

# Executive Summary – March and Manea Railway Station Improvements

## 1.1. Introduction

- 1.1.1 This business case sets out proposals for investment in the Fenland communities, enabling them to take greater advantage of rail connectivity to access jobs, education and services and to encourage and enable sustainable growth in the area.
- 1.1.2 The modest proposed improvements in station facilities at Manea and March stations complement the bigger investment in improved rail services in the area, including capacity improvements at Ely North and Soham, increased services, new stations (eg Cambridge North and South) and more stops. Together these investments will provide significantly better rail provision, not only for Manea and March but also for the surrounding communities, including the 9,000 people living in Chatteris and those in the rural hinterlands, which have no direct rail service.
- 1.1.3 The provision of park and ride, a key element of the proposal, is especially important in meeting the needs of this wider community, complemented by easier ticketing, improved information and a more attractive, safer environment for station users. These two Fenland stations are inter-dependent, with users being able to choose between the stations for travel to a range of destinations. To reflect this, we have undertaken a combined business case which encompasses both stations, encompassing the needs of existing users, new users taking advantage of the increased parking and people looking to move into the area, for whom rail connectivity will be a key factor.
- 1.1.4 This is especially important post-Covid since there is a drive towards more distributed living in areas distant from the core economic growth areas, including those around Cambridge and Peterborough. This provides a real opportunity for the Fenland communities to attract new people to live in the area, and rail connectivity provides one of the key attractors. Failure to grasp this opportunity will lead to a continued decline for the Fenland communities, as well as an increased reliance on high levels of unsustainable car travel.
- 1.1.5 The scheme demonstrates good value for money with the benefit to cost ratio for the funding being asked of the CPCA being 3.26 without the current level of optimism bias (9%) and 2.99 with it. (BCRs reflect management and construction costs.) The Net Present Value of the benefits is £4.84m without optimism bias and £4.65m with it. Optimism bias could be set to 63% before the BCR drops to 2.0 and this level would be overly pessimistic for this stage of the project.

## 1.2. Strategic Case

- 1.2.1 This is a summary of the business case for improvements and regeneration to March and Manea stations on the railway line between Peterborough and Ely.

- 1.2.2 The Cambridgeshire and Peterborough Combined Authority's (CPCA) Business Plan includes £8.7 million in the 'costed but not yet committed' category for the Fenland Stations Regeneration Project (FSRP). This allocation is subject to confirmation of costs and benefits through the work being conducted by Fenland District Council (FDC), rail franchise operator Greater Anglia (GA) and Network Rail (NR), and the completion of a successful business case.
- 1.2.1 Fenland communities are remote from the growing centres of employment and rely on good transport links to maintain their economic and social wellbeing. Highway links in the area are generally slow and unreliable, and the rail service provides a critical role in ensuring people can access jobs, education, training and key services such as healthcare.
- 1.2.2 The Fenland area has largely been bypassed by the economic success of the Greater Cambridge area to the south. There are significant areas of deep deprivation especially around Wisbech and north and east of March.
- 1.2.3 Both Manea and March railway stations serve a wide area, including substantial communities such as Chatteris and Wisbech, which have no railway stations of their own. Driving to a nearby station from these communities, and from the large surrounding rural areas, is very important.
- 1.2.4 The plans for housing growth in the Fenland communities are important in terms of providing adequate housing to the wider population and to the continued sustainability of the communities themselves. An important part of the offer, especially in meeting the needs of working families, is in terms of rail services and the access to jobs and services which this facilitates.
- 1.2.5 11,000 new homes and 9,000 local jobs are proposed for Wisbech, March, Whittlesey and Chatteris but without large, sustainable increases in transport capacity journey times are likely to increase significantly and become more unreliable.
- 1.2.6 Investment in the rail service, especially in terms of station facilities and parking, is crucially important. As well as the larger scale investments in the area (including the new Cambridge South station and capacity increases at Ely North Junction) and the services themselves (including frequency increases on the Peterborough to Ipswich service) the complementary interventions set out in the business case form an important part of the customer offer. Better waiting facilities, improved shelters, better information, ticketing equipment and parking facilities will all make the service more attractive to existing and new residents in the area.
- 1.2.7 The availability of the rail service and the improvements set out in the business case will also make a significant contribution towards lowering car-dependency. Although short journeys may be made to the stations, longer trips to destinations such as Peterborough and Cambridge will be reduced. Many local trips to the stations can be made by walking and cycling, helping to provide more sustainable, inclusive communities.
- 1.2.8 Fenland has a long and strong tradition of community involvement in its railway starting from before FDC, CCC and Fenland Strategic Partnership (FSP) developed the 'Fenland Rail Development Strategy 2011 – 2031' (FRDS). This has provided a detailed framework for

