-Vessel Composting process, rising costs for recycling wood and rigid plastics collected at Household Recycling Centres and a shortfall in the delivery of savings for the current financial year – it is expected that these will however be delivered next year. Although the Mechanical Biological Treatment (MBT) plant has performed slightly better than the 2016/17 performance levels, the savings this has delivered are not sufficient to offset the additional pressures.

The variable nature of the MBT creates significant uncertainty in the forecast and actual performance could improve (and the forecast overspend reduce) or worsen (and the overspend increase). There are also historic disputes to consider, which are not factored into any of the above.

A number of predicted underspends have been identified across ETE, (either one-off, which will help offset the waste pressure this financial year, or ongoing, which can be brought out in the Business Plan) which can be used to offset the pressure in waste. The areas which are predicted to underspend (or achieve additional income) are Concessionary Fares, Traffic Signals, Streetlighting, Highways income and City centre access cameras.

2.2.2 Winter Maintenance

This budget is expected to overspend due to the number of gritting runs that have taken place in November and December compared to previous years. For this year 27 runs have taken place compared to 16 runs that took place over the same period last year.

2.3 Additional Income and Grant Budgeted this Period (De minimis reporting limit = £30,000)

There were no items above the de minimis reporting limit recorded in December 2017.

A full list of additional grant income can be found in [appendix 3](#).

2.4 Virements and Transfers to / from Reserves (including Operational Savings Reserve) (De minimis reporting limit = £30,000)

There is items above the de minimis reporting limit recorded in December 2017:-

Allocation of budget to match insurance charges £1,614,648

A full list of virements made in the year to date can be found in [appendix 4](#).

3. BALANCE SHEET

3.1 Reserves

A schedule of the Service's reserves can be found in [appendix 5](#).

3.2 Capital Expenditure and Funding

Expenditure

3.2.1 Operating the Network

One of the signals schemes will be delayed until 2018/19, as traffic modelling work needs to be completed to determine the final design options. The scheme is on Cherry Hinton Road, Cambridge at the Queen Ediths Way / Robin Hood junction. The scheme is funded by developer contributions and expected cost is £556k.

Funding

All other schemes are funded as presented in the 2017/18 Business Plan.

A detailed explanation of the position can be found in [appendix 6](#).

4. PERFORMANCE

4.1 Introduction

This report provides performance information for the suite of key Economy, Transport & Environment (ETE) indicators for 2017/18. At this stage in the year, we are still reporting pre-2017/18 information for some indicators.

New information for red, amber and green indicators is shown by Committee in Sections 4.2 to 4.4 below, with contextual indicators reported in Section 4.5. Further information is contained in Appendix 7.

4.2 Red Indicators (new information)

This section covers indicators where 2017/18 targets are not expected to be achieved.

a) Economy & Environment

No new information this month.

b) ETE Operational Indicators

No new information this month.

4.3 Amber indicators (new information)

This section covers indicators where there is some uncertainty at this stage as to whether or not year-end targets will be achieved.

a) Economy & Environment

No new information this month

b) ETE Operational Indicators

No new information this month

4.4 Green Indicators (new information)

The following indicators are currently on-course to achieve year-end targets.

a) Economy & Environment

Connecting Cambridgeshire

- Percentage of premises in Cambridgeshire with access to at least superfast broadband – December 2017

Figures have risen to 95.8% as at the end of December 2017.

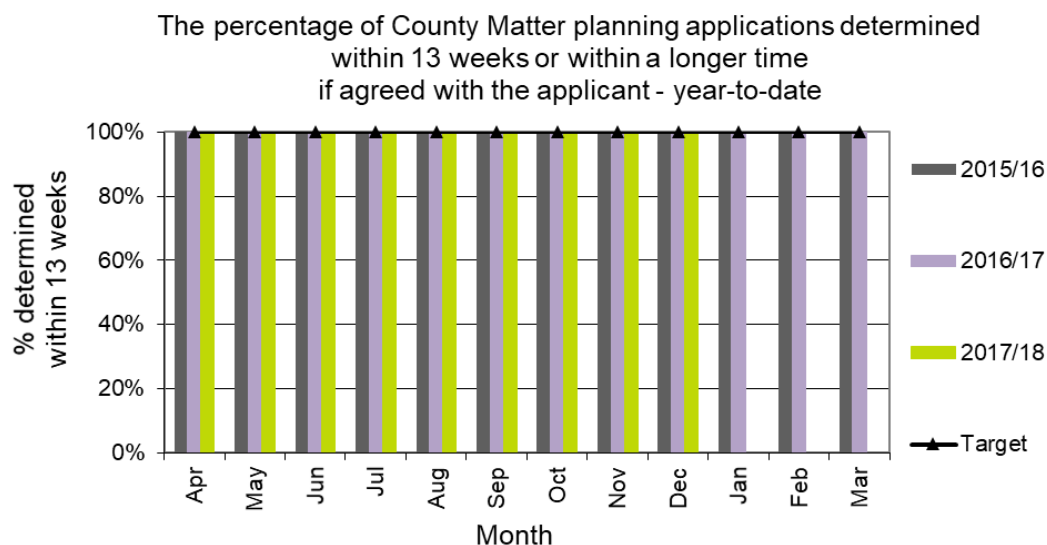
The 2016/17 target is based on estimated combined commercial and intervention superfast broadband coverage by the end of June 2017.

Planning applications

- The percentage of County Matter planning applications determined within 13 weeks or within a longer time period if agreed with the applicant - year-to-date (to December 2017)

Thirteen County Matter planning applications have been received and determined on time since the beginning of the 2017/18 financial year.

There were five other applications excluded from the County Matter figures. These were applications that required minor amendments or Environmental Impact Assessments (a process by which the anticipated effects on the environment of a proposed development is measured). Both applications were determined on time.



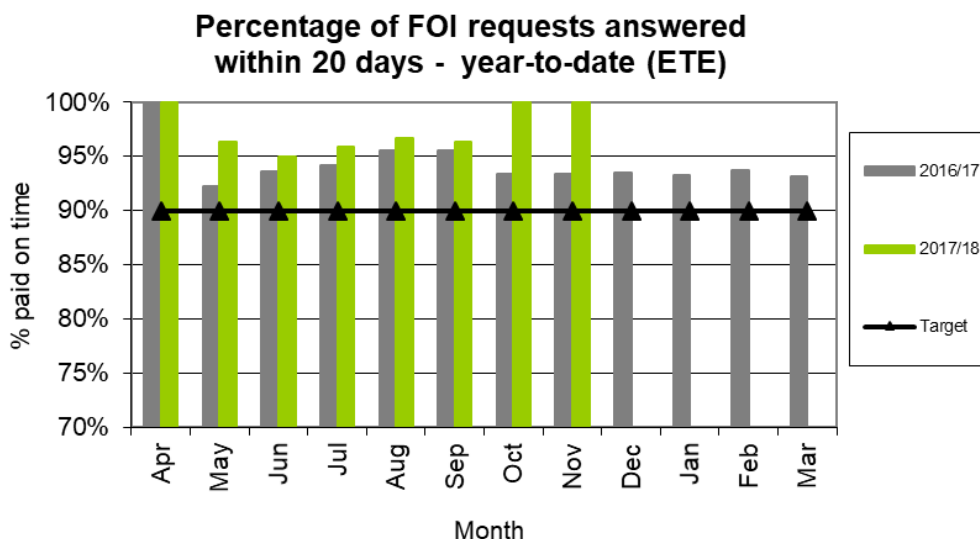
b) ETE Operational Indicators

Freedom of Information (FOI) requests

- FOI requests - % responded to within 20 days (November 2017)

18 Freedom of Information requests were received during November 2017. Provisional figures show that all 18 (100%) of these were responded to on time.

