

**MARCH AREA TRANSPORT STUDY PROGRESS REPORT**

**To:** Economy and Environment Committee

**Meeting Date:** 5 March 2020

**From:** Steve Cox, Executive Director, Place and Economy

**Electoral division(s):** March North and Waldersley, March South and Rural, Whittlesey South

**Forward Plan ref:** na                      **Key decision:** No

**Purpose:** To note progress on the March Area Transport Study, comment on the emerging outcomes and approve them for consultation with the public.

**Recommendation:** It is recommended that the Economy and Environment Committee:

- a) Note and comment on the emerging outcomes of the March Area Transport Study.
- b) Approve the study outcomes for consultation with the public.

<b><i>Officer contact:</i></b>	<b><i>Member contacts:</i></b>
Name: <b>Steve Newby</b>	Names: Councillors Ian Bates & Tim Wotherspoon
Post: Transport and Infrastructure Officer	Post: Chair/Vice-Chair
Email: Steve.Newby@cambridgeshire.gov.uk	Email:
Tel: 01223 699810	Tel: 01223 706398

## **1. BACKGROUND**

- 1.1 The original March Area Transport Study (2011) and the March Market Town Transport Strategy (2013) identified a number of transport interventions that were needed to address existing congestion problems and provide capacity for housing and employment growth for March, identified in the Fenland Local Plan. Although these pinch points were identified in previous studies, no schemes were devised to address the problems.
- 1.2 The Cambridgeshire and Peterborough Combined Authority (CPCA) presented a paper at its Board meeting on 28<sup>th</sup> March 2018 that set out spending on transport during the period 2018-20.
- 1.3 The March Junctions Improvement Package was one of the transport schemes identified in the pipeline of schemes and was allocated £100k in October 2017 and a further £1m in March 2018 for a feasibility study with responsibility for leading and delivering the study delegated to Cambridgeshire County Council (CCC). CCC subsequently appointed Skanska as its consultant support for the study through its Highways Services Contract and the study was renamed as the March Area Transport Study (MATS).
- 1.4 In addition, and following approval from Economy and Environment Committee in July 2018, a Member Steering Group (MSG) was established to ensure Local Member involvement throughout the study. This has met twelve times to date and has successfully guided the study throughout its development.
- 1.5 The study has examined a wide range of options developed from officer led workshops and subsequently reviewed by the MSG. These options were assessed using bespoke transport models at a higher strategic and more detailed operational level. Study outcomes are now detailed in the Options Assessment Report. The Executive Summary of this report is included as Appendix A.

## **2 MAIN ISSUES**

- 2.1 At the outset of the study and after discussions with the CPCA and the MSG, the study was extended to cover all transport modes and the consideration of small, medium and large interventions relating to those junctions initially identified. MATS has identified various packages of interventions, some of which have been progressed to feasibility design with the further objective of ensuring these schemes would be ready for further development if and when any funding opportunities arise. None of the schemes assessed prejudice options for reinstating the March – Wisbech rail line, a separate CPCA funded project.
- 2.2 A variety of smaller scale Quick Win (QW) schemes were identified early on after discussions between officers and Members, and these have progressed separately from the main study. These quick win schemes comprise various small scale measures such as signal improvements at junctions, better lighting and improvements for pedestrians and cyclists through new and upgraded crossings and pavements. A full list of these Quick Win measures is included at Appendix B.
- 2.3 The first of these QW schemes to be delivered (QW 20 in May 2019) involved re-timing the traffic signals on the B1101 through March to take account of present day traffic flows. Signal timings for weekday and Saturday peak hours were changed and anecdotal evidence suggests improvements were made to traffic flow and delay as a result. Other QW schemes are being progressed through to detailed design with associated target construction costs and these are due at different times this year. QW 21 and 23, completing footways on Norwood Ave and Hundred Rd respectively already have target construction

costs and discussions with the CPCA regarding funding for delivery have commenced. Funding discussions for the remaining QW schemes will take place throughout the coming months.

