Cambridgeshire Local Transport Plan 2011-2031

Long Term Transport Strategy

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Executive Summary

Vision

The people of Cambridgeshire will benefit from an integrated transport network which enables efficient and reliable travel between key destinations in support of a thriving local economy;

A high quality passenger transport network of rail, guided bus and bus services will enable efficient journeys between Cambridge, Peterborough, the Market towns and district centres in and around Cambridgeshire. This network will prioritise passenger transport on key corridors and link up with community transport connections to access more rural areas. This will be fed by a comprehensive system of long distance cycle / pedestrian routes connecting key destinations.

Rail travel will continue to grow strongly with more frequent, fast and reliable services to London and key destinations from Cambridge, Peterborough, Ely and the market towns; Key employment destinations such as Alconbury and Cambridge Science Park will be served by new stations, providing excellent links to London. the main airports and ports, and onto the UK and European mainland. East west links will be enhanced through



Cyclists on the Wandlebury to Babraham Park & Ride cycle route alongside the A1307. Addenbrooke's hospital and the Cambridge Biomedical Campus can be seen in the background.

Peterborough and the opportunity for a new east west link between Cambridge and Luton / Bedford (<u>East West rail</u>) could enhance economic growth prospects on a wide arc between Oxford and Cambridge. Good onward connections will ensure that Cambridgeshire's profile as a thriving, attractive and accessible business destination is further enhanced.

Accessibility on the strategic road network will be improved with key barriers and capacity constraints addressed. Bottlenecks on the A14, A428, A10 and A47 will be prioritised for improvements to facilitate growth and continued economic prosperity. More car traffic will access rural hubs or Park & Ride sides for efficient, reliable onward travel to key destinations.

Improved information technology will better inform travel choices and reduce the need to travel. More people will work remotely; accessing more services online, and travelling by sustainable alternative methods of travel. This will help sustain and improve quality of life and well-being ensuring that Cambridgeshire continues to be among the top locations to live, work and study.

The Long Term Transport Strategy

This strategy identifies the major infrastructure requirements that are needed to address existing problems and capacity constraints on Cambridgeshire's transport network, and the further infrastructure that is required to cater for the transport demand associated with planned growth.

Across the county, major growth is planned in the period to 2031, with over 72,000 new dwellings needed to simply meet the predicted demand for housing for current and new residents of the area. The economy of the south of the county, and in particular the area around Cambridge is dynamic and plays on an international stage. Major transport investment is needed to support growth, maintain the competitive advantage that the



Congestion on the A428 as it approaches the A14 Cambridge Northern Bypass

clusters of high-tech industries in around the city have over competing clusters around the world, and to maintain the quality of life that draws these industries and their employees to the Cambridge area.

The strength of the Cambridge economy should not draw attention away from the rest of the county, where jobs and housing growth at similar rates is expected, including at the Enterprise Zone at Alconbury Weald. This will generate a similar need for major investment in strategic transport infrastructure, particularly around the towns of St Neots, Huntingdon, St Ives, March and Wisbech and the city of Ely.

Cambridgeshire is a largely rural area, and outside Cambridge there are high levels of car ownership and reliance on the car to maintain access to key services. In addition, high house prices and lack of affordable housing has led to more people travelling further to work, with the average length of commute in Cambridgeshire recorded as 20% greater than the national average in 2001. Access to employment, education and services can be a real challenge without a car in the rural areas outside Cambridge and the market towns.

This strategy also identifies the investment that is needed by government and its agencies on the nationally managed, trunk road, motorway and rail networks. Improvements on these networks are critical to the ongoing economic success of Cambridgeshire. Improvements to the A14 are now in the Highways Agencies programme, but further commitment is needed to vital improvements to the A47, A428 and A1. Rail growth in the county has been marked over the past decade, and opportunities to significantly improve north-south and east-west rail links are identified in this strategy. It is pleasing to note that the rail industry is proactively progressing major improvements, but there are numerous further opportunities that should be taken.

Funding of major infrastructure is often challenging. Cambridgeshire has been very successful over the years in bringing in funding from government, developers and other sources to deliver improvements to our transport network. The current funding environment is challenging, but great opportunities do exist.

In the Cambridge area, the in principle agreement of a City Deal between government, the County Council, Cambridge City Council, South Cambridgeshire District Council, the Greater Cambridge Greater Peterborough Enterprise Partnership (GCGPEP) and the University of Cambridge gives us an incredible head start that will enable the forward funding of up to half a billion pounds of transport infrastructure to support growth in and around the city.

In the wider county and GCGPEP area, the Strategic Economic Plan of the GCGPEP has transport elements that stem from this strategy and from Peterborough City Council's Long Term Transport Strategy. The Strategic Economic Plan demonstrates the linkages and interdependencies between economic growth and investment in infrastructure, and provides a very strong basis for the GCGPEP



The Boathouse Business Centre, Nene Waterfront, Wisbech

to negotiate a Growth Deal with government.

The economy of Cambridgeshire is vital to the national economy, and an effective, sustainable transport network is vital to the economy of Cambridge. This Long Term Transport Strategy, as part of the Local Transport Plan, and developed alongside the Local Plans of Cambridgeshire's districts, identifies what we need to ensure that the transport network meets this need.

1. Introduction

What is the Long Term Transport Strategy?

Why was it produced?

The Long Term Transport Strategy forms part of the Third Cambridgeshire Local Transport Plan. The LTTS supports the Greater Cambridge Greater Peterborough Strategic Economic Plan by identifying key strategic transport infrastructure and services needed to support the growth and local economy. It details how the transport network will be developed to:

- support sustainable growth across Cambridgeshire to 2031 in accordance with Local Plans of Cambridgeshire's City and District Council's;
- consider longer term aspirations in support of sustainable growth to 2050; and
- support the Greater Cambridge Greater Peterborough Growth Prospectus.

What does it do?

The Long Term Transport Strategy provides a high level framework for strategic transport policies which support sustainable development and continued economic prosperity. It links the delivery of transport infrastructure and services that are



Visualisation of Cambridge Science Park Station

required to enable and provide for planned growth to the delivery of that growth.

It provides a clear policy basis for investment decisions for strategic transport infrastructure, and will be used to secure funding to deliver our transport priorities, particularly those related to growth. It contains an Action Plan setting out the infrastructure requirements for development over time and will provide an evidence base and build a case for improvements to the rail network and other infrastructure.

What topics does it cover?

The Long Term Transport strategy focuses on strategic transport policies and priorities which enable economic growth and support the spatial strategy. It identifies the strategic transport infrastructure required to support emerging Local Plans of Cambridgeshire's districts to 2031 / 2036. It then looks at aspirations for transport and accessibility longer term to 2050 in support of developing a sustainable transport system which makes the most efficient use of our transport network, meets people's needs and helps spread the benefits of economic growth.

The LTTS also aligns with Peterborough's Long Term Transport Strategy and Local Transport Plan document. Together, Cambridgeshire and Peterborough are at the core of the functional economic area of the Greater Cambridge and Greater Peterborough Enterprise Partnership (GCGPEP) area. The LTTS will inform priorities for investment through the GCGPEP's Strategic Economic Plan which will in turn inform the GCGPEP's negotiations for a growth deal with government through the Single Local Growth Fund.

The Strategy considers requirements for the transport network across Cambridgeshire, including those on the trunk road, motorway and rail networks that are managed by the Highways Agency and Network Rail. It also references key schemes in the wider area and region that are relevant to Cambridgeshire, and will help to ensure cross border coordination with neighbouring authorities on transport matters.

What area does it cover?

The strategy area is shown in <u>Figure 1.1</u>. The strategy focuses on Cambridgeshire, and complements and incorporates measures from the Peterborough Long Term Transport Strategy, which has already been adopted by Peterborough City Council.

This area is covered by six local authorities who have worked together to create this Strategy. These authorities are:

- Cambridge City Council
- Cambridgeshire County Council
- East Cambridgeshire District Council
- Fenland District Council
- Huntingdonshire District Council
- South Cambridgeshire District Council

A range of organisations have contributed to the development of the Strategy

- The Greater Cambridge Greater Peterborough Local Enterprise Partnership.
- Norfolk County Council.
- Peterborough City Council.
- Suffolk County Council.
- The Highways Agency.

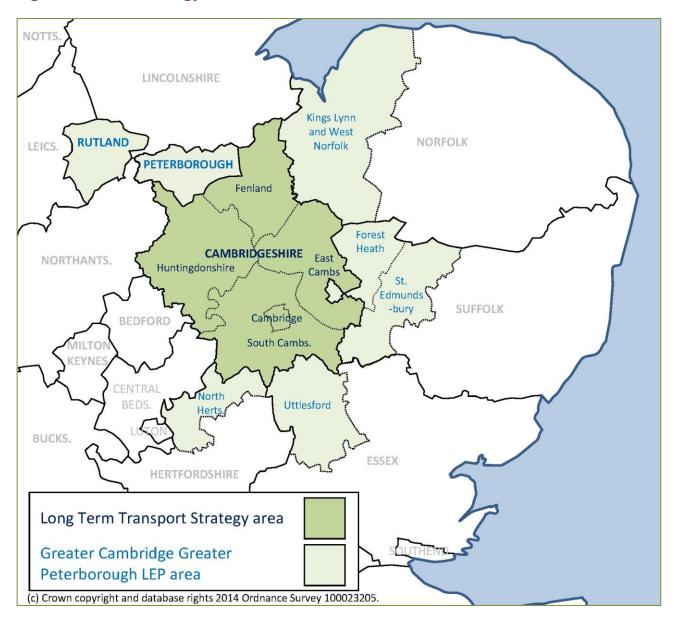
The strategy includes some interventions that are partly outside the boundaries of Cambridgeshire or Peterborough, or of the GCGPEP, but that are necessary to provide new transport capacity within the strategy area.

Links with Peterborough City Council's Long Term Transport Strategy

Peterborough City Council has developed a Long Term Transport Strategy¹ that runs from 2011 to 2026, and demonstrates how transport will support the authority's sustainable growth agenda. It outlines the transport improvements that are required to bring forward Peterborough's planned growth that aims to sustainably build 25,000 new houses and create 20,000 new jobs over the next 20 years. The Cambridgeshire Long Term Transport Strategy supports and complements Peterborough's existing policies and plans, building the links between Cambridgeshire and Peterborough.