actions to promote and develop stations, train services and community involvement in the Hereward Line ever since. One of the outcomes of the FRDS was the Hereward Community Rail Partnership [CRP] which has since been heavily involved in rail proposals.

- 1.2.9 In recognition of these issues, the Mayor of the Cambridgeshire & Peterborough Combined Authority has identified the station improvements as a key priority and has allocated resources from the Devolution Deal to ensure delivery. This will provide significant betterment for the communities and, as the longer-term rail improvements are brought in, there will be a sustained augmentation of these benefits.
- 1.2.10 The Fenland Stations Regeneration Project (FSRP) has two phases with the current transport business case being for Phase One only. The FSRP is an element of wider railway improvements in the area including new passenger trains, separate station facilities improvements that are being made by GA as part of its franchise commitments, proposals for service frequency improvements as well as new rail links such as 'Wisbech Rail'.
- 1.2.11 The proposals fit strategically at national, regional, local authority, local community and rail industry level.
- 1.2.12 The wider **objectives** are
- To enable improved access to jobs and services for the Fenland community by:
    - Influencing the rail industry to provide more services, including early morning and late evening services.
    - Influencing the rail industry to stop more trains from Fenland stations at Cambridge North.
    - Improving station facilities and access.
    - Working collaboratively with the Hereward Community Rail Partnership local authorities, community groups and station users to facilitate continuous improvement in rail services, station facilities, information and access. The Hereward CRP has an ongoing programme to raise awareness of the railway and stations and to encourage their use.
  - To accommodate housing growth in the area by
    - Improving rail services and station facilities
    - Improving access to the stations
    - Providing parking for cyclists and motorists
    - Complementing the wider masterplans and regeneration programmes for the three towns
  - Improve levels of passenger service at Fenland rail stations by:
    - Providing improved waiting, ticketing, security and information services

- Improving access to the rail station from the surrounding community
- Improving car and cycle access and parking
- Improving integration with bus and taxi services
- Accommodate and enable longer and more frequent train services at Fenland rail stations by:
  - Lengthening short platforms to accommodate longer trains
  - Supporting the wider rail investment, including the Ely capacity improvements which will enable the hourly Peterborough-Ipswich service.

1.2.13 The measures covered by the current business case are:

#### **Manea Station**

- Provision of a station car park to provide car parking facilities, with the number determined in relation to land availability, cost effectiveness and design considerations;
- Design and provision of a new waiting shelter with a specification to match the location at an unstaffed station and to meet customer requirements for inclusive access, safety and comfort, as well as minimising ongoing cleaning and maintenance requirements;

#### **March Station**

- Redesign and reconstruction/renovation of the ticket office, waiting room, toilets and shop to improve their attractiveness, improve their functionality, address current dilapidation and reduce ongoing maintenance requirements (all on platform 1);
- Provision of additional car parking spaces providing the optimum number of spaces possible within the available land, with due regard to safety, security and access, including access for people with limited mobility or other impairments.

### **1.3. Economic Case**

1.3.1 The methodology for appraising the benefits is in two parts:

- Calculate the passenger demand that individual station facilities and 'exogenous' factors such as population growth could generate for a period into the future and;
- Calculate the societal benefits generated for and by the extra passenger demand. Some of these benefits are economic and can be monetised whilst social and environmental benefits are qualitatively presented.

1.3.2 The method for establishing passenger demand uses empirical evidence from elsewhere that has been gathered by the rail industry into the Rail Passenger Demand Forecasting Handbook (RPFH).

1.3.3 Elasticities are applied to baseline ticket data to forecast the demand for facilities. Ticket data comes from the industry wide LENNON database - Latest Earnings Networked

Nationally Overnight – and has been provided for 2017/18 which therefore forms the base year for forecasts.