- 2.4 In parallel to the MATS project, Fenland District Council has developed a proposal for the Future High Street Fund (FHSF) to fundamentally change the way in which March functions as a Town Centre. This includes improvements in Broad Street which will improve pedestrian flow and footfall, changes to densification in use which will support a 24-hour economy and support resilience, and public realm improvements which will open up underused and derelict areas for commercial development.
- 2.5 The purpose of this investment is to arrest the decline in March Town Centre and enable the area to make the most of its untapped potential. This opportunity for funding has presented itself at an opportune time for March as it builds on the recently adopted Growing Fenland Strategy for the development of Fenlands towns and has linked closely with the development of the MATS.
- 2.6 There has been regular dialogue between the two projects to ensure that any proposals considered within this study for the Town Centre, and particularly Broad Street, are consistent with the FHSF aspirations.
- 2.7 The MATS Options Assessment Report, which is the key output from this stage of work, summarises and sets out the findings of the main study. Schemes were assessed in three phases, with each phase informing the next; a strategic assessment phase, an operational assessment phase and a scheme packaging phase (Figure 1).



Figure 1 – MATS Assessment Process

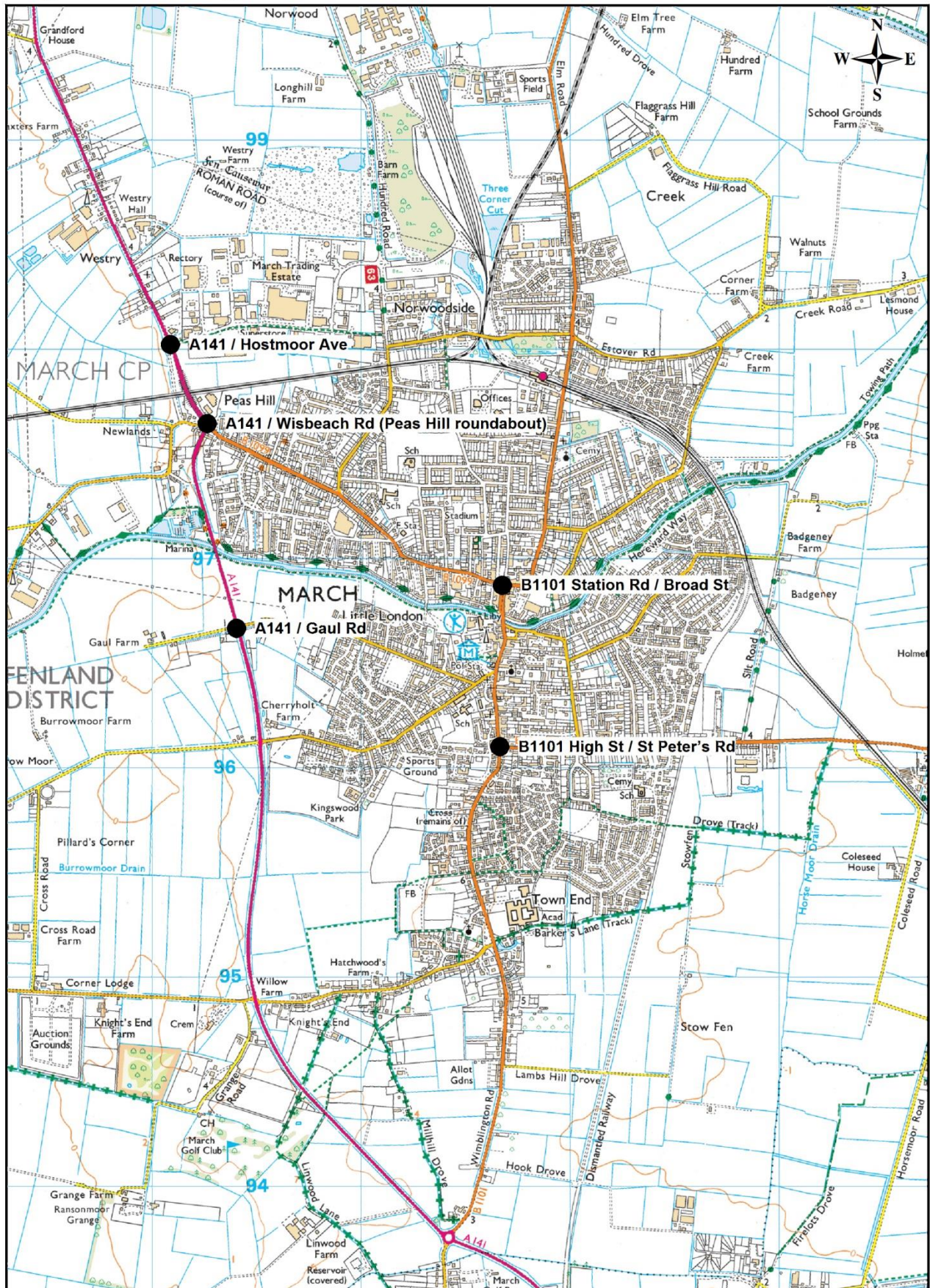
### Strategic Assessment

- 2.8 The strategic assessment considered larger options to determine at an early stage if they were likely to offer good value for money in accordance with Central Government Transport Analysis Guidance (TAG), the standard assessment framework, and rule out those that did not. Those options that were indicated to offer good value for money were then progressed to the Operational Assessment. To enable this economic assessment process, a strategic MATS SATURN model was built for the study and was used to calculate the benefits of each option, both in the present year and in future years, factoring in planned growth.
- 2.9 Currently, traffic in March experiences congestion and delays predominantly at the Broad St / Station Rd and High St / St Peters Rd junctions during weekday peak hours. Traffic levels are forecast to increase by up to 20% in peak hours by 2031 according to growth forecasts based on the Fenland Local Plan. Under these assumptions congestion is forecast to increase most significantly at the following five junctions if nothing is done to mitigate this growth (Figure 2):