174 Freedom of Information requests have been received since April 2017 and 97.1% of these have been responded to on-time. This compares with 93.4% (out of 244) and 98.2% (out of 222) for the same period last year and the year before.



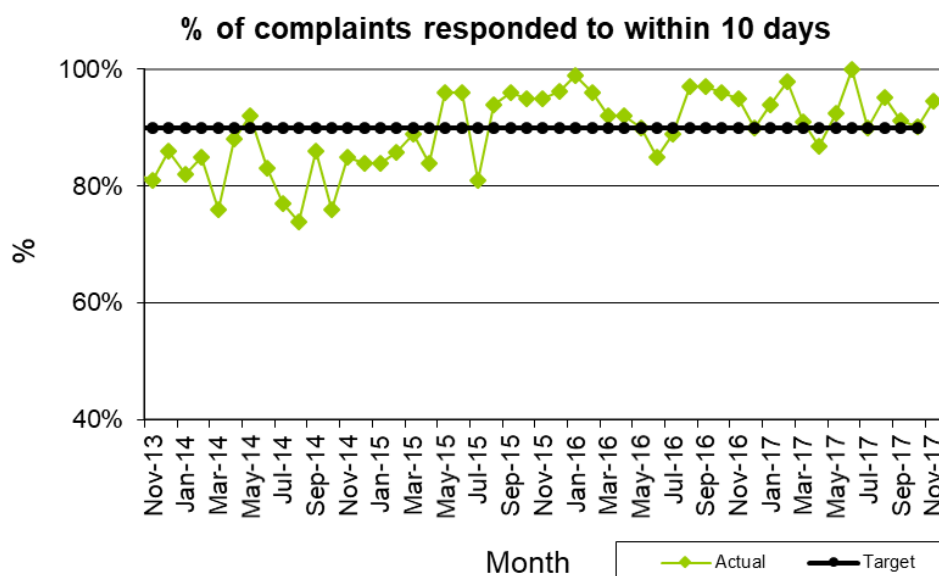
Complaints and representations – response rate

- Percentage of complaints responded to within 10 days (November 2017)
37 complaints were received in November 2017. 35 (95%) of these were responded to within 10 working days.

30 complaints were for Infrastructure Management & Operations and 28 (93%), were responded to on time.

7 complaints were for Strategy & Development and all 7 (100%), were responded to within 10 working days.

The year-to-date figure is currently 93%.



4.5 Contextual indicators (new information)

a) Economy & Environment

Connecting Cambridgeshire

% of take-up in the intervention area as part of the superfast broadband rollout programme (to November 2017)

Figures to the end of November 2017 show that the average take-up in the intervention area has increased from 46.79% in July 2017 to 49.4%.

APPENDIX 1 – Service Level Budgetary Control Report

Forecast Variance - Outturn November £'000	Service	Current Budget for 2017-18 £'000	Expected to end of December £'000	Actual to end of December £'000	Current Variance £'000 %		Forecast Variance - Outturn December £'000 %	
	Economy, Transport & Environment Services							
+206	Executive Director	1,564	2,061	2,102	+42	+2	+206	+13
+0	Business Support	268	194	195	+1	+0	+0	+0
0	Direct Grants	-21,673	0	0	+0	+0	+0	6
+207	Total Executive Director	-19,841	2,255	2,297	+42	+2	+207	-1
	Directorate of Infrastructure Management & Operations							
-4	Director of Infrastructure Management & Operations	144	108	95	-13	-12	-4	-3
+1,604	Waste Disposal including PFI	34,080	27,757	26,678	-1,079	-4	+1,604	+5
	Highways							
+0	- Road Safety	332	260	267	+6	+2	+0	+0
-124	- Traffic Management	1,384	1,011	900	-111	-11	-131	-9
-0	- Highways Maintenance	6,636	4,520	4,727	+207	+5	+51	+1
-9	- Permitting	-1,333	-806	-956	-149	+19	-9	+1
+0	- Winter Maintenance	1,975	1,230	1,396	+166	+0	+112	+6
-240	- Parking Enforcement	0	-203	-1,269	-1,066	+525	-240	+0
-368	- Street Lighting	9,505	6,115	5,522	-593	-10	-372	-4
-45	- Asset Management	578	665	635	-29	-4	-45	-8
-358	- Highways other	588	-221	-225	-4	+2	-400	-68
+0	Trading Standards	706	356	328	-27	-8	+0	+0
	Community & Cultural Services							
-84	- Libraries	3,388	2,536	2,194	-342	-13	-67	-2
+0	- Archives	347	272	205	-67	-25	-7	-2
+45	- Registrars	-541	-379	-366	+13	-4	+44	-8
+135	- Coroners	780	551	643	+92	+17	+135	+17
0	Direct Grants	-6,555	-3,278	-3,278	0	+0	0	36
+552	Total Infrastructure Management & Operations	52,015	40,493	37,497	-2,996	-7	+671	+1
	Directorate of Strategy & Development							
+0	Director of Strategy & Development	142	106	99	-7	-6	+0	+0
+9	Transport & Infrastructure Policy & Funding	297	73	203	+130	+178	+9	+3
	Growth & Economy							
-83	- Growth & Development	549	422	299	-122	-29	-84	-15
+0	- County Planning, Minerals & Waste	304	144	88	-56	-39	+0	+0
+0	- Historic Environment	53	88	127	+39	+45	+0	+0
-0	- Flood Risk Management	442	296	248	-48	-16	+0	+0
-250	- Highways Development Management	0	69	-145	-214	-309	-250	+0
-47	- Growth & Economy other	165	309	298	-11	-4	-47	-29
+0	Major Infrastructure Delivery	0	235	254	+19	+8	+0	+0
	Passenger Transport							
+65	- Park & Ride	193	634	984	+350	+55	+70	+36
-408	- Concessionary Fares	5,393	3,474	3,299	-175	-5	-408	-8
-26	- Passenger Transport other	2,342	1,423	1,441	+18	+1	-26	-1
0	Direct Grants	0	0	0	0	+0	+0	0
-740	Total Strategy & Development	9,881	7,273	7,196	-77	-1	-735	-7
19	Total Economy, Transport & Environment Services	42,055	50,020	46,990	-3,030	-6	+143	+0
	MEMORANDUM							
£'000	Grant Funding	£'000	£'000	£'000	£'000	%	£'000	%
0	- Combined Authority funding	-21,673	0	0	+0	+0	+0	+0
0	- Street Lighting - PFI Grant	-3,944	-1,972	-1,972	+0	+0	+0	+0
0	- Waste - PFI Grant	-2,611	-1,306	-1,306	+0	+0	+0	+0
+0	Grant Funding Total	-28,228	-3,278	-3,278	0	0	0	+0

APPENDIX 2 – Commentary on Forecast Outturn Position

Number of budgets measured at service level that have an adverse/positive variance greater than 2% of annual budget or £100,000 whichever is greater.