¹ See <u>www.peterborough.gov.uk/ltp</u>.

Figure 1.1. The strategy area



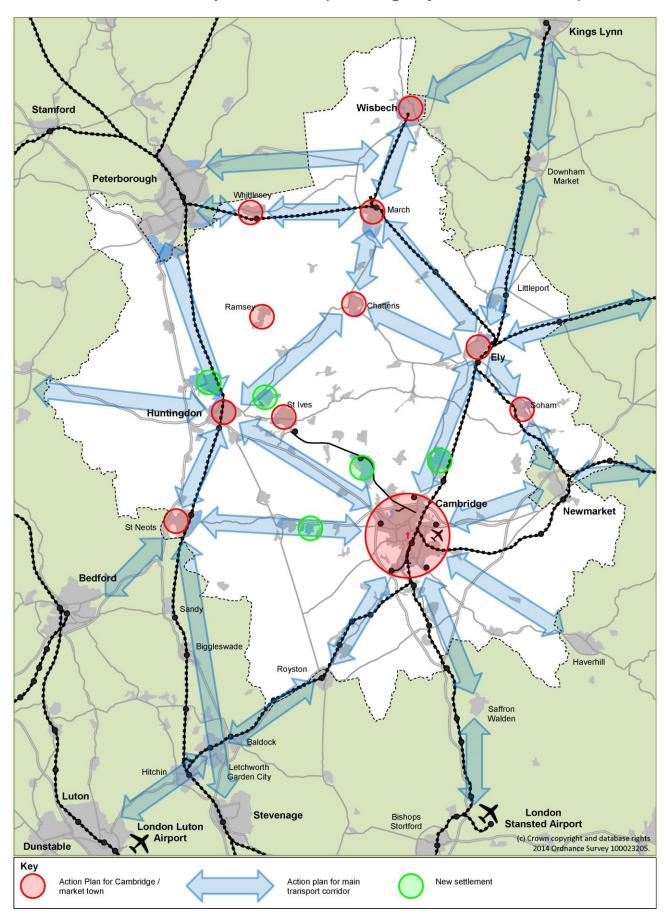
Links with Highways Agency, Network Rail, and Train Operating Companies

The Highways Agency (HA) manages the Motorways and Trunk Roads in the county (the M11, A1(M), A1, A11, A14, A47 and A428). This strategy includes schemes that we think are needed to provide necessary capacity on the HA's network for local and longer distance trips. It will also take account of outputs from the Highways Agencies Route Based Strategies. Three route based strategies will cover the network in Cambridgeshire.

- A14 and A428: Midlands to Felixstowe
- M11, A1 and A1(M): London to Leeds
- A11 and A47: East of England

Similarly, the strategy includes interventions that are required on the rail network managed by Network Rail (NR), and takes account of planned interventions of NR and the Train Operating Companies. It also seeks to influence the Department for Transport's specification of train service frequencies as part of the Rail Franchising process.

Figure 1.2. Coverage of Action Plans covering Cambridge, the market towns and the main transport corridors (including major new settlements).



What time-period does it cover?

The Long Term Transport Strategy covers the period to 2050. However, the Strategy provides more detail to 2031 (2036 in Huntingdonshire) to complement the Local Plans.

The wider Local Transport Plan strategy for Cambridgeshire

This strategy does not provide comprehensive detail of local transport schemes such as small-scale junction improvements, village cycle routes or maintenance schemes. Programmes of measures for these types of scheme are typically set out in strategies and action plans that form part of the Cambridgeshire Local Transport Plan. More detail can be found in Appendix A. Figure 1.2 shows how Cambridge, the market towns and main transport corridors are covered by detailed action plans, and also shows the five new settlements that are planned.



Visualisation of the Ely Southern Bypass scheme

Objectives

The objectives of the strategy are:

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

Adoption of the Long Term Transport Strategy

Stakeholder and public consultation on the LTTS took place in the summer of 2014. Alongside this consultation, a refreshed version of the LTP: Policies and Strategy document was also consulted upon. The updates to this document primarily reflect the Long Term Transport Strategy, and also the Transport Strategy for Cambridge and South Cambridgeshire (TSCSC), which was adopted in March 2014. The overarching policy approach of the Local Transport Plan has not changed as a result of the either the LTTS or TSCSC:



Cambridge Core Traffic Scheme Phase 3 – Silver Street

rather, it is the case that the LTP policy approach has led the development LTTS and TSCSC. However, the Strategic Environmental Assessment, Habitats Regulation Assessment and Community Impact Assessments for the LTP have all been updated.

Following the consultation, the Long Term Transport Strategy was adopted alongside the refreshed LTP: Policies and Strategy document at the 11 November 2014 meeting of Cambridgeshire county Council's Economy and Environment Committee.

2. The challenge of providing for continued growth

The local area

The core of the Greater Cambridge Greater Peterborough Enterprise Partnership (GCGPEP) area; the county of Cambridgeshire and the city of Peterborough, has a resident population of over 800,000 people.

The area hosts a number of globally-significant business clusters, world class research centres linked to universities and a number of thriving market towns. The area boasts 700,000 jobs, 60,000 enterprises and generates £30 billion gross value added (GVA) per annum. It is one of the UK's fastest growing and most dynamic areas. Greater Cambridgeshire and Greater Peterborough have strong links, both in terms of labour market and complementary economic strengths. This relationship is reflected in the close working and joint initiatives that take place within the Local Transport Body (LTB) area.

Cambridgeshire

Cambridgeshire is a county of contrasts, with a range of distinctive market towns, the historic university city of Cambridge with its numerous high-tech companies and research institutes, and wide-open Fen landscapes. The county has grown significantly, and was the fastest growing county during the last decade where the population increased by 12.8% in ten years, from 552,700 in 2001 to 621,200 in 2011.

The economic area around Cambridge and in neighbouring areas of Suffolk, Essex and Hertfordshire is an engine of growth for the national economy. Since the 1970s the area has been transformed into a world-leading hitechnology cluster, an evolution widely known as the 'Cambridge Phenomenon'. The area now acts as the scientific research and development capital of the UK with five times more Research and Development jobs than the UK average and a cluster of around 1,500 hi-tech businesses employing nearly 43,000 people.

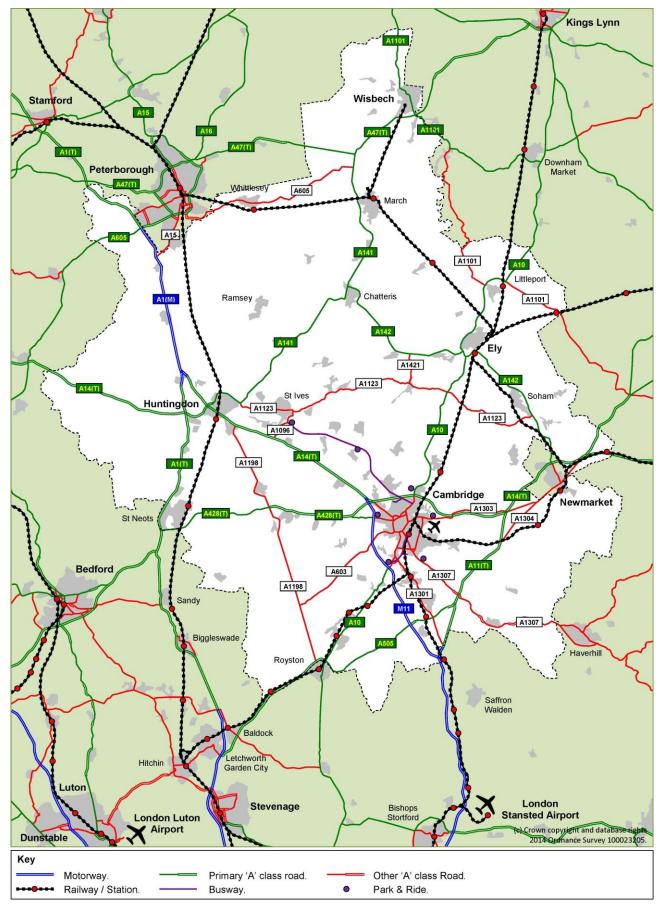
The broader geography of the Cambridge sub region includes the city of Ely and the towns of Chatteris, Littleport, Soham, Newmarket, Haverhill, Saffron Walden, Royston, St Neots, Huntingdon and St Ives. These towns all have their own distinctive economies, but functionally, they have strong relationships with Cambridge in

Living and working in Cambridgeshire

- Around 84% of Cambridgeshire's workers live and work in the county.
- There are 11 jobs for every 10 employed residents in Cambridge itself, not accounting for those people who live in the city and commute out.
- House prices in and around Cambridge are high; many workers live a significant distance from their place of work.
- In 2001, the average length of commute in Cambridgeshire, at around 10 miles each way, was 20% greater than the national average.
- Around a quarter of the population of Cambridgeshire live in settlements of less than 3,000 population; these settlements often have relatively few local services and limited transport choices other than the private car.
- In these areas, access to employment, education, health and social activities can be limited without access to a car.

terms of labour markets, housing markets and business networks. 'Greater Cambridge' is recognised as a functional, highly connected economic sub-region. However, transport constraints represent a key challenge to supporting further growth.

Figure 2.1. The Strategic Road, Rail and Busway network in and around Cambridgeshire and Peterborough



The north of Cambridgeshire, including the towns of March, Wisbech, Whittlesey and Ramsey has a more traditional rural economy, and often looks to Peterborough or Kings Lynn rather than Cambridge as its economic hubs.

The north of the county is generally less prosperous than the south, and the relatively poor accessibility of the area to Cambridge can be seen as hindering opportunities for the spread of higher value business into the area from the south of the county. Improved transport linkages within the north of the county, and to the south of the county can help to address this problem.



The planned new town of Northstowe in South Cambridgeshire

Neighbouring areas

The city of Peterborough and the towns of Royston, Haverhill and Newmarket are all very near to the county boundary, and all have growth or transport issues that are interlinked with those of the Cambridgeshire.