- 1.3.4 Future year forecasts are based on how population is expected to grow as well as there being an element for growth related to the provision of new station facilities and increasing jobs and services in Greater Cambridge and Peterborough etc. Doubling of the frequency of GA's service between Peterborough and Ipswich is anticipated to take place in 2029 after rail infrastructure improvements are made in the Ely area.

<b>Demand element</b>	<b>March</b> forecast no. of passengers (entries and exits)	<b>Manea</b> forecast no. of passengers (entries and exits)
<b>Year 2017/18</b> Actual no. of entry and exits as per Office of Road and Rail station data	<b>404,345</b>	<b>15,947</b>
<b>2021/22</b> Business case forecast including growth from increased population and generated by new station facilities	<b>452,400</b>	<b>18,200</b>
<b>2029/30</b> Further growth from 2021/22 plus rail service frequency improvements in 2029	<b>622,000</b>	<b>31,600</b>
<b>2036/37</b> Continuing growth	<b>669,600</b>	<b>33,800</b>

- 1.3.5 'Present Value Benefits' (PVB) are calculated for each year. Note that the values presented below are for the Core Scenario, that is, they include the forecasted effect of the proposed station facilities and car parks as well as the impact that the increase in population and other background growth will have on passenger demand. They do not, however, include the impact of increased rail services. This is because they are dependent on other factors such as Ely improvements.

- 1.3.6 There are three parts to the PVBs:

- "Willingness to pay" (WTP) values for new station facilities;
- The value of improved safety and security resulting from increased and improved parking provision; and
- Marginal External Costs (MECS), which include monetised road traffic decongestion benefits, savings in road accidents and reductions in environmental externalities such as greenhouse gases.

- 1.3.7 Taking each in turn:

- 1.3.8 **WTP:** The monetary benefits of the new station facilities, in 2010 prices, adjusted for inflation and discounted for the 15 year appraisal period from 2021/22 to 2036/37 are:

- March: £49,195
- Manea: £6,191

- 1.3.9 **Car park safety and security:** The resulting equivalent time savings related economic benefits in the core scenario are as follows:

- March: -£517,564 (At March the figure is negative because the £4 or £5 parking fee outweighs the monetary value of safety and security improvements.)
- Manea: £298,855

**1.3.10 MECS:** Shown in the table in £s millions for the 60 year period from 2021/22.

	Congestion	Infrastructure	Accidents	Local Air Quality	Noise	Greenhouse Gases	Indirect Taxation	TOTAL
MARCH	6.27	0.03	0.68	0.01	0.05	0.31	-0.54	<b>6.79</b>
MANEA	0.329	0.001	0.038	0.008	0.002	0.0016	-0.037	<b>0.358</b>

1.3.11 The PVB for the two stations amount to £6.984m over the appraisal period.

	March	Manea	Total March + Manea
<b>WTP value (2021/22 to 2036/37)</b>	£0.049m	£0.006m	£0.055m
<b>Equivalent time savings (2021/22 to 2081/82)</b>	-£0.518m	£0.299m	-£0.219m
<b>MECs (2021/22 to 2081/82)</b>	£6.790m	£0.358m	£7.147m
<b>Present Value Benefits Total</b>	<b>£6.321m</b>	<b>£0.663m</b>	<b>£6.984m</b>

1.3.12 Present Value Costs (PVCs) showing 2020 prices, and 2010 prices to compare with the PVBs, are shown in the next table. The impact of 9% optimism bias - as recommended in DfT's TAG guidance for rail projects - is also shown.

Item	CPCA construction and management (2020 prices)	CPCA (2010 prices)	Plus Optimism bias	CPCA with optimism bias (2010)
March: Capital cost	£1,925,650	£1,319,665	9%	£1,438,434
March: Management and Business Case Development	£183,333	£130,067	9%	£141,773
<b>MARCH Total</b>	<b>£2,108,983</b>	<b>£1,449,732</b>	<b>9%</b>	<b>£1,580,207</b>

Manea: Capital cost	£818,675	£561,173	9%	£611,678
Manea: Management and Business Case Development	£183,334	£130,067	9%	£141,773
<b>MANEA Total</b>	<b>£1,002,009</b>	<b>£691,240</b>	<b>9%</b>	<b>£753,451</b>
<b>TOTAL COST</b>	<b>£3,110,992</b>	<b>£2,140,972</b>	<b>9%</b>	<b>£2,333,659</b>