# Figure 2 - Congested Junctions

No Window



Scale (at A4): 1:23355

Centred at: 541493,296533

Date:03/02/2020

© Crown copyright and database rights 2020 OS 100023205

- A141 / Hostmoor Ave
- A141 / Wisbeach Rd (Peas Hill roundabout)
- B1101 Station Rd / Broad St
- B1101 High St / St Peter's Rd
- A141 / Gaul Rd

2.10 The schemes assessed in the MATS aimed to address problems at these junctions, as well as inform and support Local Plan development sites. The larger strategic schemes that were also considered included:

- A141 re-alignment options (a number of options bypassing the current alignment of the A141)
- the March Northern Industrial Link Road (a number of different alternative alignments)
- new river crossings - both within March town centre and as part of a wider Eastern bypass to the town

2.11 Assessment of A141 re-alignment options concluded that none of the options offered value for money alongside significant deliverability issues. The options that were therefore taken further in the study were online A141 junction improvements at Twenty Foot Rd (to the north of March), Hostmoor Ave and Peas Hill roundabout. The study concluded that re-timing the recently installed traffic signals at Gaul Rd would accommodate future traffic growth at that junction.

2.12 Assessment of the March Northern Industrial Link Road (NILR) concluded that the alignment identified in the March Market Town Transport Strategy remained the best alignment as it offers the best value for money due to the relatively low cost and high transfer of trips from alternative routes. However, this alignment runs past Whitemoor Prison and Network Rail's Whitemoor Maintenance Yard and could therefore be a complex time consuming scheme to deliver.

2.13 Of the eastern bypass options around March, none were found to offer value for money due to their very high construction costs when compared to the relatively low number of vehicles that would use them. However, reasonable benefits were obtained for potential new river crossings closer to the existing town centre bridge as these provided alternative routes for the higher numbers of vehicles that currently use the town bridge, as well as those additional trips forecasted as a result of future growth. The area identified to offer the highest potential user benefits was assessed to be that to the west of the current High Street/Broad Street river crossing. However, further development work would be required to assess the feasibility of this route in more detail.