Peterborough

Peterborough was historically a small market town on the edge of the Fens. In 1968 it was designated a New Town, and grew rapidly from that time. A second wave of growth began in 1997 with the construction of Hampton to the south of the city, consisting of 7,000 homes and commercial space for 12,000 jobs. The 2011 census recorded the population of Peterborough as 183,631 living predominantly in the urban area.

Peterborough has a long history of growth with recent population growth almost double the national average. The city has a diverse economy with a range of service industries including insurance, finance, publishing, travel, retailing and logistics, and a number of major public sector employers. High value manufacturing still has a significant place in the economy and a particularly important characteristic of Peterborough is the concentration of companies engaged in environment related activities and technologies.

The city has excellent communication links; it is located adjacent to the A1(M) motorway and its railway station is a busy and important interchange on the East Coast Main Line, with a journey time of just 43 minutes to London's King's Cross. For large parts of the north of Cambridgeshire, Peterborough is the major service centre, and the point at which people join the national road and rail networks.

Royston, Haverhill and Newmarket

Royston is a market town in Hertfordshire to the south of Cambridge, and sits on the Cambridge to London Kings Cross railway line. In Cambridgeshire the A10 also links the town to Cambridge, the A505 to Newmarket, and the A1198 to Huntingdon. The villages in Cambridgeshire to the north of Royston look to the town as a service centre.

Haverhill is a growing town, and has a well-developed industrial employment sector. It also feeds commuters into employment sites in Cambridgeshire on the A1307 corridor and in Cambridge. Housing growth in Haverhill along with jobs growth at the Cambridge Biomedical Campus, Granta Park and at the Babraham Research Campus is likely to increase pressure on the transport network between Haverhill, the A11 and Cambridge.

Newmarket in Suffolk is largely surrounded by Cambridgeshire, and is the centre of horse racing in the United Kingdom. The town sits on the A14 and A11 trunk roads, and on the Ipswich to Cambridge and Ipswich to Peterborough railway lines. Traffic issues on the A14 and A142 in Suffolk cause knock on problems for the road network in Cambridgeshire, particularly on the A142 towards Soham and Ely.

Travel in Cambridgeshire

Levels of car ownership in Cambridgeshire are high; 82% of households own a car, and around 57% of resident workers travel to work as a car or van driver. Only 30% of journeys to work by Cambridge residents were made by car in 2011, a 20% decrease since 2001, and one of the lowest proportions in the country outside of London. In the rest of the country, car use is for travel to work trips is at levels that are comparable to those typically seen across rural England.

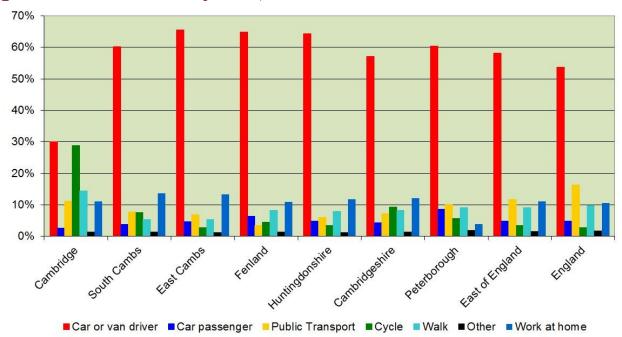


Figure 2.2. Travel to Work by mode, 2011 census

Overall, traffic levels in Cambridgeshire are increasing. Over the past ten years, traffic crossing the county screen line has grown by 6%, although the trend has been fairly flat over the last seven years. However, traffic in Cambridge has been stable since the mid-1990s, despite an increase in jobs and more people traveling into the city overall.

The majority of our main transport corridors are experiencing traffic growth. The A14 is a crucial and extremely busy link in the national transport network, catering for both local and strategic traffic movements. It carries approximately 87,000 vehicles a day at Dry Drayton, leading to significant congestion and delay. Other parts of the trunk road network also experience high traffic flows; traffic density on these routes is almost double the national average, and almost three times for Heavy Goods Vehicles.

On the principal road network in Cambridgeshire, the A141 has seen a 15% increase in traffic flow over the past ten years, and the A10 has experienced a 14% increase. Housing growth in East Cambridgeshire and Huntingdonshire has contributed to these increases.

Public Transport

Cambridgeshire is well served by the strategic rail network, with the East Coast Main Line, the Fen Line and others providing links to London, Peterborough, Ipswich, Norwich and further afield. Stations on the Fen Line, West Anglia Main Line and East Coast Main Line all have excellent links to London. While this does mean that much of the county is in the London commuter belt, it also brings significant advantages for businesses locating in the area with the access it gives to the capital. Rail use in Cambridgeshire grew by over 60% in the ten years from 2001, and Cambridge is now the busiest station in the east of England.

Bus use in Cambridgeshire increased in the county by over 30% in the same period, with over 20 million journeys in 2011. In Cambridge, Park & Ride use almost doubled from two million journeys in 2000 to nearly four million journeys in 2010. The Busway has seen four million passenger journeys since opening in 2011, and passenger numbers grew by half a

million in 2013. Across the county the proportion of people using the bus to travel to work grew by 1.3% between 2001 and 2011. However, there is significant variation across the county; there was a 30% decrease in East Cambridgeshire, as compared to a 22% increase in Cambridge and a 5% increase in South Cambridgeshire.



Contra-flow Bus Lane on Huntingdon Ring Road

In more rural areas, bus services are much more limited with often circuitous routes and long journey times leading to problems of lack of accessibility to key services and transport poverty. At present, many traditional bus services in rural areas are being withdrawn, and in some cases being replaced with locally led transport solutions which are more appropriate for the community's needs. Community transport, voluntary car schemes and other similar schemes which operate in many parts of the county provide essential access to services for those without access to traditional bus services.

Cycling

Around 9% of journeys to work in the County in 2011 made by bicycle (compared to the national average of around 3%). In Cambridge this figure rises to almost 29% (increased from 26% in 2001), the highest proportion in the United Kingdom by some distance. The very strong cycling in culture in and around Cambridge has spread to outlying areas as evidenced by a 12% increase in cycling for the journey to work in South Cambridgeshire between 2001 and 2011. This encouraging trend is in part due to investments in cycling infrastructure in Cambridge and links to surrounding villages.

Exclusion and accessibility

Many rural areas of Cambridgeshire continue to suffer from problems related to social exclusion and lack of access to key services such as jobs, education and health care. The main issues often involve a lack of access to the passenger transport system, and the inability to reach destinations, services and facilities within a reasonable amount of time, cost, level of effort and safety. In Fenland the proportion of people walking to work increased by 13.5% between 2001 and 2011, a possible indication of the challenging economic climate in the district at that point in time.

For transport providers, delivering a service that meets the needs of local people is a key challenge in rural areas. The dispersed nature of communities in rural areas means that it is often not viable for commercial bus operators to run traditional services, and even when they do, frequencies often do not allow people to access the services they need at the times they need. Furthermore, long journey times and poor reliability can often make trips by bus an undesirable choice for many people, particularly for the journey to work. Consequently, the private car has an important role to play for travel and access in rural communities.

Improving transport has an important role to play in reducing social exclusion, improving accessibility and helping people to live independent lives, but the location of services and choices as to how they are provided often have significant transport impacts.

Planning for growth

The population of Cambridgeshire and Peterborough is forecast to grow by another 23-24% over the next two decades to around 1,000,000, with demand for new homes and employment significantly increasing.

In a diverse area like Cambridgeshire, this brings a range of transport challenges to be addressed in the longer term. The overriding challenge that this strategy seeks to address is to provide the transport infrastructure that will unlock the growth potential of the county and sustain economic growth for the longer term.

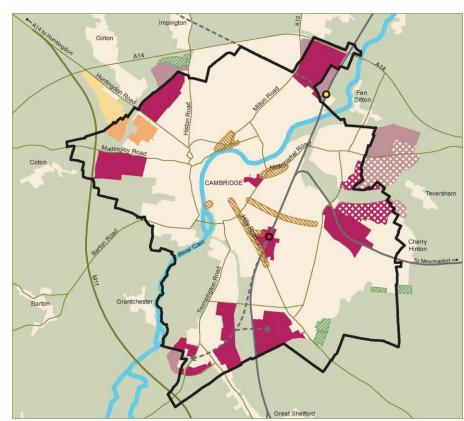
Current and emerging Local Plans include allocations for around 72,500 new houses to be delivered across Cambridgeshire to 2031. Investment in transport infrastructure is critically important to help sustain this growth and economic prosperity. This has been recognised by the partners in developing a Long Term Transport Strategy for Cambridgeshire to ensure that growth is planned for the long term in an integrated way with supporting infrastructure.

Figure 2.3. Co	ommitted and	planned resid	lential devel	opment
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Authority	Approximate dwelling numbers to 2031			
	In Local Plans / LDFs adopted before 2011	Additional in new or emerging Local Plans	Total growth	
Cambridgeshire	41,400	31,100	72,500	
Cambridge	10,600	3,400	14,000	
East Cambridgeshire	5,900	5,600	11,500	
Fenland	1,600	9,400	11,000	
Huntingdonshire	9,100	7,900	17,000	
South Cambridgeshire	14,200	4,800	19,000	
Peterborough	9,300	16,200 (to 2026)	25,500	
Total	50,700	47,300	98,500	

Figure 2.3 sets out the planned housing growth commitments in current and emerging Local Plans to meet objectively assessed needs. The locations of major allocations in the Draft Local Plans is shown in Figure 2.4, and includes large sites at Alconbury Airfield, Wyton Airfield, Waterbeach Barracks, Ely, Bourn Airfield and to the west of Cambourne.

A range of strategic infrastructure investments have already been made to support planned growth across the Greater Cambridge Greater Peterborough area.