Service	Current Budget for 2017/18 £'000	Current Variance		Variance	
		£'000	%	£'000	%
Executive Director	1,564	+42	+2	+206	+13
<p>The review of Senior management within ETE has completed with implementation on 1st January 2018. This limits the amount of savings that can be made in this financial year. The full year will save up to £250k.</p>					
Waste Disposal incl PFI	34,080	-1,079	-4	+1,604	+5
<p>We are currently forecasting the Waste PFI budget to be around £1.6m overspent. This is largely due to an increase in the quantity of waste collected compared to the forecast, lower levels of Third Party Income through the contract, an increase in the amount of bulky waste collected that is sent direct to landfill, an increased quantity of material rejected from the In-Vessel Composting process, rising costs for recycling wood and rigid plastics collected at Household Recycling Centres and a shortfall in the delivery of savings for the current financial year – it is expected that these will however be delivered next year. Although the Mechanical Biological Treatment (MBT) plant has performed slightly better than the 2016/17 performance levels, the savings this has delivered are not sufficient to offset the additional pressures.</p> <p>The variable nature of the MBT creates significant uncertainty in the forecast and actual performance could improve (and the forecast overspend reduce) or worsen (and the overspend increase). There are also historic disputes to consider, which are not factored into any of the above.</p> <p>A number of predicted underspends have been identified across ETE, (either one-off, which will help offset the waste pressure this financial year, or ongoing, which can be brought out in the Business Plan) which can be used to offset the pressure in waste. The areas which are predicted to underspend (or achieve additional income) are Concessionary Fares, Traffic Signals, Streetlighting, Highways income and City centre access cameras.</p>					
Traffic Management	1,384	-111	-11	-131	-9
<p>The signals budget is expected to underspend by £100k mainly due to savings from a new contract and savings on energy. There is also expected to be an increase in income of £65k for Temporary Traffic Regulation Orders (TTRO), however the income for New Roads and Street Works Act (NRSWA) charges is behind expected budgeted position. This underspend will be used to help cover the pressure on the Waste budget.</p>					

Winter Maintenance	1,975	+166	0	+112	+6
This budget is expected to overspend due to the number of gritting runs that have taken place in November and December compared to previous years. For this year 27 runs have taken place compared to 16 runs that took place over the same period last year.					
Parking Enforcement	0	-1,066	+525	-240	0
Income from City centre access cameras is currently ahead of budget, due to new cameras but the level of income is not expected to continue as drivers get used to the new restrictions.					
Street Lighting	9,505	-593	-10	-372	-4
We are currently forecasting the Street Lighting budget to be £368k under spent. This is due to the higher number of deductions for performance failures than expected, which were made in line with the PFI contract and relate to adjustments due under the contract Payment Mechanism regarding performance. An element of this forecast outturn is also due to project synergy savings which have now been realised in this financial year.					
Highways other	588	-4	+2	-400	-68
Additional Highways income that has been achieved would normally be re-invested in preventative maintenance work but until the spend on the Waste budget is clearer, this funding will be held to cover the pressure on the Waste budget.					
Coroners	780	+92	+17	+135	+17
Costs in this area have increased due to more deaths and also an increase in costs relating to Assistant Coroners handling complex cases. There is also an increase in inquest costs due to the large case load.					
Highways Development Management	0	-214	-309	-250	0
Section 106 and section 38 fees have come in higher than expected for new developments and is expected to lead to an overachievement of income. However, this is an unpredictable income stream and the forecast outturn is updated regularly.					
Concessionary Fares	5,393	-175	-5	-408	-8
The projected underspend is based on the final spend in the last financial year and currently the initial indications are that this level of underspend will be achieved this year. This underspend will be used to help cover the pressure on the Waste budget.					

APPENDIX 3 – Grant Income Analysis

The table below outlines the additional grant income, which is not built into base budgets.

Grant	Awarding Body	Expected Amount £'000
Grants as per Business Plan	Various	32,051
Waste PFI Grant		-80
Reduction to match Combined authority levy		-1,327
Adult Learning & Skills - now being reported under People & Communities		-2,418
Non-material grants (+/- £30k)		+2
Total Grants 2017/18		28,228

APPENDIX 4 – Virements and Budget Reconciliation

	£'000	Notes
Budget as per Business Plan	38,682	
Apprenticeship Levy	61	
Implementation of the Corporate Capacity Review	-698	
Allocation of Waste inflation	200	
Waste – allocation of demand funding to cover increased costs	170	
Adjustment to match Combined authority levy	1,327	
Use of earmarked reserve – Asset Information records	45	
Use of earmarked reserve – Transport Strategy & Policy	200	
Use of earmarked reserve – Flood Risk Management	42	
Use of earmarked reserve – Former Whippet Bus Routes	118	
Transfer of Service from Corporate Services – Green Spaces	56	
Adult Learning & Skills - now being reported under People & Communities	-180	
Transfer of Service from Corporate Services – Cultural Services	427	
Allocation of budget to match insurance charges	1,615	
Non-material virements (+/- £30k)	-10	
Current Budget 2017/18	42,055	

APPENDIX 5 – Reserve Schedule

Fund Description	Balance at 31st March 2017	Movement within Year	Balance at 31st December 2017	Yearend Forecast Balance	Notes
	£'000	£'000	£'000	£'000	
General Reserve					
Service carry-forward	2,229	(2,229)	0	0	To be transferred to central reserve
Sub total	2,229	(2,229)	0	0	
Equipment Reserves					
Libraries - Vehicle replacement Fund	218	0	218	218	
Sub total	218	0	218	218	
Other Earmarked Funds					
Deflectograph Consortium	57	0	57	57	Partnership accounts, not solely CCC
Highways Searches	55	0	55	0	
On Street Parking	2,286	0	2,286	2,000	
Bus route enforcement	117	(117)	0	0	
Streetworks Permit scheme	98	0	98	0	
Highways Commuted Sums	620	3	622	620	
Asset Information records	0	0	0	0	
Streetlighting - LED replacement	0	200	200	0	
Community Transport	0	444	444	562	This is being used to meet legal costs if required.
Guided Busway Liquidated Damages	1,523	(718)	805	300	
Waste and Minerals Local Development Fra	59	0	59	59	
Strategic Transport Corridor Feasibility Studies	0	0	0	0	
Flood Risk funding	0	0	0	0	
Proceeds of Crime	356	0	356	356	
Waste - Recycle for Cambridge & Peterborough (RECAP)	291	0	291	250	Partnership accounts, not solely CCC
Fens Workshops	61	0	61	61	Partnership accounts, not solely CCC
Travel to Work	211	0	211	211	Partnership accounts, not solely CCC
Steer- Travel Plan+	72	0	72	72	
Northstowe Trust	101	0	101	101	
Archives Service Development	234	0	234	234	
Other earmarked reserves under £30k - IMO	36	2	38	0	
Other earmarked reserves under £30k - S&D	(188)	(1)	(189)	0	
Sub total	5,989	(188)	5,801	4,883	
Short Term Provision					
Mobilising Local Energy Investment (MLEI)	669	0	669	0	
Sub total	669	0	669	0	
Capital Reserves					
Government Grants - Local Transport Plan	0	25,368	25,368	0	Account used for all of ETE
Government Grants - S&D	786	13,731	14,517	0	
Government Grants - IMO	0	0	0	0	
Other Capital Funding - S&D	5,788	(1,590)	4,198	5,000	
Other Capital Funding - IMO	699	135	834	200	
Sub total	7,274	37,643	44,917	5,200	
TOTAL	16,379	35,227	51,606	10,301	