### Operational Assessment

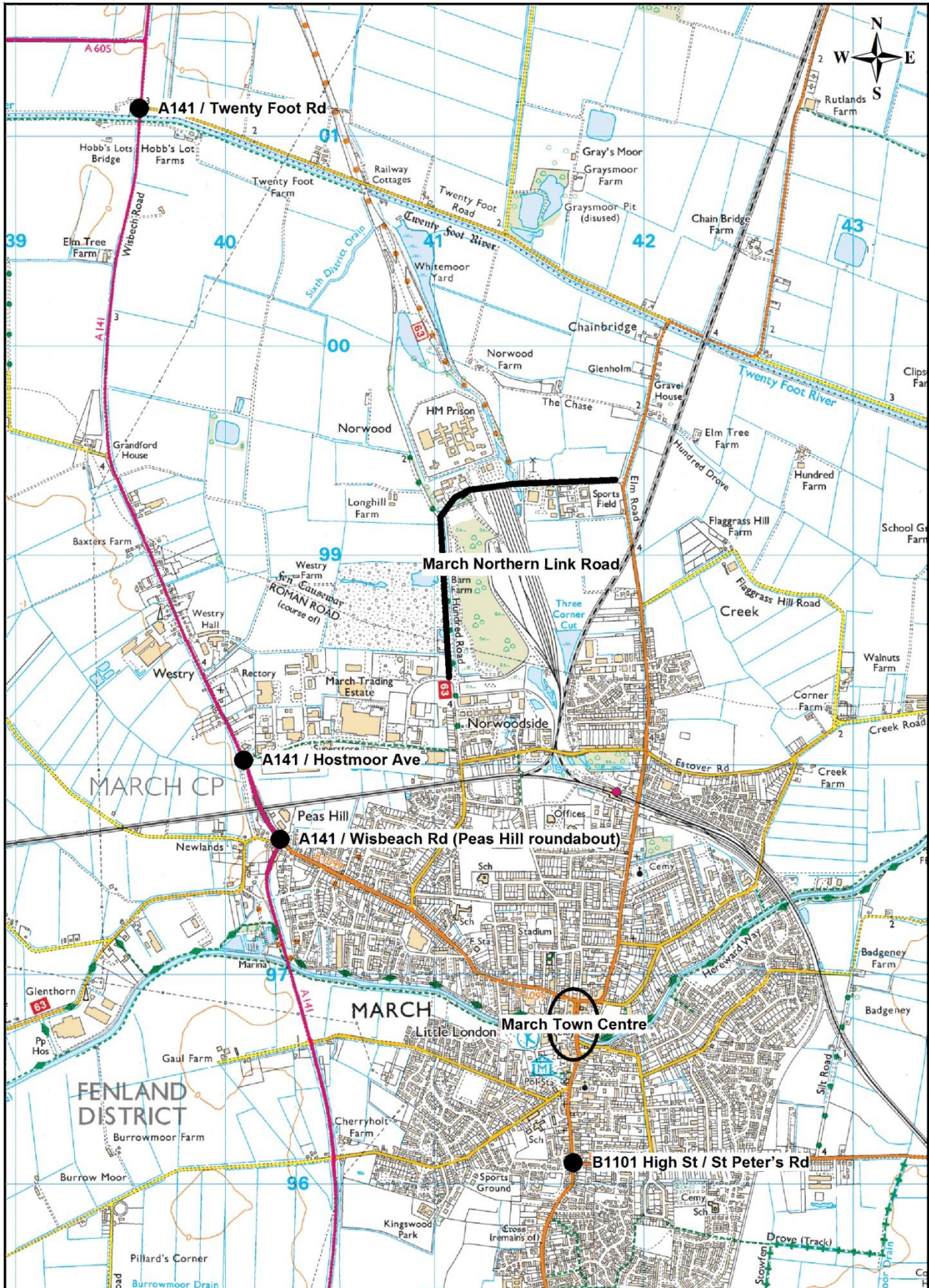
2.14 The operational assessment provided more detailed information about how options performed. This assessment included building on the strategic SATURN model assessment, using a more focussed and specific model, a micro-simulation model, named VISSIM. As with the SATURN model, this was developed specifically for use in the MATS, and looks at present year traffic flows as well as assessing the situation when planned growth is factored in, for the future years of 2026 and 2031.

2.15 Schemes that progressed to the operational assessment are shown in Figure 3 and are:



Figure 3 - Operationally Assessed Schemes

No Window



- A141 / Twenty Foot Rd – introduce traffic signals
- A141 / Hostmoor Ave – test developer funded roundabout
- A141 / Wisbech Rd (Peas Hill roundabout) – re-design existing roundabout
- March NILR – new link road
- B1101 High St / St Peters Rd – re-design traffic signals
- March town centre packages (discussed in more detail below).