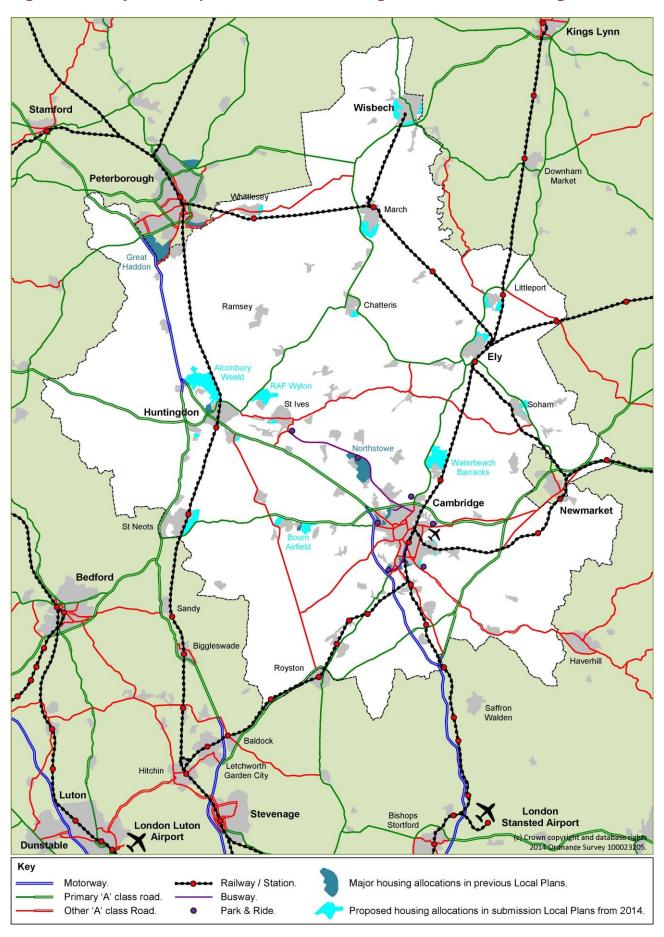
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Cambridge Local Plan Key diagram

This has included the provision of new transport capacity for the development included in Local plans to 2011, including:

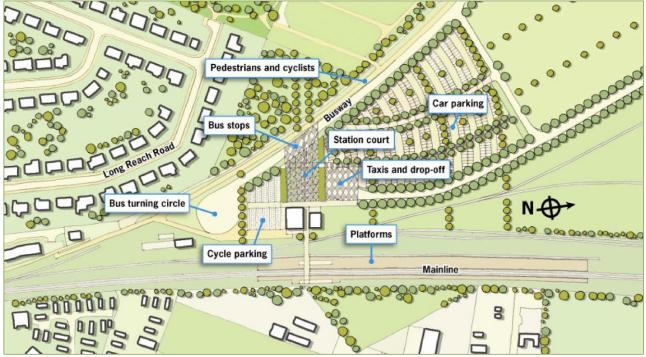
- The Busway between St Ives and Cambridge, Trumpington and Addenbrooke's
- The Addenbrooke's Access Road
- Local access works for Northstowe
- Interchange improvements in the Cambridge Station area.

Figure 2.4. Major development sites in Cambridgeshire and Peterborough



In addition, a range of strategic transport infrastructure and services that will support this growth are in development and should be implemented by 2021(see also <u>Figure 4.1</u>).

- Ely Southern Bypass.
- Bourges Boulevard improvements, Peterborough.
- A47 / A15 Junction 20 Capacity improvements.
- A605 Kings Dyke level crossing replacement with bridge or underpass.
- Soham Station.
- Variable Message Signs (VMS) / Intelligent Transport Systems (ITS) improvements on the Parkway system in Peterborough.
- Cambridge Science Park Station: a new station in north Cambridge.
- A1139 Fletton Parkway, A1 to junction 2 widening, Peterborough (under construction).
- Huntingdon West of Town Centre link road (opened April 2014).
- A14 Trunk Road between Cambridge and Huntingdon: major capacity improvements.
- A1 / A47 junction improvements.
- Peterborough Station: new access from developments to the west of the city, and investment in further station improvements and additional platforms.
- A10 Foxton level crossing replacement with bridge or underpass.
- Rail infrastructure improvements, enabling more frequent passenger / freight services:
 - Double tracking of the line between Ely and Soham
 - Ely North junction capacity improvements
 - East Coast Main Line capacity improvements between Huntingdon and Peterborough
- Thameslink timetable; major enhancements to rail services from Peterborough and Cambridge to London, Gatwick Airport and the south coast from 2018.
- Intercity Express Programme (improved rolling stock and longer trains between London and Peterborough, and potentially to Cambridge and Kings Lynn).
- Increase in frequency of rail services between Cambridge and Kings Lynn, Norwich and Peterborough, and between Ipswich and Peterborough.



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Indicative plan showing early ideas of how the planned Cambridge Science Park Station could look

Growth locations

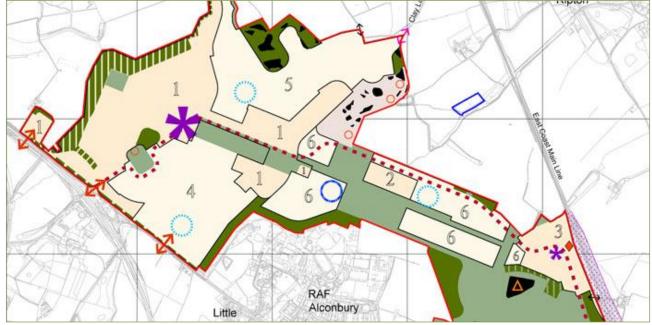
In and around Cambridge

The southern part of Cambridgeshire has traditionally been the economic hub of the county, with economic growth in the Cambridge city region driving growth in the wider area. Major employment growth is occurring on the northern and western fringes of the city, in the station area and on the Cambridge Biomedical Campus around Addenbrooke's Hospital, where around 10,500 new high value jobs are being created. Major housing growth is also occurring on the southern and northern fringes of the city. The high tech and biotech sectors remain strong, and employment growth is continuing at major research parks and campuses on the outer edge of the green belt around Cambridge.

This growth will create additional demand for trips in and to the Cambridge area, which will need to be accommodated by sustainable modes, as parts of the network, particularly on the approaches to Cambridge are at capacity.

In Huntingdon, St Ives, Alconbury and Wyton

The Alconbury Enterprise Zone, Alconbury Weald and Wyton Airfield developments will drastically change the economic profile of the local area around Huntingdon and St Ives, acting as a major economic hub, and leading to new travel patterns and new pressures on the transport network. The A14 Cambridge to Huntingdon improvement will provide some relief to traffic problems in Huntingdon, Godmanchester, Brampton and St Ives, but new transport links will still be needed to cater for this level of new development.



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The Alconbury Weald site

With 8,000 new jobs planned at Alconbury over the next 25 years, it is expected that future employees will travel from East Cambridgeshire, Peterborough, South Cambridgeshire and other parts of Huntingdonshire to access employment opportunities. There will be considerable demand for travel between Alconbury and Huntingdon (the main service centre for the new development) with a strong need for sustainable transport links between the two settlements.

In St Neots, Cambourne and at Bourn Airfield

Over 8,000 new dwellings are planned in the corridor between St Neots and Cambridge, primarily on large sites east of Neots, at Cambourne and Bourn Airfield. This development will lead to new travel demand on the corridor, and on the Huntingdon to Royston corridor.

In Ely, Littleport, Soham and at Waterbeach Barracks

A new town of between 8,000 and 9,000 dwellings is planned for Waterbeach Barracks to the north of Cambridge. 3,000 new dwellings are planned to the north of Ely, and significant numbers of new dwellings are also planned for the towns of Soham and Littleport. The A10 and the railway between Cambridge and Ely both suffer congestion, and for this development to be progressed, new capacity for travel will be needed to avoid increasing congestion acting as a constraint to economic growth.

In Fenland

Major development in Fenland will deliver 11,000 homes by 2031, and is primarily focused around the market towns of March and Wisbech, with smaller allocations to the south of Chatteris and east of Whittlesey. Improving links into Fenland, increasing its attractiveness as a place to do business will be a key factor in achieving balanced growth in the towns.



Broad Street March, looking south into the High Street

In neighbouring authority areas

Peterborough

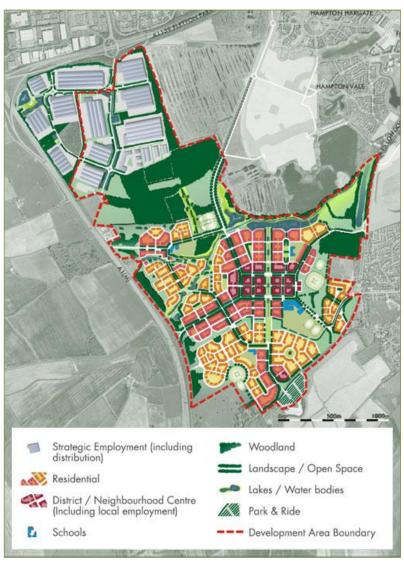
The City of Peterborough has been growing for many years, with a mixture of redevelopment sites within the urban area, and peripheral expansion. One of the most noticeable examples of this is at Hampton, to the north and east of the villages of Yaxley and Farcet in Cambridgeshire, where a major urban extension is underway on reclaimed brickfields. Further growth is planned to 2026 where more than 25,000 dwellings are planned to be delivered, including some 4,300 in the City Centre and a further 20,100 in areas in and adjoining the urban area of Peterborough, including around 4,100 dwellings in

Hampton and 5,300 dwellings in Great Haddon. Peterborough's growth is outlined in the <u>Peterborough Core Strategy</u>. The core strategy was adopted in February 2011 and covers the period to 2026.

Peterborough's Long Term Transport Strategy forms part of the third Peterborough Local Transport Plan, and focuses on minimising the impacts of planned growth by encouraging and providing alternatives modes of travel to the private car. It is recognised that there is still an important role for the car, particularly in rural areas, so the strategy will also focus on tackling congestion on key corridors to enable movement of goods and people between centres of employment and population. One area where this is happening is on the A605 between Peterborough and Whittlesey, where proposals at Stanground in Peterborough and at Kings Dyke and Whittlesea Station in Cambridgeshire form part of an overall Whittlesey Access scheme.