APPENDIX 6 – Capital Expenditure and Funding

Capital Expenditure

2017/18						TOTAL SCHEME	
Original 2017/18 Budget as per BP	Scheme	Revised Budget for 2017/18	Actual Spend (December)	Forecast Spend - Outturn (December)	Forecast Variance - Outturn (December)	Total Scheme Revised Budget	Total Scheme Forecast Variance
£'000		£'000	£'000	£'000	£'000	£'000	£'000
	Integrated Transport						
200	- Major Scheme Development & Delivery	200	114	200	0	200	0
682	- Local Infrastructure Improvements	1,014	467	995	-19	863	0
594	- Safety Schemes	594	38	594	0	594	0
345	- Strategy and Scheme Development work	601	551	601	0	345	0
2,362	- Delivering the Transport Strategy Aims	4,501	1,111	3,742	-759	4,178	0
23	- Air Quality Monitoring	23	0	23	0	23	0
14,516	Operating the Network	16,255	8,480	15,375	-880	16,248	0
	Infrastructure Management & Operations Schemes						
6,269	- £90m Highways Maintenance schemes	6,000	2,690	6,140	140	90,000	0
0	- Pothole grant funding	1,155	801	1,155	0	1,155	0
395	- Waste Infrastructure	395	7	395	0	5,120	0
2,060	- Cambridgeshire Archives	1,975	24	39	-1,936	5,180	0
284	- Community & Cultural Services	1,993	80	1,493	-500	3,042	0
0	- Street Lighting	736	0	736	0	736	0
0	- National Productivity Fund	2,890	1,779	2,905	15	2,890	0
0	- Challenge Fund	4,583	300	4,583	0	6,250	0
0	- Safer Roads Fund	1,175	84	1,175	0	1,175	0
	Strategy & Development Schemes						
4,370	- Cycling Schemes	5,149	1,753	2,212	-2,937	17,598	0
850	- Huntingdon - West of Town Centre Link Road	1,510	533	560	-950	9,116	0
25,000	- Ely Crossing	25,891	15,857	25,891	0	36,000	0
0	- Chesterton Busway	200	240	206	6	200	0
1,370	- Guided Busway	1,200	124	1,200	0	148,886	0
11,667	- King's Dyke	6,000	485	5,580	-420	13,580	0
0	- Wisbech Access Strategy	330	314	330	0	1,000	0
1,000	- Scheme Development for Highways Initiatives	1,000	4	1,000	0	1,000	0
100	- A14	342	236	310	-32	25,200	0
250	- Energy Efficiency Fund	250	96	250	0	1,000	0
0	- Soham Station	500	13	500	0	6,700	0
	Combined Authority Schemes	55	81	55	0	55	0
	Other Schemes						
3,590	- Connecting Cambridgeshire	4,217	1	850	-3,367	36,290	0
0	- Other Schemes	200	200	200	0	200	0
75,927		90,934	36,463	79,295	-11,639	434,824	0
-9,664	Capital Programme variations	-15,022		-3,383	11,639		
66,263	Total including Capital Programme variations	75,912	36,463	75,912	0		

The increase between the original and revised budget is partly due to the carry forward of funding from 2016/17, this is due to the re-phasing of schemes, which were reported as underspending at the end of the 2016/17 financial year. The phasing of a number of schemes has been reviewed since the published business plan and this has included a reduction in the required budget in 2017/18, for King's Dyke. This still needs to be agreed by GPC.

Three additional grants have been awarded since the published business plan, these being Pothole grant funding, the National Productivity fund and the Challenge Fund.

The Capital Programme Board have recommended that services include a variation budget to account for likely slippage in the capital programme, as it is sometimes difficult to allocate this to individual schemes in advance. As forecast underspends start to be reported, these are offset with a forecast outturn for the variation budget, leading to a balanced outturn overall up to the point when slippage exceeds this budget. The allocations for these

negative budget adjustments have been calculated and shown against the slippage forecast to date.

Operating the Network

One of the signals schemes will be delayed until 2018/19, as traffic modelling work needs to be completed to determine the final design options. The scheme is on Cherry Hinton Road, Cambridge at the Queen Ediths Way / Robin Hood junction. The scheme is funded by developer contributions and expected cost is £556k.

Safer Roads Fund

A successful bid was made to Department for Transport (DfT) to secure £1,300,000 worth of funding from the Safer Roads Fund. This funding is specifically for safety improvements on the A1303. The scheme will be completed in 2018/19.

Cambridgeshire Archives

When last assessed it was assumed that a third of the construction work would be delivered in 2017/18. The latest schedule received from the Contractor indicates that all construction work will now start in May 2018, therefore £3.778m of the £3.817m capital budget will be required in 2018/19. However, the scheme is still on track to complete in 2018/19.

King's Dyke

Negotiations with the main land owners on land acquisition and land contract are progressing well. There are some encouraging signs that a contract exchange with one of the main land owners may be completed soon after Christmas.

There are still some minor issues to resolve with the land deals and conditions of access with the remaining parties, but these are not considered onerous and should also reach a conclusion later in January 2018.

Kier, the appointed contractor, has commenced on the Stage 1 contract for detailed design. The design will inform a more robust construction target price prior to award of the Stage 2 contract for construction. Further and more detailed land and ground survey work is required to feed into the design. The first of the Ground Investigation works are expected to start early in the New Year. This will involve trial holes in the existing A605 to locate and survey the public utility services within the road and verges.

Ely Southern By Pass

The construction target cost for the contract was £27.4m at the time of award of Stage 2. Whilst work is progressing on site, some significant risks have emerged requiring additional work, including Network Rail requirements, the diversion of statutory undertakers' plant, buildability issues arising from the complex V piers and additional temporary works resulting from poor and variable ground conditions. These will increase the outturn cost of the scheme significantly and are currently being considered with the contractor to minimise the impact on the project and to reduce the cost impact.

The completion date is likely to be late summer/Autumn 2018 depending on weather. The Council is working with the contractor to identify options to mitigate against delay and minimise costs. A number of value engineering opportunities are also being explored.

Abbey - Chesterton Bridge

This project is still in the process of discharging planning conditions to enable works to start on site, as per below.

Originally planned spend for 2017/18 was £1,917,000 but now looks to be £350,000. The planning application was submitted in July 2016 and it was anticipated that this process would complete by autumn 2016, with construction of the bridge in late 2017, and thus significant construction related spend could be achieved.

The planning permission was not granted until February 2017 following the need to submit multiple packages for certain aspects of the application. Construction now looks likely to commence in March 2018, though this is dependent upon discharging the pre-start planning conditions.

Significant spend will not be encountered until the construction work commences, thus the majority of spend will now come in 2018/19 rather than 2017/18.

Huntingdon – West of Town Centre Link Road

The outturn for the scheme has reduced to £665,000 from £1,510,000, this is due to land cost claims which have not been resolved as anticipated and it is now expected these claims will be resolved in 2018/19.

Cambridge Cycling infrastructure

This is the programme of S106 funded cycling projects in Cambridge. The funding is generally not time limited, and thus any underspend rolls into the next year. The originally planned spend was £1,580,000 but now looks to be £150,000. This is a consequence of public consultation and scheme development work being extended, not least Queen Edith's Way, which is the project with the largest single budget. Following consultation E&E Committee agreed to undertake further development and consultation with local residents. The delivery team's priority has been to complete projects that have some time limited funding associated with them such as DfT Cycle City Ambition funded schemes and St Neots Northern foot and cycle bridge, and to progress some of the higher profile projects such as Abbey-Chesterton bridge.

A10 Harston - Scheme under construction and approaching the end of the 18 week programme, with some minor works needed in the new year to complete. Wider shared path. On track to achieve spend forecast of £1,030,000 for the year.

Trumpington Road – Scheme recently completed. Spend slightly over the original forecast of £480,000 for the year due to more extensive than anticipated works associated with gas main.

Quy to Lode – Scheme substantially complete. 2km new village link. On track to achieve spend forecast of £451,000 for the year.

Major Scheme Development and Delivery – Relocation of BT poles has been ordered in advance of a new foot and cycleway being built in the future on the A1198 between Papworth and Cambourne. Preliminary design work is underway to determine the feasibility of improved street lighting on West Fen Road, Ely and a new foot and cycleway between Burwell and Exning.