- 2.16 Three **March town centre options** were tested which focussed on the area around the Broad St / Station Rd junction in the centre of town. **Town Centre Package 1 (TC1)** (Figure 4) included an upgrade to the traffic signals at Broad St / Station Rd comprising banning the under-used westbound ahead movement along Station Rd and replacing it with a gyratory around Broad St. This option reduced delays to traffic over the existing junction but required re-positioning March Fountain to accommodate the new traffic signals. This option did not permit any re-allocation of road-space for public realm improvements and as a result of this and concerns about the safety of heavy goods vehicles u-turning at the southern end of Broad St it was not considered a viable option and rejected at the Operational Assessment stage.
- 2.17 **Town Centre Package 2 (TC2)** (Figure 5) involved removing the traffic signals at Broad St / Station Rd and replacing them with a mini roundabout. Broad St was reduced to a single lane in each direction with traffic using the western side of Broad St, enabling the eastern side to be re-purposed as public realm. This scheme is included in the March Future High Street Fund (FHSF) bid and ties in with wider aspirations to make March a more pleasant, diverse town centre. This option will require the March Fountain to be re-positioned but it may be renovated and moved to a more prominent place in the public realm space where the public can access it more easily. This scheme offered benefits to traffic by reducing delays at the Broad St / Station Rd junction compared with the existing traffic signals and offered benefits to pedestrians by making Broad St a more pleasant place to visit and shop. Modelling showed this option to perform better than the existing traffic signals now and with increased traffic flows in future years.
- 2.18 **Town Centre Package 3 (TC3)** (Figure 6) has a number of similarities to TC2 in terms of what is proposed on Broad Street and the benefits it provides with decreased vehicle movements and a better public realm. However in TC3, the road capacity removed from Broad St is replaced by a new road and river crossing, most likely located to the west of the existing town bridge. Additionally, improvements to the Burrowmoor Rd / City Rd roundabout are identified, reducing delay at this junction. It should be noted that this option, and in particular the proposal for a new road and river crossing, would likely be a very difficult and costly solution. The cost of construction is also forecast to be very high in comparison with other options considered. This option should be viewed as a much longer term option, and if additional river crossing capacity was to be pursued, this would require significant further feasibility work to understand the best route option alongside more detailed public consultation.