Haverhill (St Edmundsbury Borough)

Around 4,260 new homes are proposed at Haverhill, around 18 miles to the south east of



Great Haddon development, Peterborough. Yaxley in Cambridgeshire is immediately to the east of Great Haddon.

Cambridge. The population of the town is likely to grow to around 38,000 by 2031. Many residents in this area will use the corridor A1307 through Cambridgeshire to access jobs and services, including in Cambridge and at the Science Parks and innovation centres to the south east of the city such as Granta Park and the Babraham Research Campus.

Longer term growth

Growth is planned in the county through the Local Plans, which cover the period to 2031 (2036 in Huntingdonshire). Beyond this period the Strategy will need to identify the emerging key strategic transport issues that may potentially constrain future growth. The Strategy may also help highlight directions or broad locations where due to the availability of transport capacity, services and infrastructure, growth beyond the Local Plan periods could potentially be accommodated most sustainably.

3. The strategy approach

This Long Term Transport Strategy sets out what needs to be done to ensure that the transport network can continue to provide for local transport needs, and that new transport provision keeps pace with economic, housing and employment growth in the county. It focuses on enhancing capacity between key destinations and centres of employment and growth. It seeks to enhance accessibility, improve reliability, reduce delays and conflicts and remove pinch points.

The strategy reflects that Cambridgeshire as a largely rural county² has many areas where the private car is always likely to remain the dominant form of transport for longer than local trips. However, with growth focused on Cambridge, the market towns and in new settlements, the opportunities for use of passenger transport services, walking and cycling for more trips will increase. The strategy therefore looks to provide or enhance integrated high quality segregated bus, guided bus



The Busway at the St Ives Park and Ride site

or rail options on many of the main growth corridors, and on all of the main corridors into Cambridge. A comprehensive pedestrian and cycle network will also provide for many more trips by foot or by bike, and will complement the passenger transport network.

The strategy addresses capacity constraints on the strategic and primary road networks, and includes measures to remove pinch points and provide capacity for growth, to ensure that traffic can move efficiently and without interfering with passenger transport corridors

The passenger transport network

The passenger transport network will connect major engines of growth along our main transport corridors, and would be unaffected by congestion on the wider transport network. From a user perspective it will operate as a single system, whatever the combination of modes that are required to complete a journey. The need for interchange would be minimised, but where required, connections will be straightforward and timely.

We will work with developers to provide advice regarding passenger transport provision in new developments and to ensure connections with interchanges and hubs. Furthermore, the strategy will help to ensure that new developments make a contribution towards the passenger transport network.

Advances in technology will be utilised to ensure information about travel options is easily available. Furthermore, new and improved technology and broadband services will enable

3-1

² For the purpose of this strategy, Cambridge and its fringes, the market towns of Chatteris, Ely, March, Huntingdon (including Brampton and Godmanchester), Ramsey, St Ives, St Neots, Whittlesey and Wisbech and the town of Soham are treated as 'urban', and the remainder of the county as 'rural'.

faster and simpler ticketing and booking systems to be in put place. This may be particularly useful for communities in rural areas to access Community Transport services.

The bus / guided bus network

The enhancement of the bus/guided bus network forms a major part of our Long Term Transport Strategy. To achieve a high quality network we will:

- Extend the busway network to serve major new developments and employment sites.
- Develop high quality public transport corridors along key routes with priority at key junctions, helping to reduce journey times.
- Implement new and improved passenger transport interchanges and hubs with parking, cycle parking, high quality waiting facilities, passenger information and facilities for local feeder services, and that are easily accessible by pedestrians and cyclists.

The rail network

There is great potential to achieve further increases in rail travel. To achieve this we 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;
- support new track infrastructure, electrification of existing



- railway lines and the provision of enhanced rolling stock;
- improve sustainable access to railway stations e.g. cycle routes, bus routes and cycle parking facilities.

Rural transport services

For our large rural areas, the strategy recognises that the private car will often be the most viable option for many journeys. However, for those without access to a private car, the bus and community transport network is vitally important. The strategy will see a rolling programme of review for rural bus services to:

- develop services designed by local communities that meet their needs;
- ensure services provide better value for money;
- better integrate health, education and social services transport.

In practice this will involve a phased review of rural transport across the county. It will result in locally led tailored transport solutions which are appropriate to the area and meet the needs of local communities; there will not be a one size fits all approach to rural bus

services. This flexible approach will enable the implementation of appropriate transport provision in rural areas, which could comprise of:

- better local connections to main bus corridors and / or Park and Ride services (feeder services;
- Demand Responsive Transport (DRT) such as Dial-a-Ride, including timetabled services at peak times;
- Taxi sharing schemes;
- community / voluntary car schemes (typically where volunteer drivers give their time freely, and use their own cars to take passengers, who pay any fuel or parking costs);
- traditional bus services.

Alongside this approach, the following priorities have been set for rural areas

- Working with service providers to be innovative in the way services are delivered locally recognising that it is not simply about providing a transport service but as much about where and how the service is provided based on need.
- Reviewing local bus services when major developments come forward.
- Rural interchange sites on main bus corridors, with high quality waiting facilities, cycle parking, kiss and ride drop off point, some car parking (as appropriate to the site / service), stopping space for local community transport and taxis.
- Improved access to the rail network through new and enhanced cycle routes, increased cycle parking, pedestrian enhancements and bus links / interchanges
- Enhanced rail frequencies and more stops at rural stations.
- Making better use of technology and increasing broadband coverage to provide improved travel information and booking services for transport

The cycle and pedestrian networks

Greater levels of walking and cycling are critical if existing traffic problems are not to be exacerbated further, and investment in the cycle and pedestrian network is therefore one of the key investment priorities in this strategy. The benefits of walking and cycling reach much further 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. As the routes such as the cycleways alongside the Busway, and between Histon and Cottenham have demonstrated, if high quality, direct routes are implemented, people are more willing to consider walk and cycle greater distances.

We will look to build on the high levels of walking and cycling in Cambridge and the growing cycle culture across the county to:

- Increase walking and cycling levels in Cambridge by enhancing and adding to the current networks.
- Develop the cycle network in the area around Cambridge, providing greater opportunity for cycling to replace the use of the private car for more trips into the city.
- Provide greater opportunity to walk and cycle in the market towns by enhancing their pedestrian and cycle networks, with higher quality links to more key destinations.
- 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.

- Develop a comprehensive longer distance cycle network across the county linking Cambridge and the towns to their neighbours (including beyond the county boundary – for example to Peterborough, Haverhill, Royston, Saffron Walden and Bedford) on high quality segregated routes.
- 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.

We will seek to raise the standard of provision so that walking and cycling will be a more obvious choice for many more medium and longer-distance trips, for either the whole or part of the journey.

Where possible we will seek to segregate cyclists from general traffic, particularly on the main transport corridors and on busier rural routes. However, there are areas where on 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.

The detail of local interventions to improve the pedestrian and cycle network will be included in the strategies and action plans for Cambridge and South Cambridgeshire, and for East Cambridgeshire, Fenland and Huntingdonshire as detailed in Figure A.2 and Figure A.3. In addition, a new countywide cycle strategy will be developed. However, there are programmes of cycle and pedestrian schemes associated with the development of the larger housing and employment growth sites that are included in the detailed Long Term Transport Strategy Action Plan. These interventions include cycle promotion and Personalised Travel Planning projects in the new developments, which raise awareness of pedestrian and cycle facilities and of travel choices that are available.

The road network

This strategy does not generally prioritise major increases in capacity for car trips, and reflects that the provision of additional road capacity along some of our major transport corridors would be difficult or impossible to match with additional capacity within Cambridge and the market towns. Nonetheless, there are a number of areas on the strategic and primary route network that require measures to be introduced for capacity reasons, with a particular emphasis on longer distance trips. These include:

- The A14 Trunk Road in Huntingdonshire and South Cambridgeshire.
- The A428 Trunk Road in Huntingdonshire and South Cambridgeshire.
- The A47 Trunk Road in Peterborough, Fenland and Norfolk.

There will also be a need for new road capacity around a number of the major growth sites, including Alconbury Weald, Wyton Airfield and Waterbeach Barracks, and potentially for additional orbital capacity around Cambridge in the longer term, linked to the reallocation of road space in the city.

There is a need to enhance the connections between our major engines of growth in order to boost the economy and support business. The proximity of business parks, research parks and our main urban centres to the strategic road network contributes towards their economic success. Unreliability and inefficiencies on the longer-distance road network may erode this advantage and therefore need to be tackled. To maintain the advantage of

the area's location on the strategic road network, infrastructure does need to keep pace with the demands placed upon it by growth.

The focus in our towns and cities will be on sustainable transport movements, particularly cycling and high quality passenger transport for more than local trips. Where required, priority will be given to fast and frequent passenger transport services on major corridors, improving journey times and extending the coverage and quality of the network. Furthermore, new interchanges will be provided to intercept car journeys at an earlier stage of the journey. Park & Ride will continue to be an important travel option for people in rural areas. The strategy will also promote car sharing and low emission vehicles as ways to improve efficiency and reduce the overall impacts of car use.

In the more sparsely populated or remote areas of the county, the car will be the mode of choice for all or part of many trips. However, new and upgraded transport interchanges – railway stations, park and ride, kiss and ride – will encourage more car trips to transfer to the passenger transport network at an earlier stage in the journey. Improvements to the accessibility of those interchanges will also be required and an efficient strategic road network is needed to maintain accessibility for rural populations.

The strategy will support the use of measures which reduce inappropriate through traffic in our towns and villages and encourage all traffic to use the most appropriate route, with a particular focus on Heavy Commercial Vehicles (see below). The strategy will consider measures or mechanisms to keep strategic traffic on the strategic road network.

Freight movements and Heavy Commercial Vehicles (HCVs)

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, which is predicted to guadruple by 2030.

Road freight and the use of inappropriate routes can have considerable impacts on villages in the county. It can lead to localised congestion, noise and poor air quality, and can significantly impact on people's quality of life, health and wellbeing.