Milton Road to Cambridge North Station - This project is now substantially complete apart from some minor snagging issues. The previous Network Rail Track is to become public highway and the adoption process is underway. There will be some fees and charges associated with this process either in 2017/18 or 2018/19 depending on the date of adoption.

Cambridgeshire Busway Lighting - This project is now complete and operational. There is a requirement to pass on a commuted sum of £50k for maintenance purposes from 2018/19.

Connecting Cambridgeshire

Expenditure in this year will be lower than estimated in relation to the BT contract. To confirm, delivery is on track but expenditure has been re-phased, and therefore the funding will be required next financial year.

Capital Funding

2017/18				
Original 2017/18 Funding Allocation as per BP £'000	Source of Funding	Revised Funding for 2017/18 £'000	Forecast Spend - Outturn (December) £'000	Forecast Funding Variance - Outturn (December) £'000
17,991	Local Transport Plan	17,815	17,507	-308
2,483	Other DfT Grant funding	21,965	20,398	-1,567
19,231	Other Grants	10,367	10,367	0
4,827	Developer Contributions	6,418	3,666	-2,752
18,992	Prudential Borrowing	23,768	19,425	-4,343
12,403	Other Contributions	10,601	7,932	-2,669
75,927		90,934	79,295	-11,639
-9,664	Capital Programme variations	-15,022	-3,383	11,639
66,263	Total including Capital Programme variations	75,912	75,912	0

Funding	Amount (£m)	Reason for Change
Rolled Forward Funding	6.0	This reflects slippage or rephasing of the 2016/17 capital programme to be delivered in 2017/18 which will be reported in August 17 for approval by the General Purposes Committee (GPC)
Additional / Reduction in Funding (Specific Grant)	-9.0	Rephasing of grant funding for King's Dyke (-£1.0m), costs to be incurred in 2018/19. Grant funding for Ely Crossing now direct from DfT previously part of Growth Deal funding (-£8.3m)
Revised Phasing (Section 106 & CIL)	-0.8	Revised phasing of Guided Busway spend and receipt of developer contributions.
Revised Phasing (Other Contributions)	-3.2	Revised phasing of King's Dyke spend
Additional Funding / Revised Phasing (DfT Grant)	16.3	New Grant funding – National Productivity Fund (£2.9m), Pothole Action Fund (£1.2m), Challenge Fund (£3.5m) and Safer Roads Fund (£1.2m). Grant funding for Ely Crossing now direct from DfT previously part of Growth Deal funding (£11.3m)
Additional / Reduction in Funding (Prudential borrowing)	-1.0	Rephasing of grant funding for Ely Crossing reduced the requirement for borrowing (-£3.0m). Brought forward borrowing to fund DfT Challenge Fund schemes (£2.25m).

The increase between the original and revised budget is partly due to the carry forward of funding from 2016/17, this is due to the re-phasing of schemes, which were reported as underspending at the end of the 2016/17 financial year. The phasing of a number of schemes have been reviewed since the published business plan and this has included a reduction in the required budget in 2017/18, for King's Dyke.

Four additional grants have been awarded since the published business plan, these being Pothole grant funding, the National Productivity fund, Challenge Fund and Safer Roads Fund.

APPENDIX 7 – Performance (RAG Rating – Green (G) Amber (A) Red (R))

a) Economy & Environment

Economy & Environment									
Frequency	Measure	What is good?	Dir'n of travel	Latest Data		2017/18 Target	Current status	Year-end prediction	Comments
				Period	Actual				
Connecting Cambridgeshire									
Quarterly	Operating Model Outcome: The Cambridgeshire economy prospers to the benefit of all Cambridgeshire residents								
	% of take-up in the intervention area as part of the superfast broadband rollout programme	High	N/A	New indicator for 2016/17 To 30 November 2017	49.4%		Contextual		Figures to the end of November 2017 show that the average take-up in the intervention area has increased from 46.79%.in July 2017 to 49.4% at the end of November 2017.
Yearly	Operating Model Outcome: The Cambridgeshire economy prospers to the benefit of all Cambridgeshire residents								
	% of premises in Cambridgeshire with access to at least superfast broadband	High	N/A	New indicator for 2016/17 To 31 December 2017	95.8%	95.2% by June 2017	G	G	Figures have risen to 95.8% as at the end of December 2017. The 2016/17 target is based on estimated combined commercial and intervention superfast broadband coverage by the end of June 2017.
Economic Development									
Quarterly	Operating Model Outcome: The Cambridgeshire economy prospers to the benefit of all Cambridgeshire residents								
	% of 16-64 year-old Cambridgeshire residents in employment: 12-month rolling average	High	↓	To 30 June 2017	78.5%	80.9% to 81.5%	A	A	The latest figures for Cambridgeshire have recently been published by the Office for National Statistics (ONS). The 12-month rolling average is 78.5%, which although it has decreased slightly from the last quarterly rolling average, is still below the 2016/17 target range of 80.9% to 81.5%. It is above both the national figure of 74.4% and the Eastern regional figure of 77.0%. 78.7% are employed full time and 21.3% are employed part time. 12.2% of employed 16-64 year old Cambridgeshire residents are self-employed and 66.4% are employees.

Frequency	Measure	What is good?	Dir'n of travel	Latest Data		2017/18 Target	Current status	Year-end prediction	Comments
				Period	Actual				
	'Out of work' benefits claimants – narrowing the gap between the most deprived areas (top 10%) and others	Low	↓	November 2016	10.8%:4.8% Ratio of most deprived areas (Top 10%) to all other areas Gap of 6.0 percentage points	Gap of <=6.0 percentage points Most deprived areas (Top 10%) Actual <=11.5%	G	A	The 2016/17 target of <=11.5% is for the most deprived areas (top 10%). Latest figures published by the Department for Work and Pensions show that, in August 2016, 10.8% of people aged 16-64 in the most deprived areas of the County were in receipt of out-of-work benefits, compared with 4.8% of those living elsewhere in Cambridgeshire. The gap of 6.0 percentage points is lower than the last quarter and is currently achieving the target of <=6.5 percentage points.
Yearly	Operating Model Outcome: The Cambridgeshire economy prospers to the benefit of all Cambridgeshire residents								
	Additional jobs created	High	↑	To 30 September 2016	+12,600 (provisional)	+3,500	G	G	The latest provisional figures from the Business Register and Employment Survey (BRES) show that 12,600 additional jobs were created between September 2015 and September 2016 compared with an increase of 6,300 for the same period in the previous year. This means that the 2016/17 target of +3,500 additional jobs has been achieved. This information is usually published late September/early October each year, for the previous year, by the Office for National Statistics (ONS) as part of the BRES Survey. BRES is the official source of employee and employment estimates by detailed geography and industry. The survey collects employment information from businesses across the whole of the UK economy for each site that they operate.
Passenger Transport									