Figure 4 – March Town Centre Package 1

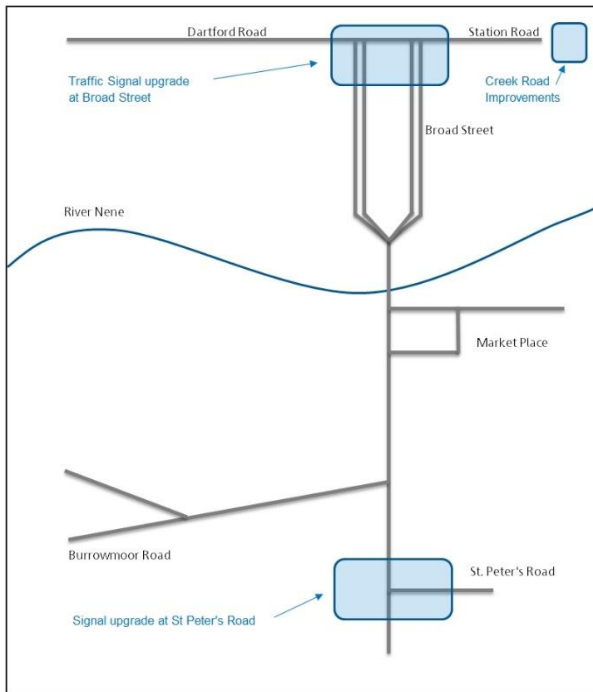


Figure 5 – March Town Centre Package 2

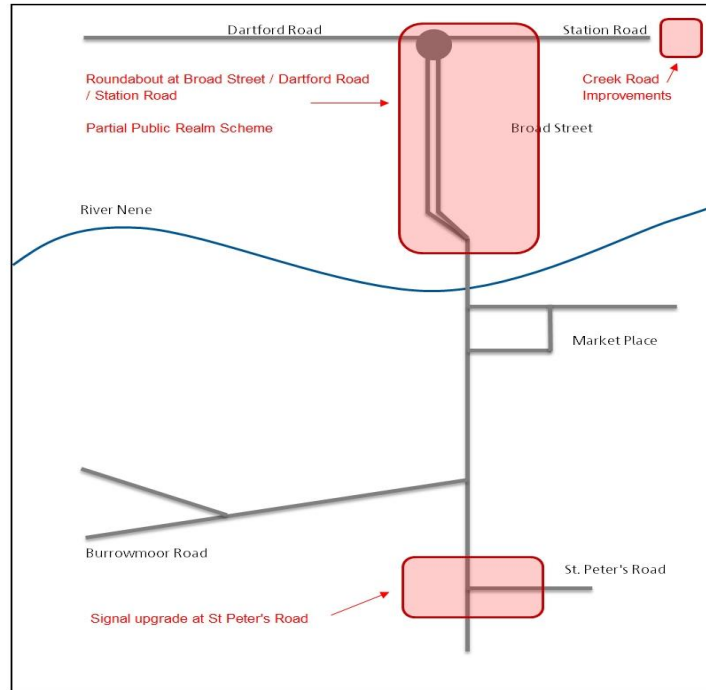
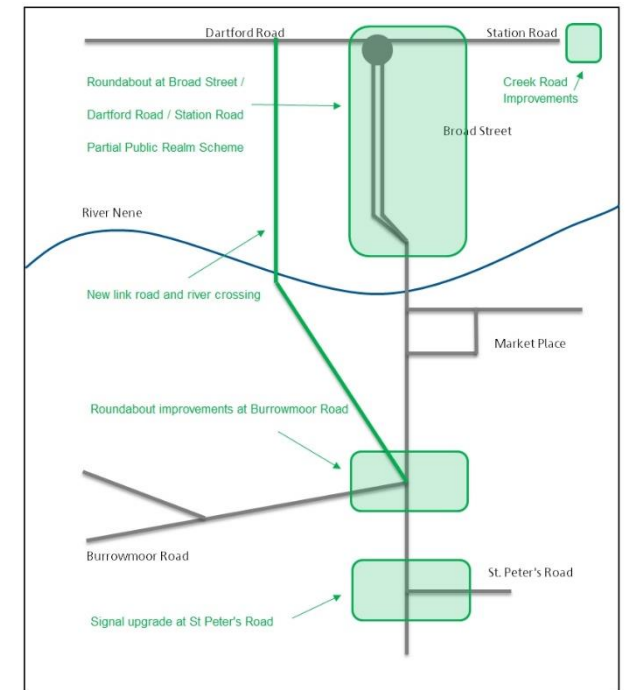


Figure 6 – March Town Centre Package 3





## Packaging Assessment

2.19 The packaging assessment took the best performing schemes from the strategic and operational assessments and combined them into packages based on varying levels of intervention in March town centre, considering scenarios with and without the NILR. High level construction costs were calculated and economic appraisals were run on the packages to produce benefit to cost ratios (BCR) for each. Table 1 lists the component schemes for each package and Table 2 summarises the respective benefit to cost ratios.

Package	Component Schemes				
	Twenty Foot Rd signals	Peas Hill & Hostmoor Ave roundabouts	High St / St Peter's Rd	Town Ctr Package	NILR
Package 1	✓	✓	✓	-	-
Package 1a	✓	✓	✓	-	✓
Package 3	✓	✓	✓	TC2	-
Package 3a	✓	✓	✓	TC2	✓
Package 4	✓	✓	✓	TC3	-
Package 4a	✓	✓	✓	TC3	✓

**Note:** Packages 2 and 2a included Town Centre Package 1 so were removed from the assessment when TC1 was rejected

Package	Benefit to Cost Ratio	DfT Value for Money Statement
Package 1	2.3	High
Package 1a	2.5	High
Package 3	4.4	High
Package 3a	3.6	High
Package 4	1.1	Low
Package 4a	1.2	Low

**Note:** Packages 2 and 2a included Town Centre Package 1 so were removed from the assessment when TC1 was rejected.

2.20 Conclusions from the packaging assessment are:

- All packages serve to mitigate the impact of the Local Plan growth to varying degrees and all perform well
- Packages 1 and 1a do not include any changes to Broad St and both offer High value for money (VfM), with Package 1a (incl NILR) offering slightly better VfM
- Packages 3 and 3a are closely aligned with the FHSF proposal for providing public realm on Broad St and offer the highest VfM relative to Packages 1/1a and 4/4a.
- Packages 4 and 4a include provision of public realm on Broad St with a new river crossing. These two options are very high cost by comparison with other packages, which is reflected by the low BCR and VfM statement and they are considered to be much longer term options.

2.21 Public Consultation detailing options assessed in the study and seeking public opinion on the individual schemes is planned for a 6 week period commencing 28 March 2020. Comments from the public will not be sought on the packaging of schemes. Four public drop-in events are planned at numerous locations, after 20 April to avoid the school Easter holidays. These have been guided by the MSG.