This strategy supports the transfer of more freight onto the rail network, and the improvements being made to the line between Newmarket and Peterborough through Cambridgeshire as part of



The Goosetree junction of the A141 between March and Wisbech, and the A605 to Whittlesey

Network Rail's Felixstowe to Nuneaton (F2N) route improvements. This work will allow for a quadrupling of rail freight traffic through the county, and remove some pressure from the A14 Trunk Road, which would otherwise take much of this traffic. Schemes to remove level crossings on the A142 at Ely and the A605 at Whittlesey addressing the local impacts of increased use of the rail network and show the strong commitment of the local authorities to the better use strategic rail freight link.

We will continue to work with freight operators to promote the use of the most appropriate strategic routes for road freight, avoiding local village routes where possible. The Strategy aims to minimise and mitigate the environmental impact of HCVs 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.

The <u>Cambridgeshire advisory freight map</u> looks to reconcile the needs of local communities and lorry operators; we aim to better manage HCV traffic by giving freight companies information on appropriate routing when planning their journeys.

In addition, as part of planning agreements we will work with operators to secure routing agreements to ensure freight operators are using the most appropriate routes for their journeys and minimising impacts on local communities. We will also explore the use of faster broadband and improved ICT to improve freight efficiencies, logistics and fleet management.

Technology

In Cambridgeshire the proportion of people working from home rose from 10.06% in 2001 to 12.24% in 2011, an increase of over 21%. In South Cambridgeshire and East Cambridgeshire, over 13% of people worked from home in 2011. However, in Peterborough levels of working at home dropped from 7.54% to 3.92% in 2011

We will make better use of ICT, faster broadband and communications technologies. Adequate broadband, ICT and training is needed to facilitate increased levels of teleworking, helping to reduce the need for personal travel. Furthermore, increased availability of video conferencing will help to reduce business mileage.

Enhanced internet and broadband access will also be important for improving accessibility. For example, the internet is an important channel for matching employers to job seekers. Furthermore, teleworking could be an option for those who would otherwise be unable to access the labour market, for example people with disabilities and carers.

Technology will also be utilised to enhance the standard and availability of information about travel options as well as helping to improve booking options and ticketing systems for passenger transport services, car sharing schemes, and other transport services.

Further work to develop the Long Term Transport Strategy

There are areas where a more detailed consideration of the wider issues raised by traffic growth and route choices on a transport network coping with major growth is needed. Detailed study work will be undertaken looking at a number of areas, including:

- The high tech clusters and growth corridors to the south east of Cambridge the A1307 and A1301 corridors between Cambridge, Haverhill and Saffron Walden, and the A505 between the M11 and the A11.
- Central Cambridgeshire the area bounded by the A141, A142, A10 and the A14.

In looking at these issues, the strategy will seek to take a holistic view of the areas, recognising that to address individual problems in isolation may lead to greater problems elsewhere. We will seek to avoid interventions that move problems from one part of the transport network to another.

4. Action Plan

The Action Plan identifies schemes necessary to deliver both the Cambridgeshire and Peterborough Long Term Transport Strategies.

A. Schemes in the period from 2014 to 2031.

- A1. Schemes that are already planned for public sector delivery in the period from 2014 to 2021.
- A2. Schemes that are required to directly support the delivery of major development allocations in current and emerging Local Plans to 2031 (Huntingdonshire 2036).
- A3. Additional schemes that are not currently programmed, but that are necessary to provide new capacity or to address existing problems on the transport network.
- B. Further schemes that may be considered, including in the longer term (to 2050).

In the first section, schemes that are required specifically to cater for the transport demands of specific major development sites are identified separately.

Part A covers the period of the emerging Local Plans of the district councils to 2031 (or in the case of Huntingdonshire, to 2036). It sets out the required infrastructure to support the major development allocations, as well as other strategic transport infrastructure improvements that are needed to support economic growth in the area.

Part B of the Action Plan looks to 2050 and identifies some of the longer term transport aspirations for Cambridgeshire.

Where available, the Action Plan provides information on estimated costs and potential funding sources, as well as the responsible delivery agency and approximate timescales for delivery.

The schemes in this Action Plan will deliver the transport infrastructure and services that are needed to provide transport capacity for each major development site. Schemes will be taken forward in line with development timescales, and if and when other funding opportunities come forward.

To deliver the Action Plan there will be an increased emphasis on working with government and local partners to bring forward the early delivery of schemes to help facilitate economic growth, including joint funding of schemes, like the A14 example.

The tables in this chapter give brief description of the schemes and an indication of their costs and their delivery timescale. More detail on the schemes is set out in area based strategies (such as the Transport Strategy for Cambridge and South Cambridgeshire). These strategies are listed in Appendix A. In addition the rationale behind the packages of measures in each area is set out in Appendix B.

A Schemes that are planned for public sector delivery by 2021

This section of the Action Plan sets out the schemes that are in current programmes for delivery or that are assessed as having a realistic prospect of delivery in the period to 2021 based on current knowledge. It includes schemes that are proposed to be delivered using funding for local major schemes from the Local Transport Body, as well as schemes that are programmed to be delivered by the County Council or by others such as the Highways Agency or Network Rail.

Figure 4.1. Schemes that are planned for public sector delivery in the period from 2014 to 2021.

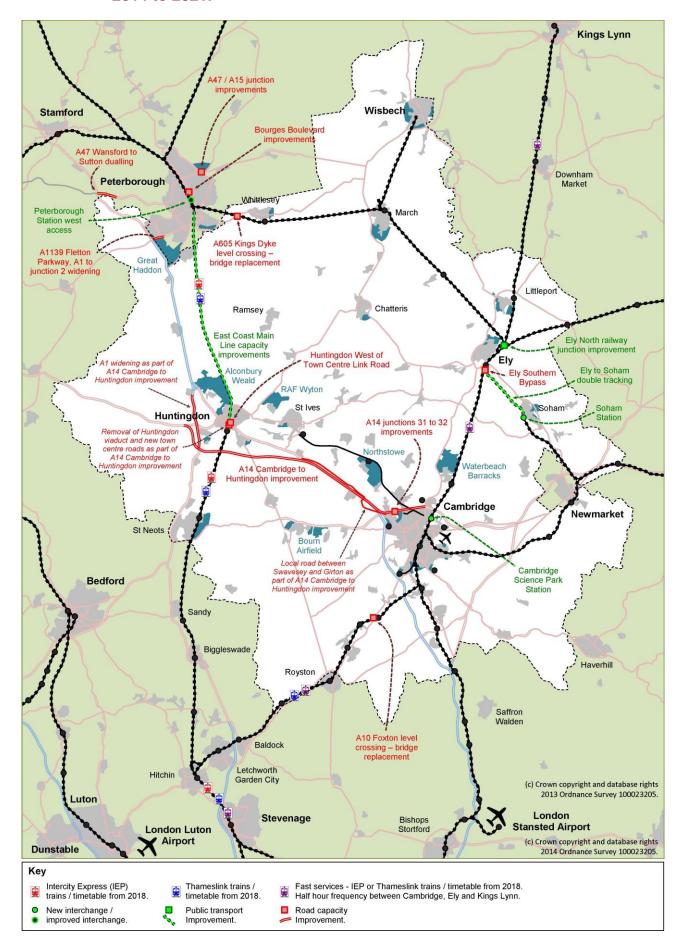


Figure 4.2. Schemes that are planned for public sector delivery in the period from 2014 to 2021.

Scheme / programme	Delivery timescale	Scheme cost		
Local Transport Body major scheme programme, 2015/16 to 20	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
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.	By March 2017	£35M		
Bourges Boulevard improvements, Peterborough. Series of local network improvements, including signalisation of two junctions, pedestrian crossing to link development sites and public realm improvements (scheme in Peterborough).	By March 2017	£7.5M		
A47 / A15 junction (A47 junction 20) capacity improvements. Full signalisation of the roundabout, increase in the number of approach and circulatory lanes and construction of a shared-use pedestrian / cycle bridge over the A47 (scheme in Peterborough).	By March 2019	£7M		
A605 Kings Dyke level crossing replacement, Whittlesey. A bridge or underpass across the railway, removing the potential conflict between trains and vehicular traffic, as well as cyclists and pedestrians. A link to the industrial area north of the railway will also be provided.	By March 2017	£13.5M		
Soham Railway Station. Reinstatement of the station at Soham, providing a direct rail link to Ely.	By March 2018	£6.15M		
VMS / ITS improvements, Peterborough Introduction of Variable Message Signing strategic road network, linked back in real time to its control system (scheme in Peterborough).	To be determined	£5M		
Other locally promoted major schemes				
Cambridge Science Park Station. A new station serving the north side of Cambridge and the high tech business cluster centred on Cambridge Science Park. Scheme includes segregated Busway access and parking for 1,000 cycles.	2016	£30M		
A1139 Fletton Parkway, A1 to junction 2 widening, Peterborough. Carriageway widening and junction improvements, to improve capacity and to provide access to Great Haddon (scheme in Peterborough).	By March 2015	£11M		
Huntingdon West of Town Centre link road. A link road between Brampton Road and Ermine Street, facilitating development to the west of Huntingdon town centre.	By March 2014	£10M		
Highways Agency road improvements				
A14 junctions 31 to 32 capacity improvements An additional lane in each direction between Girton and Histon, and improvements to the westbound slip roads, funded through the Highways Agency's Targeted Improvements and Pinch Point programmes.	By November 2014	£15.7M		
 A14 Cambridge to Huntingdon improvement. Major capacity enhancement scheme in four main sections: A Huntingdon Southern Bypass, comprising a 2/3 lane dual carriageway between Ellington and Swavesey. Also incorporates widening of the A1 from 2 to 3 lanes between Brampton and Alconbury. Huntingdon viaduct over the East Coast Main Line removed and old A14 alignment fed into Huntingdon's local road network. On-line widening between Swavesey and Girton. 3 lanes from Swavesey to Bar Hill. 4 lanes from Bar Hill to Girton. Single carriageway local access road running parallel to A14 between Swavesey and Girton. Simplified Girton Interchange maintaining current major movements. On-line widening from 2 to 3 lanes between Girton and Histon (incorporating A14 junctions 31 to 32 scheme noted above). 	By 2019	Up to £1,500M		