Frequency	Measure	What is good?	Dir'n of travel	Latest Data		2017/18 Target	Current status	Year-end prediction	Comments
				Period	Actual				
Monthly	Operating Model Outcome: The Cambridgeshire economy prospers to the benefit of all Cambridgeshire residents								
	Guided Busway passengers per month	High	↑	To 31 October 2017	393,512		Contextual		The Guided Busway carried 393,512 passengers in October. There have now been over 21.3 million passengers since the Busway opened in August 2011. The 12-month rolling total is 3.97 million.
Yearly	Operating Model Outcome: The Cambridgeshire economy prospers to the benefit of all Cambridgeshire residents								
	Local bus passenger journeys originating in the authority area	High	↑	2016/17	Approx. 18.7 million	19 million	A	A	There were over 18.7 million bus passenger journeys originating in Cambridgeshire in 2016-7. This represents an increase of almost 2% from 2015-6; this growth can probably be attributed to the continued increase in passenger journeys on the guided busway. As predicted last year the target of 19 million bus passenger journeys was not achieved, but it still is anticipated that there is a chance of growth in the future through the City Deal and if so, this will take place in 2017-8 at the earliest.
Planning applications									
Monthly	Operating Model Outcome: The Cambridgeshire economy prospers to the benefit of all Cambridgeshire residents								
	The percentage of County Matter planning applications determined within 13 weeks or within a longer time period if agreed with the applicant	High	↔	To 31 December 2017	100%	100%	G	G	Thirteen County Matter planning applications have been received and determined on time since the beginning of the 2017/18 financial year. There were five other applications excluded from the County Matter figures. These were applications that required minor amendments or Environmental Impact Assessments (a process by which the anticipated effects on the environment of a proposed development is measured). Both applications were determined on time.
Traffic and Travel									

Frequency	Measure	What is good?	Dir'n of travel	Latest Data		2017/18 Target	Current status	Year-end prediction	Comments
				Period	Actual				
Yearly	Operating Model Outcomes: People lead a healthy lifestyle and stay healthy for longer & The Cambridgeshire economy prospers to the benefit of all Cambridgeshire residents								
	Growth in cycling from a 2004/05 average baseline	High	↑	2015	62.5% increase	70% increase	G	G	There was a 4.7 per cent increase in cycle trips in Cambridgeshire in 2015. Overall growth from the 2004-2005 average baseline is 62.5 percent which is better than the Council's target of 46%.
	% of adults who walk or cycle at least once a month – narrowing the gap between Fenland and others	High	↑	October 2014	Fenland = 81.1% Other excluding Cambridge = 89.4%	Fenland = 86.3%	A	A	Latest figures published by the Department for Transport show that in 2014/15, 81.1% of Fenland residents walked or cycled at least once a month. This a reduction compared with 2013/14, which is disappointing, although, because the indicator is based on a sample survey, the figure can vary from one survey period to the next, and the change since 2013/14 is not statistically significant. Excluding Cambridge, the latest figure for the rest of the County is 89.4%. The gap of 8.3 percentage points is only slightly less than the 2012/13 baseline gap of 8.7 percentage points. A large number of schemes have been undertaken across most parishes in Fenland to further promote cycling and walking including new cycle routes, new footways, large maintenance schemes, general improvements and whole town centre redesigns. During 2015/2016 Cambridgeshire was awarded funding from the Government for a project in Wisbech from the Local Sustainable Transport Fund (LSTF). The project included Sustrans undertaking cycling work with schools and the County Council Travel to Work Unit working with employers in

Frequency	Measure	What is good?	Dir'n of travel	Latest Data		2017/18 Target	Current status	Year-end prediction	Comments
				Period	Actual				
									<p>Wisbech to encourage more sustainable travel for commuting.</p> <p>In addition to this, the Cycling Projects team regularly work with Fenland District Council and their Transport team to undertake surveys and audits with the Transport Strategy Team helping to determine some of the improvement schemes.</p>
Yearly	Operating Model Outcome: The Cambridgeshire economy prospers to the benefit of all Cambridgeshire residents								
	The average journey time per mile during the morning peak on the most congested routes	Low	↓	September 2015 to August 2016	4 minutes 52 seconds	4 minutes	R	A	<p>At 4.52 minutes per mile, the latest figure for the average morning peak journey time per mile on key routes into urban areas in Cambridgeshire is better than the previous year's figure of 4.87 minutes.</p> <p>The target for 2017/18 is to reduce this to 4 minutes per mile.</p>

b) ETE Operational Indicators

Frequency	Measure	What is good?	Dir'n of travel	Latest Data		2017/18 Target	Current status	Year-end prediction	Comments
				Period	Actual				
ETE Operational Indicators									
Monthly	Operating Model enabler: Ensuring the majority of customers are informed, engaged and get what they need the first time they contact us								
	% of Freedom of Information requests answered within 20 days	High	↑	To 30 November 2017	100%	90%	G	G	18 Freedom of Information requests were received during November 2017. Provisional figures show that all 18 (100%) of these were responded to on time. 174 Freedom of Information requests have been received since April 2017 and 97.1% of these have been responded to on-time. This compares with 93.4% (out of 244) and 98.2% (out of 222) for the same period last year and the year before.
	Operating Model enabler: Ensuring the majority of customers are informed, engaged and get what they need the first time they contact us								
	% of complaints responded to within 10 days	High	↑	To 30 November 2017	95%	90%	G	G	37 complaints were received in November 2017. 35 (95%) of these were responded to within 10 working days. 30 complaints were for Infrastructure Management & Operations and 28 (93%), were responded to on time. 7 complaints were for Strategy & Development and all 7 (100%), were responded to within 10 working days. The year-to-date figure is currently 93%.
	Operating Model enabler: Having Councillors and officers who are equipped for the future								

Frequency	Measure	What is good?	Dir'n of travel	Latest Data		2017/18 Target	Current status	Year-end prediction	Comments
				Period	Actual				
	Staff Sickness - Days per full-time equivalent (f.t.e.) - 12-month rolling total. A breakdown of long-term and short-term sickness will also be provided.	Low	↔	To 30 November 2017	3.6 days per f.t.e.	6 days per f.t.e	G	G	<p>The 12-month rolling average has risen slightly to 3.6 days per full time equivalent (f.t.e.) and is below (better than) the 6 day target.</p> <p>During November the total number of absence days within Economy, Transport & Environment was 150 days based on 535 staff (f.t.e) working within the Service. The breakdown of absence shows that 110 days were short-term sickness and 40 days long-term sickness.</p>

ECONOMY & ENVIRONMENT COMMITTEE TRAINING PLAN*

A description of each training session is provided on page 2.

The text in red bold indicates that the details are yet to be confirmed.

Ref	Subject	Responsibility / Lead officer	Date	Venue booked? Y/N	Invitation sent out? (Cat)	Agenda sent? Y/N (Lead officer)	Attendance form sent Y/N (TA)	Nature of training	No. of Cllrs Attended	% of total invited
1.	The budget and ETE business planning process**	Amanda Askham	Wed 9 th Aug 2017 10am-12pm	Y KV Room	Y	n/a	Y	Seminar	6	10%
2.	Introduction to major infrastructure delivery	*Send sheet to Tanya, Stuart Walmsley	Tue 22nd Aug 2017 2-4pm	Y KV Room	Y	Y	Y	Seminar	David Ambrose Smith Henry Bachelor Ian Bates Anna Bradnam Kevin Cuffley John Gowing Anne Hay Joan Whitehead Donald Adey Bill Hunt Nichola Harrison Josh Schumann Tim Wotherspoon Lorna Dupre Anna Bailey Matthew Shuter	26%
3.	Ely Bypass site visit	Brian Stinton, Stuart Walmsley (For E&E / H&CI if places)	Fri 25 th Aug 2017 10am-1pm	Y Conference room	Y	Y	Y	Site visit, seminar	David Ambrose Smith Ian Bates Henry Batchelor Lorna Dupre Ian Gardener Bill Hunt Tom Sanderson Tim Wotherspoon	24%
4.	Waterbeach Waste Management Park site visit [Organised by H&CI Committee. Dawn to also invite E&E]	Adam Smith	Mon 12 Feb 2018 11am – 2pm	Y	Y			Site visit		
5.	The Combined Authority <u>This will be a seminar for all County Councillors.</u>	Martin Whiteley from the Combined Authority	Friday 16 March 2018 10.30am – 12.30pm This will be a one hour plus slot on the above	Y KV Room	Y			Topic on Monthly Member Seminar		
6.	Connecting Cambridgeshire – Digital Connectivity	Noelle Godfrey	Mon 4th Sep 2017 2-3pm	Y KV Room	Y	n/a	Y	Seminar	David Ambrose Smith Ian Bates Adela Costello Lorna Dupre Lis Every Mark Howell David Jenkins Noel Kavanagh John Williams Tim Wotherspoon	16%
7.—	Adult Skills and Learning	Lynsi Hayward-Smith	CANCELLED No longer E&E	Y KV Room	Y			Seminar		