## 2.22 Next steps for MATS are:

- March 2020 – report study outcomes to CPCA Transport and Infrastructure (T&I) committee, FDC Cabinet and March Town Council (MTC)
- March to April 2020 – public consultation on individual schemes
- Summer 2020 – report consultation outcome to CCC E&E committee, CPCA T&I committee, FDC Cabinet and March Town Council, and seek support for the recommended next phase of work
- Apply for funding for the next phase of work and Quick Win schemes.

## 3. ALIGNMENT WITH CORPORATE PRIORITIES

### 3.1 A good quality of life for everyone

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

- The March study will improve access in the study area which will assist with providing better links to employment, health and education.
- The March study has considered use of sustainable forms of transport which have health benefits.

### 3.2 Thriving places for people to live

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

- The primary focus of the March study is to enable growth in the study area. This is both housing and employment growth which would be to the benefit of all local residents.
- Additional aims are to reduce congestion and improve safety across the area which will result in economic benefits.

### 3.3 The best start for Cambridgeshire's children

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

- MATS has identified a key location on St Peters Rd for installation of a zebra crossing enabling safer crossing of a busy main road for school children.

### 3.4 Net zero carbon emissions for Cambridgeshire by 2050

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

- The transport schemes outlined in the Options Assessment Report are aimed at reducing vehicle delays and congestion thereby reducing emissions from idling engines
- The walking and cycling strategy developed as one of the Quick Win schemes aims to promote walking and cycling across the town which will encourage reduction in vehicle use
- The aspiration to improve public realm on Broad Street could further encourage non-car use with associated benefits on air quality.

## 4. SIGNIFICANT IMPLICATIONS

### 4.1 Resource Implications

This project has been delegated to the Transport Strategy and Funding team by the CPCA. Skanska were appointed as the consultant support for the study via the CCC Highways

Services Contract. The total budget for the lifetime of the study, as allocated by the CPCA, was £1m. The study is currently running under budget, with actual spend to date (since the outset of the study) at around £550,000. As it stands, the study is forecast to spend just over £900,000 of the £1m budget. This includes the consultation costs of £4,500.

#### 4.2 Procurement/Contractual/Council Contract Procedure Rules Implications

In procuring the March ATS, CCC appointed Skanska as the study consultant through the Highways Services contract. This is in line with procurement practices.

#### 4.3 Statutory, Legal and Risk Implications

The March ATS has a quantified risk assessment that can be provided if required.

#### 4.4 Equality and Diversity Implications

There are no significant implications within this category at this stage of the Study. An equality impact assessment will be undertaken at the option appraisal stage.

#### 4.5 Engagement and Communications Implications

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

- MATS is scheduled to go to Public Consultation in March 2020. Discussions are ongoing with CCC Communications officers to support the project team with this part of the study.

#### 4.6 Localism and Local Member Involvement

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

- Local Members have been involved in MATS via regular Local Member Steering Group meetings. March Town Council Members also sit on the MSG.

#### 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: Gus De Silva
Has the impact on statutory, legal and risk implications been cleared by the Council's Monitoring Officer or LGSS Law?	Yes Name of Legal Officer: Fiona McMillan Monitoring Officer
Have the equality and diversity implications been cleared by your Service Contact?	Yes Name of Officer: Elsa Evans
Have any engagement and communication implications been cleared by Communications?	Yes Name of Officer: Eleanor Bell



<b>Have any localism and Local Member involvement issues been cleared by your Service Contact?</b>	Yes Name of Officer: Andrew Preston
<b>Have any Public Health implications been cleared by Public Health</b>	Yes Name of Officer: Iain Green

<b>Source Documents</b>	<b>Location</b>
<p><b><u>March ATS Documents</u></b></p> <p>Existing Conditions and Data Collection Report</p> <p>Sustainable Travel Report</p> <p>SATURN Model Validation Report</p> <p>VISSIM Model Validation Report</p> <p>Forecasting Report</p> <p>Options Assessment Report</p>	<p><a href="https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/transport-funding-bids-and-studies/march-transport-study">https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/transport-funding-bids-and-studies/march-transport-study</a></p>

## **Appendix A – March ATS – Options Assessment Report, Executive Summary**

### **Executive Summary**

#### **Introduction**

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

#### **Assessment Process**

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

- Strategic Assessment
- Operational Assessment
- Packaging Assessment.