Scheme / programme	Delivery timescale	Scheme cost
A47 capacity improvements, A1 to Wansford. Dualling of the A47 between the Wansford and Sutton (scheme in Peterborough).	By 2020	£75M
Rail infrastructure capacity improvements		
A10 Foxton level crossing replacement. A bridge or underpass across the railway, removing the potential conflict between trains and vehicular traffic, as well as cyclists and pedestrians. The opportunity to improve interchange facilities at Foxton station will also be investigated.	By March 2019	Network Rail to fund and deliver.
Ely area rail infrastructure improvements. Increased capacity through Ely North junction for freight and passenger trains. Double tracking of the Ely to Soham line.	By March 2019	Network Rail to fund and deliver.
East Coast Main Line rail capacity improvements. Additional track capacity on the East Coast Main Line between Huntingdon and Peterborough.	Trains entre service from 2018	Network Rail to fund and deliver.
Peterborough Station western access. A new access to Peterborough Station from the Station West development (scheme in Peterborough).	To be determined	£10M
Rail service capacity improvements		
Cambridge to Kings Lynn service increase in frequency to half hourly. Capacity improvements at Ely North junction – see above – are required to enable this improvement. In the Thameslink timetable (see below), these trains are likely to continue to serve London Kings Cross from 2018.	By 2015	DfT / Thameslink franchisee funded
 2018 Thameslink timetable. Service improvements including: Trains from Cambridge and Peterborough to London to serve St Pancras, Farringdon, Blackfriars, London Bridge and destinations south of London including Gatwick Airport. Longer train formations and increased number of seats. 	Summer 2018	DfT / Rail industry funded
Intercity Express Programme. New rolling stock and longer trains on InterCity services between London and Peterborough (and potentially to Cambridge and Kings Lynn).	By 2019	DfT / Rail industry funded
 Rural and cross country service enhancements. Works at Ely North junction (see above) are being undertaken on the basis of modified and new passengers services, which are likely to include: Cambridge to Norwich service increase in frequency to half hourly. Birmingham New Street to Stansted service run using longer trains at its current hourly frequency, with a portion detached at Ely for an onward service to Ipswich. A new Nottingham (or Leeds or Sheffield) to Stansted Airport service at hourly frequency, interlocking with the Birmingham New Street service to provide a half hourly service between Peterborough, March, Ely, Cambridge and Stansted Airport. 	By 2021	DfT / Rail industry funded

B Schemes that are required to directly support the delivery of major development allocations in current and emerging Local Plans

This section of the Action Plan sets out the schemes that are required to directly mitigate the transport impacts of major development allocations included in current and emerging Local Plans, providing capacity to meet that developments transport demand.

Measures are typically grouped under the particular development that they relate to, with some exceptions, most notably in Cambridge, where the measures set out address the impacts of growth across the city as a whole.

It should be noted that the presence of an intervention in a group linked to a particular development does not by default mean there is an expectation that the development in question will part or fully fund the intervention. As an example, the Cambridge Science Park Station is of significant benefit to development in the Ely area, but funding for the scheme will be from the rail industry / County Council. Where measures are assumed to be funded directly by development, this is noted in the funding column of Figure 4.3.

Appendix B to this document provides further detail on the rationale for the packages of measures detailed in the following pages.



The A14 trunk road as it passes around the south western edge of Huntingdon town centre.

The A14 Cambridge to Huntingdon scheme (see <u>Figure 4.1</u>, <u>Figure 4.2</u> and <u>Figure 4.9</u>) will provide a new route for the A14 to the south of Huntingdon. The viaduct over the East Coast Main Line and Brampton Road on the current A14 alignment (at the top centre of the picture) will be removed and replaced with a new road layout that will feed into the existing local roads in the town centre and station area.

The A14 Cambridge to Huntingdon scheme is a critical intervention to support development at Alconbury Weald, Wyton Airfield, Northstowe and north west Cambridge.

Figure 4.3. Schemes that are required to support major development allocations in current and emerging Local Plans.

Scheme / programme	Delivery timescale	Indicative cost
Cambridge area development		
A1303 / A1134 Newmarket Road bus priority / Busway. Comprehensive segregated bus priority / Busway on Newmarket Road into Cambridge between Airport Way and Elizabeth Way / East Road.	By March 2022	£43M
A1309 Milton Road bus priority. Bus lanes between Busway junction and Mitchams Corner.	By March 2018	£16M
A1303 Bus priority measures, West Cambridge (see also Bourn Airfield below). High quality segregated bus priority measures between the A428 at its junction with the A1303 and Queens Road in Cambridge. Scheme includes: On-line or off-line bus priority measures between the A428 and M11. On-line bus priority measures between the M11 and Queens Road.	By March 2018	£25M
A1307 Hills Road, 'Project Cambridge'. Traffic restrictions, bus priority, pedestrian and cycle infrastructure and public realm enhancements on hills Road between Station Road and Gonville Place / Lensfield Road / Regent Street.	By March 2019	£25M
Newmarket Road / Airport Way Park & Ride. A new Park & Ride site at the junction of Airport Way and Newmarket Road to replace and enlarge the current Newmarket Road site and to take advantage of the bus priority measures on the A1303 between Airport Way and Elizabeth Way (see above).	By March 2023	£12M
B1049 Histon Road bus priority. Bus priority measures on Histon Road.	By March 2018	£3M
Cambridge orbital bus priority. Cambridge Ring Road, Addenbrooke's to Newmarket Road. Newmarket Road to Cambridge Science Park Station. Histon Road to Madingley Road (provided directly by development). Madingley Road to Trumpington.	By March 2025	£13M £40M - Tbc
The Chisholm Trail. A north – south pedestrian / cycle route between Cambridge Station and Cambridge Science Park, including links to Cambridge Science Park Station and a new bridge over the River Cam.	By March 2017	£8M
Hauxton Park & Ride. A new Park & Ride site on the A10 at Hauxton, complementing the existing Trumpington site.	By March 2021	£12M
Hauxton to Trumpington Park & Ride Busway / bus priority. Segregated bus access from the new Hauxton Park & Ride site to the Busway at the Trumpington Park & Ride site and to Trumpington Road.	By March 2021	£11M
A1307 bus priority. Bus priority measures past congestion on the A1307 corridor between Haverhill and Cambridge.	By March 2020	£25M
Additional Park & Ride capacity, A1307. One or more Park & Ride / rural interchange sites accessed from the A1307 to take advantage of the bus priority measures on A1307 corridor.	By March 2020	£5M
Northstowe		
A14 Cambridge to Huntingdon improvement. See Figure 4.2 above.	By 2019	Up to £1,500M
Northstowe access roads. Access roads to Northstowe from the A14 at Bar Hill and to the A14 parallel local access road at Dry Drayton.	To be determined	Directly funded by developer
Northstowe busway loop. New Busway / segregated bus corridor through the town, linking from the Busway at the Longstanton Park & Ride to the Busway at Oakington.	To be determined	Directly funded by developer

Scheme / programme	Delivery timescale	Indicative cost
Waterbeach Barracks, South Cambridgeshire		
Waterbeach Station relocation. A relocated Waterbeach station to serve the village and the new town, with platforms (capable of taking 12-carriage Thameslink trains or 10-carriage InterCity Express trains).	Mid to late 2020s	£25M
Waterbeach Barracks Busway. A busway link from the station and town centre to north Cambridge including a fully segregated crossing of the A14 Trunk Road.	Mid to late 2020s	£32M
A10 corridor outer Park & Ride site. Park & Ride site on A10 to intercept traffic from the north of Waterbeach, served by new busway link to Cambridge. Alignment to be determined.	Mid to late 2020s	£8M
A10 capacity improvements. Additional capacity for general traffic between the northernmost access to the new town and the Milton Interchange of the A10 with the A14.	Mid to late 2020s	£45M
A14 / A10 Milton Interchange improvements. Additional capacity at the Milton Interchange for movements between the A10 and A14, and the A14 and the A10.	Mid to late 2020s	£40M
Mitigation of local impacts. Delivery or funding of any measures required to mitigate the traffic impact of the new town on Horningsea, Fen Ditton, Milton and Landbeach.	Mid to late 2020s	To be determined
Wider Waterbeach pedestrian / cycle network. A comprehensive network of high quality pedestrian / cycle routes linking the town with key destinations in Cambridge and the surrounding villages.	Mid to late 2020s	£12M
Bourn Airfield and West Cambourne, South Cambridgeshire		
West Cambourne bus links. Segregated bus links from the A428 at Caxton Gibbet through the West Cambourne site, linking to Great Cambourne by the Cambourne Business Park and School Lane Lower Cambourne. Bourn Airfield bus links. A segregated bus link from Cambourne to Bourn Airfield, and on through the development to the junction of St Neots Road with Highfields Road. Bourn Airfield to A428 / A1303 junction bus links. Any measures necessary to ensure that a bus journey between Highfields and the junction of the A428 and the A1303 is direct and unaffected by any	By 2020/21	£20M
congestion suffered by general traffic. A1303 Bus priority measures, A428 to M11. On-line or off-line bus priority measures between the A428 and M11.	By 2016/17	£9M
A1303 Bus priority measures, M11 to Queens Road, Cambridge. On-line bus priority measures between the M11 and Queens Road.	By 2018/19	£24M
A1303 / A428 corridor outer Park & Ride capacity. One or more Park & Ride or rural interchange sites accessed from the A428, to take advantage of the bus priority measures on the A1303 between the A428 and the M11.	By 2016/17	£8M
Wider Cambourne pedestrian / cycle network. Direct, segregated high quality pedestrian / cycle links to west Cambridge, Papworth Everard, Highfields, Hardwick, Caxton, Bourn, Caldecote, Comberton, Bar Hill and Dry Drayton.	By 2018/19	£10M
A428 / A1198 Caxton Gibbet junction improvements (see also Wintringham Park below). Scheme to be identified informed by Highways Agency's Midlands to Felixstowe Route Based Strategy.	To be determined	To be determined
Mitigation of local impacts. Delivery or funding of any measures required to mitigate the traffic impact of the developments on Bourn, Caldecote, Toft, Comberton and Barton.	To be determined	To be determined