Ref	Subject	Responsibility / Lead officer	Date	Venue booked? Y/N	Invitation sent out? (Cat)	Agenda sent? Y/N (Lead officer)	Attendance form sent Y/N (TA)	Nature of training	No. of Cllrs Attended	% of total invited
8.	County's role in Growth and Development	Sass Pledger, Juliet Richardson	Mon 2 nd Oct 2017 2-4pm	Y KV Room	Y	Y	Y	Seminar	Donald Adey David Ambrose Smith Ian Bates Anna Bradnam Steve Criswell Lis Every Lynda Harford Anne Hay Linda Jones Lina Joseph Noel Kavanagh Joshua Schumann	20%
9.	Flood Risk Management Strategy and work	Sass Pledger, Julia Beeden	Wed Oct 25 th 2017 2-4pm	Y KV Room	Y	Y	Y	Seminar	Ian Bates Anna Bradnam John Gowing Mark Howell Tom Sanderson Joan Whitehead John Williams Tim Wotherspoon	13%
10.	Energy Strategy and work	Sass Pledger, Sheryl French	Mon 13 th Nov 2017 10am-12pm	Y KV Room	Y	Y	Y	Seminar	Ian Bates Anna Bradnam John Gowing Mark Howell Joshua Schumann Terry Rogers	10%
11.	County Planning Minerals and Waste	Sass Pledger, Emma Fitch	Wed 29 th Nov 2017 2-4pm	Y KV Room	Y	Y	Y	Seminar	David Connor Anna Bradnam Ian Gardener John Gowing Lynda Harford Terry Rogers Joan Whitehead John Williams	13%
12.	Major railway projects	Jeremy Smith	Mon 18 th Dec 2017 2-4pm	Y KV Room	Y		Y	Seminar	Donald Adey David Ambrose Smith Anna Bradnam John Gowing Ian Bates Lis Every Bill Hunt Terry Rogers Joan Whitehead John Williams	16%
13.	A14 site visit* (Possibly to also include H&CI. Depending on number of spaces available)	Stuart Walmsley	TBC	N Swavesey	N			Site visit, seminar		
14.	New Developments	TBC	TBC							
15.	Section 106	TBC	TBC							
16.	Bus bill	TBC	TBC							

* Note:

- The training sessions are primarily for E&E Committee Members and Substitutes, but will be open to all County Councillors, with the exception of:
 - site visits - a limited number of visitors can be accommodated during site visits. H&CI Committee may be invited if space is available.
 - the budget and ETE business planning process – targeted to ETE. H&CI Committee may be invited if space is available.
- Members can ask officers for one-to-one meetings if they would like to discuss topics further.
- In addition to the E&E training plan, Member Seminars are to re-start in October 2017 (contact Democratic Services for more information).

** In addition, the following finance training is available to all Members (please contact Democratic Services for dates and more information):

- One to One Budget Information Sessions, open to all Councillors by appointment – Michelle Rowe
- Local Government Finance (First Session), Chris Malyon
- Local Government Finance (Second Session), Chris Malyon
- Local Government Finance (Third Session), Chris Malyon

Ref	Subject	Date	Description of training
1.	The budget and ETE business planning process**	Wed 9 th Aug 10am-12pm	The learning outcomes will be: <ul style="list-style-type: none"> • An overview of the Council's budget and how it works in ETE • A understanding of the business planning process and cycle • The committee process for approving, delivering and monitoring business cases and transformation ideas
2.	Introduction to major infrastructure delivery	Tue 22nd Aug 2-4pm	tbc
3.	Ely Bypass site visit	Fri 25 th Aug 10am - 1pm	This training will include: <ul style="list-style-type: none"> • An overview of the project development and the work on site • A visit onto the site
4.	Waterbeach Waste Management Park site visit [Organised by H&CI Committee]	Tbc - H&CI rep to organise a new date for this visit in Autumn 2017	The training will include a presentation from officers on our responsibilities, how we deliver our services and working with our partners. There will also be a presentation from our contractor Amey who will provide an overview of the waste treatment technology and services delivered through the PFI contract. This will be followed by a tour of the Waterbeach site, please wear appropriate footwear and clothing as it is a working site (PPE will be provided by Amey).
5.	The Combined Authority	16 th March 2018	This training will cover: <ul style="list-style-type: none"> • The role of E and E Committee and where it sits in relation to the decision making role and functions of the Combined Authority.
6.	Connecting Cambridgeshire – Digital Connectivity	Mon 4th Sep 2-3pm	<p>Training description:</p> <p>Ubiquitous digital connectivity is seen as vital to support economic growth and help our communities to thrive across Cambridgeshire and Peterborough.</p> <p>Cambridgeshire is already a leading digital county and the County Council has set ambitious targets to strive for >99% connectivity by 2020 through its Connecting Cambridgeshire programme.</p> <p>Noelle Godfrey, Programme Director for Connecting Cambridgeshire & Smart Cambridge, will lead this Members' training session to explain the Council's Digital Connectivity Blueprint for 21st Century Infrastructure, including:</p> <ul style="list-style-type: none"> • progress of the superfast broadband rollout - ahead of national targets • work to increase mobile coverage and be among the first to get 5G services • potential to expand Wifi provision in village halls and community buildings • opportunities to use open data and technology to develop smart solutions <p>There will be an opportunity for questions afterwards.</p>
7.	Adult Skills and Learning	Mon 11 th Sep 2-4pm	The training aims to answer some key questions: <ul style="list-style-type: none"> • What does the service do? • How does it support the priorities of the County Council? • How does it work in partnership and plan for local delivery? • How does it link to the Employment and Skills policy? • Some examples of the work in local areas
8.	County's role in Growth and Development, including <ul style="list-style-type: none"> • pre-apps • CIL and S106 	Mon 2 nd Oct 2-4pm	The role of Growth and Development: <ul style="list-style-type: none"> • statutory planning responses for planning, transport and county community infrastructure (library, adult social care) • transport assessment role for strategic sites with close working relationship with policy TIPF, MID and Highways DC • Education planning for new school and school extensions for growth where necessary in response to planning applications. • Support and defence of application and districts at appeal. • Travel for Cambridgeshire sustainable travel planning role • Representation to local plans to ensure county functions have sufficient leverage and policy support and reference in local plans. • Liaison with City Deal and LEP for leverage of developer funding to support economic and residential development • Negotiation, drafting and agreement of S106 agreements with associated development. Including large site provision for education and transport, such as funding for new schools, significant highway improvements and city deal funding.
9.	Flood Risk Management Strategy and work	Wed Oct 25 th 2-4pm	The training will cover: <ul style="list-style-type: none"> • The County Council's statutory duties and responsibilities in flood risk management • The importance of joint working with other risk management authorities and other internal teams • From investigation to delivery (Surface Water Management Plans) • How Members can help