- 1.3.13 The cost of construction to the CPCA is **£2,744,325** in 2020 prices. This excludes third party contributions such as funds towards cycle storage facilities that have been secured through the Rail Cycle Fund, and developer contributions.
- 1.3.14 TAG Unit A5.3 'Rail Appraisal' suggests using 9% optimism bias at Level 4 'Single Option Refinement' stage, which is appropriate here.
- 1.3.15 Overall, the benefit to cost ratio (BCR) - calculated by dividing the PVB by the PVC - for the funding being asked of the CPCA is 3.26 without 9% optimism bias and 2.99 with. (This is for construction and management.) The Net Present Value of the benefits (PVC – PVB) is £4.84m without optimism bias and £4.65m with.
- 1.3.16 Stand-alone BCRs are 4.00 for March and 0.88 for Manea.
- 1.3.17 63% optimism bias would result in a BCR of 2.00 across both March and Manea. (Note that this is close to 64% which is the level recommended at Level 2 'Pre-Feasibility Stage'. This project is now well beyond this stage.)
- 1.3.18 For the BCR at March alone to fall to 2.00 would need optimism bias at 218%! Without a change in either the costs or benefits optimism bias at Manea on its own would need to be negative for its BCR to reach 2.00.

<b>PERCENTAGE OPTIMISM BIAS</b>	<b>MARCH</b>	<b>MANEA</b>	<b>TOTAL</b>
<b>9%</b>	PVB = £6.321m PVC = £1,580m <b>BCR = 4.00</b>	PVB = £0.663m PVC = £0.753m <b>BCR = 0.88</b>	PVB = £6.984m PVC = £2.334m <b>BCR = 2.99</b>
<b>63%</b>			PVB = £6.984m PVC = £3.486m <b>BCR = 2.00</b>
<b>218%</b>	PVB = £6.321m PVC = £3.160m <b>BCR = 2.00</b>		

## 1.4. Value for Money Summary

- 1.4.1 The overall Core Scenario 'Benefit Cost Ratio' for the measures at March and Manea is medium to high.
- 1.4.2 The impact of more trains after 2029 would be to increase the BCR further.
- 1.4.3 GA will add considerable value to the initial capital investment having agreed to maintain and, if needs be, renew the station facilities within the lifetime of its franchise.
- 1.4.4 There is a wide range of benefits:

### **Economy – Economy and Regeneration**

- The scheme will encourage and support development and housing in the area.
- The new facilities (especially the car parks) should support improved rail services which will, in turn, provide additional access to education, jobs and services elsewhere.
- The facilities will lead to a reduction in traffic congestion and accidents especially on the approaches to Cambridge and Peterborough.

### **Environmental – Emissions**

- Reduced traffic will lead to a reduction in greenhouse gas emissions, noise and improvement in air quality.

### **Environmental – Landscape/Townscape**

- The surroundings of the stations will be improved especially at March, which is a key gateway to Fenland.

### **Social – Security of users**

- The improvements will be designed with personal security in mind and the increased usage will enhance this further.