#### **Strategic Assessment**

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

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

#### **Operational Assessment**

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

#### **Packaging Assessment**

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

#### **Future High Streets Fund**

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

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

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

### **Option Development**

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

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

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

### **Option Review**

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

### **Further Option Evolution**

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

### **Strategic Assessment Summary**

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

The secondary purpose of the Strategic Assessment is also to determine a set of traffic flows to be used in the Operational Assessment.



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

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

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

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

### **Operational Assessment Summary**

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

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

- Peas Hill Roundabout Option 5.2 (60m ICD), in conjunction with the A141 / Hostmoor Avenue roundabout (developer funded scheme)
- Town Centre Package 2 (TC2), consisting of:
  - Broad Street / Dartford Road / Station Road mini roundabout, with Broad Street made one lane in each direction (and the provision of public realm improvements)
  - St Peter's Road Traffic Signal Improvements
- Town Centre Package 3 (TC3), consisting of:
  - Station Road / Creek Road Mini Roundabout
  - Broad Street / Dartford Road / Station Road mini roundabout, with Broad Street made one lane in each direction (and the provision of public realm improvements)
  - A New River Crossing, joining Dartford Road to the north and City Road to the south, with a new roundabout at Burrowmoor Road / City Road and High Street
  - St Peter's Road Traffic Signal Improvements.

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

## Packaging Assessment Summary

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

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

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

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

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

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

The packages assessed are described beneath:

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

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

Table 1: Package BCR Results

Net Benefit/BCR Impact						
	Package 1	Package 1a	Package 3	Package 3a	Package 4	Package 4a
<b>Present Value of Benefits (PVB)</b>	10225	23019	22711	35091	37163	47094
<b>Present Value of Costs (PVC)</b>	4501	9428	5122	9679	33699	38682
<b>Net Present Value (NPV)</b>	5724	13713	17589	25412	3464	8412
<b>Benefit/Cost Ratio (BCR)</b>	<b>2.3</b>	<b>2.5</b>	<b>4.4</b>	<b>3.6</b>	<b>1.1</b>	<b>1.2</b>
<b>VFM Statement</b>	High	High	High	High	Low	Low

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

Packages 3 and 3a are closely aligned to the FHSF proposals and have the highest BCRs relative to their counterpart Packages (Package 3 is higher than Package 1 and 4, Package 3a is higher than 1a and 4a). Packages 3, 3a, 4 and 4a all require the repositioning of March Town Fountain, which would be incorporated into wider public realm and landscape design. This study has not considered the detail of that design, and this would need to be undertaken in consultation with environment, conservation and heritage specialists, as well public engagement in some form.

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

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

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



## Appendix B – Quick Win Schemes

Quick Win Scheme	Description	Assessment Completion Date
QW1 – A141/Twenty Foot Rd	Upgrade junction to traffic signals. Preliminary assessment indicated junction would have to be moved northwards, hence it was removed from QW schemes and added to the main study.	n/a
QW1A – Station Rd	Improve safety for pedestrians. Provide a zebra crossing	Feb 20
QW2 – Upwell Rd/Cavalry Drive	Introduce gateway feature at edge of town, introduce 40mph speed limit buffer and revise deflections on Cavalry Dr roundabout	Apr 20
QW11-13 March-wide Walking/Cycling Strategy	March-wide walking and cycling facility audit and produce improvement delivery plan	Feb 20
QW15 – St Peter’s Rd	Improve safety for school children. Provide a zebra crossing	Apr 20
QW16 – March-wide HGV Signage	Improve signage for HGV drivers to reduce poor route choice	May 20
QW19 – A141 / Burrowmoor Rd and A141/Knights End Rd junctions	Introduce street lighting at two junctions	Aug 20
QW20 – Traffic signals on B1101	Re-validate signal timings on B1101 between St Peters Rd and Station Rd	Completed May 19
QW21 – Norwood Ave	Complete footway on southern side of Norwood Ave	Jan 20
QW22 – Norwood Rd	Introduce traffic calming on three sections of Norwood Rd	Nov 19
QW23 – Hundred Rd	Complete footway on eastern side of Hundred Rd including build out feature	Jan 20