Ref	Subject	Date	Description of training
			<ul style="list-style-type: none"> The Flood and Water Team structure
10.	Energy Strategy and work	Mon 13 th Nov 10am-12pm	<p>The training will cover:</p> <ul style="list-style-type: none"> Strategic overview – Disruption and change in the energy market and its relevance to the Council Progress with the Local Energy Investment Strategy for Greater Cambridge Greater Peterborough Local Enterprise Partnership area The East Anglian Local Innovation Project Progress delivering the Council's Corporate Energy Strategy including: <ul style="list-style-type: none"> Schools programme CCC buildings Solar Park Smart Energy Grid Procurement Other projects
11.	County Planning Minerals and Waste	Wed 29 th Nov 2-4pm	The County Planning, Minerals and Waste training will set out the roles and responsibilities of the team, including the types of planning applications determined and how this function feeds into the wider growth agenda across Cambridgeshire.
12.	Major railway projects	Mon 18 th Dec 2-4pm	
13.	A14 site visit	Tbc – Mar 2018	<p>Organised primarily for E&E Committee, however H&CI Committee may also attend where there are spaces available (spaces are limited to 20).</p> <p>This site visit will include:</p> <ul style="list-style-type: none"> a presentation on the scheme background, scheme objectives, scheme overview, progress to date and work planned visit to the Mobile Visitor Centre and the Traffic Management Control Centre

ECONOMY AND ENVIRONMENT POLICY AND SERVICE COMMITTEE AGENDA PLAN

Published on 2nd January 2018
Updated 22nd January 2018



Cambridgeshire
County Council

Notes

Committee dates shown in bold are confirmed.

Committee dates shown in brackets and italics are reserve dates.

The definition of a key decision is set out in the Council's Constitution in Part 2, Article 12.

* indicates items expected to be recommended for determination by full Council.

+ indicates items expected to be confidential, which would exclude the press and public.

Additional information about confidential items is given at the foot of this document.

Draft reports are due with the Democratic Services Officer by 10.00 a.m. eight clear working days before the meeting.

The agenda dispatch date is six clear working days before the meeting.

Committee date	Agenda item	Lead officer	Reference if key decision	Deadline for draft reports	Agenda despatch date
08/02/18	Transport Scheme Development	Chris Poultney / Natasha Hincks	2018/029	25/01/18	30/01/18
	Recommendation from the Ely Cambridge Transport Study	Sarah Hatcher	Not applicable		
	Queen Adelaide Traffic Study	Chris Poultney	Not applicable		
	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable		
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		

Committee date	Agenda item	Lead officer	Reference if key decision	Deadline for draft reports	Agenda despatch date
	Agenda Plan	Democratic Services	Not applicable		
08/03/18	Response to Outline Planning Application for Wintringham Park, St Neots & Section 106	Juliet Richardson	Yes	22/02/18	27/02/18
	Wisbech Access Strategy - recommendation of schemes to access £10.5m Growth Deal Funding	Jack Eagle	Not applicable		
	Connecting Cambridgeshire Update	Noelle Godfrey	Not applicable		
	Risk Management	Tamar Oviatt-Ham	Not applicable		
	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable		
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		
	Agenda Plan	Democratic Services	Not applicable		
12/04/18	Ely Bypass Costs	Brian Stinton	2018/021	29/03/18	03/04/18
	Cambridgeshire and Peterborough Minerals and Waste Local Plan – Preliminary Consultation	Ann Barnes	Not applicable		
	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable		
	Business Planning	Graham Hughes	Not applicable		
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		

Committee date	Agenda item	Lead officer	Reference if key decision	Deadline for draft reports	Agenda despatch date
	Agenda Plan	Democratic Services	Not applicable		
24/05/18	Planning Obligations Strategy	Colum Fitzsimons	Not applicable	10/05/18	15/05/18
	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable		
	Business Planning	Graham Hughes	Not applicable		
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		
	Agenda Plan	Democratic Services	Not applicable		
14/06/18 (reserve meeting)	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable	31/05/18	05/06/18
	Business Planning	Graham Hughes	Not applicable		
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		
	Agenda Plan	Democratic Services	Not applicable		
12/07/18	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable	28/06/18	03/07/18
	Business Planning	Graham Hughes	Not applicable		
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		
	Agenda Plan	Democratic Services	Not applicable		

Committee date	Agenda item	Lead officer	Reference if key decision	Deadline for draft reports	Agenda despatch date
16/08/18 (reserve meeting date)				02/08/18	07/08/18
13/09/18	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable	30/08/18	04/09/18
	Business Planning	Graham Hughes	Not applicable		
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		
	Agenda Plan	Democratic Services	Not applicable		
11/10/18	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable	27/09/18	02/10/18
	Business Planning	Graham Hughes	Not applicable		
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		
	Agenda Plan	Democratic Services	Not applicable		
15/11/18	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable	01/11/18	06/11/18
	Business Planning	Graham Hughes	Not applicable		
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		
	Agenda Plan	Democratic Services	Not applicable		
06/12/18	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable	22/11/18	27/11/18

Committee date	Agenda item	Lead officer	Reference if key decision	Deadline for draft reports	Agenda despatch date
	Business Planning	Graham Hughes	Not applicable		
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		
	Agenda Plan	Democratic Services	Not applicable		
10/01/19	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable	21/12/18	31/12/18
	Business Planning	Graham Hughes	Not applicable		
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		
	Agenda Plan	Democratic Services	Not applicable		
07/02/19 Reserve date				24/01/19	29/01/19
14/03/19	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable	01/03/19	05/03/19
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		
	Agenda Plan	Democratic Services	Not applicable		
11/04/19 Reserve date				28/03/19	02/05/19
23/05/19	Finance and Performance Report	Sarah Heywood / David Parcell	Not applicable		
	Business Planning	Graham Hughes	Not applicable		

Committee date	Agenda item	Lead officer	Reference if key decision	Deadline for draft reports	Agenda despatch date
	Economy and Environment Committee Training Plan	Tamar Oviatt-Ham / Tess Adams	Not applicable		
	Agenda Plan	Democratic Services	Not applicable		

Notice made under the Local Authorities (Executive Arrangements) (Meetings and Access to Information) (England) Regulations 2012 in compliance with Regulation 5(7)

1. At least 28 clear days before a private meeting of a decision-making body, public notice must be given which must include a statement of reasons for the meeting to be held in private.
2. At least 5 clear days before a private meeting of a decision-making body, further public notice must be given which must include a statement of reasons for the meeting to be held in private, details of any representations received by the decision-making body about why the meeting should be open to the public and a statement of the Council's response to such representations.

Forward plan reference	Intended date of decision	Matter in respect of which the decision is to be made	Decision maker	List of documents to be submitted to the decision maker	Reason for the meeting to be held in private
.../...	[Insert Committee date here]		[Insert Committee name here]	Report of ... Director	The decision is an exempt item within the meaning of paragraph ... of Schedule 12A of the Local Government Act 1972 as it refers to information

Decisions to be made in private as a matter of urgency in compliance with Regulation 5(6)

3. Where the date by which a meeting must be held makes compliance with the above requirements impracticable, the meeting may only be held in private where the decision-making body has obtained agreement from the Chairman of the Council.
4. Compliance with the requirements for the giving of public notice has been impracticable in relation to the business detailed below.
5. The Chairman of the Council has agreed that the Committee may hold a private meeting to consider the business referred to in paragraph 4 above because the meeting is urgent and cannot reasonably be deferred for the reasons stated below.

Date of Chairman's agreement	Matter in respect of which the decision is to be made	Reasons why meeting urgent and cannot reasonably be deferred

For further information, please contact Quentin Baker on 01223 727961 or Quentin.Baker@cambridgeshire.gov.uk