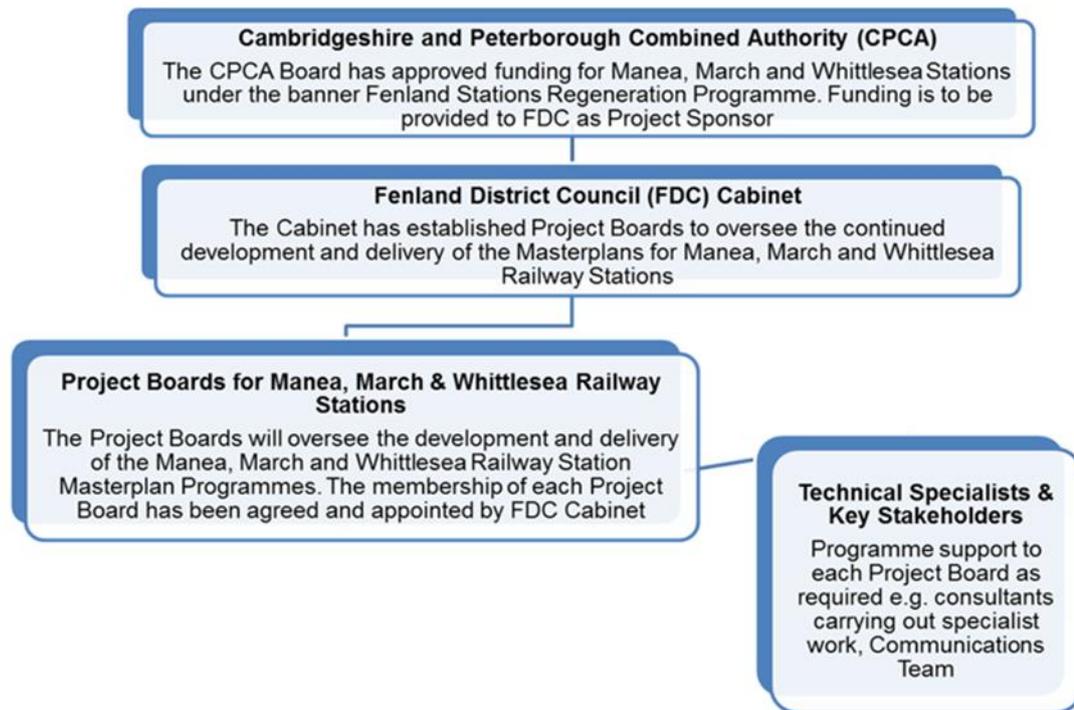
- 1.4.5 The following table shows the main risks currently associated with the projects. (L = low, M = medium)

Potential Project Risk and comment	Risk Assessment	Estimate cost (October 2020)	Potential change in cost
<b>Manea Station Car Park</b>			
Negotiations with land owner fail. Unlikely as heads of terms and valuation have been agreed and FDC has an option to purchase.	L	£800,000	+/-20%
Ground surveys indicate difficult conditions for construction. Whilst currently a field, ground conditions (drainage) are often more costly to overcome in Fenland by dint of the low lying nature of the land	M		
Planning approval not given. Unlikely since negotiations with planning and highway authorities have been positive	L		
<b>Manea Station Shelter</b>			
Implemented	-	£60,0000	0%
<b>March Station Extended Car Park</b>			
Costs have still to be finalised. The extended car park will be managed by NCP on behalf of GA. Parking charges will be introduced in line with charges in the existing charges. Some drivers park on street to avoid paying to park at the moment. The risk is that this will continue	M	£1,200,000	+/-30%
<b>March Platform 1 Improvements</b>			
Costs depend on which option the public choose for the scheme. It also depends on the results of the structural survey which has yet to be completed. Costs could be much less if the building is in good condition and the public choose the more limited scheme.	M	£718,750	+/- 30%

## 1.5. Management and other issues

- 1.5.1 FDC took the strategic decision at an early stage not to procure station facilities directly but to engage GA's station design and procurement expertise instead. This will be the case except for Manea car park which will be design and built in house.
- 1.5.2 The outcome of procurement processes is always reported to the Project Board for the relevant station. From a public accountability perspective the Project Board makes decisions through the elected representatives and the organisations who attend the board. The FDC Cabinet Member for transport is the Chairman of the Project Board and would

have a casting vote if necessary.



- 1.5.3 The car park extension at March is at the point of detailed design and early contractor involvement. Procurement and build will follow, the latter completing by March 2021, followed by the launch and promotion.
- 1.5.4 For the March Station platform one redesign:
- Survey work, public consultation and choice of the preferred option are complete
  - Next comes the tender specification and appointment of the contractor;
  - Construction is expected between January and June 2021;
  - Launch will be in July 2021
- 1.5.5 The shelter programme for Manea is now complete including launch and promotion.
- 1.5.6 The programme for Manea Car Park:
- The planning application process is nearing completion;
  - The land purchase process is underway and awaits the outcome of the planning process;
  - Detailed design work is pending;
  - Procurement of the contractor to build the site was due to take place in September 2020 with the build anticipated to be completed by April 2021;
  - Launch, promotion and final completion in June 2021.

1.5.7 A Monitoring and Evaluation Plan (MEP) and plan for realising the Benefits is in preparation and will be completed for the Full Business Case.