Scheme / programme	Delivery timescale	Indicative cost
Huntingdon, St Ives, Alconbury Weald and Wyton Airfield develop	oment, Hunting	gdonshire
A14 Cambridge to Huntingdon improvement. See Figure 4.2 above.	By 2019	Up to £1,500M
High Quality Bus Network Infrastructure, St Ives (Busway) to Wyton Airfield and Alconbury Weald. A high quality bus corridor providing quick and reliable journeys between the end of the Busway at Station Road St Ives and the Enterprise Zone at Alconbury.	To be determined	Directly funded by developer
High Quality Bus Network Infrastructure, St Ives (Busway) to Huntingdon. A high quality bus corridor providing quick and reliable journeys between the end of the Busway at St Ives and Huntingdon town centre / station.	To be determined	To be determined - funding from
High Quality Bus Network Infrastructure, Alconbury Weald to Huntingdon. A high quality bus corridor providing quick and reliable journeys between the Enterprise Zone at Alconbury and Huntingdon town centre / station.	To be determined	various sources
Alconbury Weald station. A new station at Alconbury Weald on the East Coast Main Line (this would be one of the two transport hubs for Alconbury Weald noted above).	To be determined	Rail industry / developer funded
Alconbury Weald Transport Interchange. A second transport interchange to the west / centre of the Alconbury Weald / Enterprise Zone site to serve the new development.	To be determined	Directly funded by developer
Wyton Airfield Transport Interchange. A transport interchange in the centre of the new settlement at Wyton Airfield.	To be determined	Directly funded by developer
Hartford Transport Interchange. A transport interchange to intercept car trips and provide access to the St Ives to Wyton Airfield and Alconbury and St Ives to Huntingdon High Quality Bus Network routes	To be determined	To be determined
A141 capacity enhancements around Huntingdon. Junction capacity enhancements on the A141 Huntingdon northern bypass at the following locations. Ermine Street. Washingley Road. St Peter's Road. A1123 Huntingdon Road / B1514 Main Street. B1090 Sawtry Way.	To be determined	To be determined – funding from various sources
A141 Alconbury Weald / Enterprise Zone southern access. A new access junction for Alconbury Weald on the A141 to the west of the bridge over the East Coast Main Line.	To be determined	Directly funded by developer
A141 future Huntingdon Bypass alignment. The safeguarding of an alignment for the possible future re-routing of the A141 Huntingdon northern bypass. This route would separate the strategic and local functions of the current route, and provide capacity for further growth. It would only be delivered if conditions on the network required it, or if it were needed to support growth.	Late 2020s / early 2030s if needed	To be determined
Wyton Airfield Access. Further measures (to be determined by additional study work) to identify the most sustainable way to provide for the anticipated transport demand from the development of Wyton Airfield, and mitigate impacts on St Ives and Huntingdon.	Late 2020s / early 2030s if needed	To be determined
A141 capacity improvements between the B1090 Sawtry Way junction and the A141 future Huntingdon Bypass alignment if needed. Capacity upgrades on the existing A141 alignment between Huntingdon and Wyton Airfield if needed, in concert with the A141 future Huntingdon bypass (see above).	Mid 2020s	To be determined

Scheme / programme	Delivery timescale	Indicative cost
A1096 capacity enhancements around St Ives. Junction capacity enhancements on the A1096 around St Ives at the following locations. Low Road. Busway. Meadow Lane. Compass Point.	To be determined	To be determined
B1090 traffic management. Measures to manage speed and capacity of traffic on the B1090 Sawtry Way. Precise details of measures to be undertaken to be considered in tandem with the development of detailed proposals for Wyton Airfield site access in the context of the interventions noted above.	To be determined	To be determined
Wider Huntingdon / St Ives area pedestrian / cycle network. A comprehensive network of high quality pedestrian / cycle routes linking the new town with key destinations in Huntingdon, St Ives, Alconbury Weald, Wyton Airfield and the surrounding ring of villages.	To be determined	To be determined
Wintringham Park and Love's Farm, St Neots, Huntingdonshire		
A428 / A1198 Caxton Gibbet junction improvements. (see also Bourn Airfield / West Cambourne above). Scheme to be identified, informed by Highways Agency's Midlands to Felixstowe Route Based Strategy.	To be determined	To be determined
Ely area development, East Cambridgeshire		
Ely Southern Bypass. A southern bypass of Ely (see Figure 4.2).	By March 2017	£35M
 North Ely Highway Improvements. Site access from the A10, B1382 and Lynn Road. Fourth arm at the B1382 Ely Road/Prickwillow Road/Kings Avenue Roundabout A new access road from the B1382 Prickwillow Road / Kings Avenue roundabout to the A10 including a new junction with Lynn Road. A new access road from Cam Drive to a new roundabout on the A10. 	2018	Directly funded by developer
Improved parking and interchange facilities at Ely Station. Measures to improve accessibility of the station and cater for more southbound trips from Ely by rail, reducing pressure on the A10.	2018	£1M
Cambridge Science Park Station. A new station serving the north side of Cambridge and the high tech business cluster centred on Cambridge Science Park (see Figure 4.2).	2016	£30M
Bus improvements. Measures to provide reliable and timely bus links to Ely North, including: The closure of New Barnes Avenue to through traffic Bus gate on Brays Lane Improvements to bus services and interchange facilities, particularly Ely City Centre Real-time bus information and improvements to bus infrastructure	2018	£2.7M
Dualling of the A10 between the A142 Witchford Road and the A142 Angel Drove. Capacity improvements on the busiest section of the A10 Ely bypass, including additional selective entry arm widening at the roundabouts at either end of the section.	2020	£3M
A14 / A10 Milton Interchange improvements. Additional capacity at the Milton Interchange for movements between the A10 and A14, and the A14 and the A10 (see Waterbeach barracks above).	To be determined	£40M
Wider Ely area pedestrian / cycle network. A comprehensive network of high quality pedestrian / cycle routes linking the Ely north development with key destinations in and around Ely.	2018	To be determined

Scheme / programme	Delivery timescale	Indicative cost
Fenland Market Town development		
 A47 Wisbech junction capacity improvements package. A47 / A141 Guyhirn roundabout, Guyhirn. A47 / B198 Cromwell Road roundabout, Wisbech. A47 / A1101 Elm High Road roundabout, Wisbech (scheme in Norfolk). A47 / Broad End Road, Wisbech; priority junction replaced with a roundabout (scheme in Norfolk). 	2013-2017	£7M
Wisbech river crossing and link road. A link road between the B198 South Brink / Cromwell Road and the B1169 Dowgate Road / A1101 Leverington Road, incorporating a new bridge crossing the River Nene Route to be determined.	To be determined	To be determined
Freedom Bridge junction modifications and Wisbech bus station access. Removal or partial removal of exit on the south arm of the Freedom Bridge roundabout to Horse Fair, and providing a new signalised junction on Nene Quay for bus and car park access (dependant on redevelopment in area).	To be determined	To be determined
Regeneration of Fenland Railway Stations. New car parking and station forecourt improvements at March. Implementation of Whittlesea Station Masterplan. Platform lengthening and new car park at Manea. Support increased frequencies of trains serving the three stations.		
Wisbech south access road. A new access road to provide development access to allocations to the south of Wisbech on the current alignment of Newbridge Lane, with a new priority junction linking to an extension of Boleness Road.	To be determined	To be determined
 March junction improvements package. A141 / Hostmoor Avenue junction. A141 / B1099 Wisbech Road junction. A141 / Gaul Road junction. A141 / Burrowmoor Road junction. Station Road / Broad Street / Dartford Road junction. B1101 High Street / St Peters Road junction. 	To be determined	£5.9M

C Additional schemes that are necessary to provide new capacity for growth and to address existing problems on the transport network

The schemes in <u>Figure 4.4</u> are required to provide capacity for growth across the transport network as a whole. While development may be required to directly contribute towards the delivery of some schemes, the measures in this table are generally more strategic in nature, and will have wider benefits than simply providing capacity for development.

Figure 4.4. Additional schemes that are not currently programmed, but that are necessary to provide new capacity or to address existing problems on the transport network.

Scheme / programme	Delivery timescale	Indicative cost
Locally promoted major schemes		
March to Wisbech rail reinstatement Reinstate March to Wisbech rail services. A shuttle service between the towns should be viable, but further work is needed to consider in more detail the case for direct services to Cambridge, and for freight services to use the line.	To be determined	£50-75M
March Northern Link Road. A link road between Hostmoor Avenue and Elm Road, March.	To be determined	To be determined
Cambridge to Haverhill High Quality Passenger Transport. High quality bus priority – Haverhill to edge of Cambridge. Options that will be considered include: • A1307 comprehensive bus priority, Cambridge to Haverhill • Single track Busway parallel to A1307. • Twin track Busway, Haverhill to Shelford / Addenbrooke's on alignment of the old Haverhill to Cambridge railway. • Hybrid A1307 / railway alignment Busway.	To be determined	To be determined
A605 Whittlesey Access, Peterborough. Improves resilience, address existing and long standing congestion issues.	To be determined	To be determined
Strategic Pedestrian / Cycle Network		
Cambridge cycle network. Upgrade and development of the pedestrian and cycle network in Cambridge, providing new links and upgrading existing links to provide a higher quality, more comprehensive network.	Ongoing	To be determined
Third city centre cycle park, Cambridge. A third secure, accessible, high capacity city centre cycle park	To be determined	To be determined
Town cycle networks. Investment in pedestrian and cycle networks in the towns of Cambridgeshire, focusing on safety, amenity, and achieving more comprehensive networks that serve a greater number of destinations.	Ongoing	To be determined
Rural pedestrian cycle network development. Networks of shorter distance routes between villages around key destinations in the rural area such a larger village centres, village colleges, doctor's surgeries and major employment sites.	To be determined	To be determined
Interurban cycle network. High quality pedestrian and cycle links between Cambridge, Peterborough, towns in Cambridgeshire and towns in neighbouring counties.	To be determined	To be determined
Community led transport solutions		
Locally led solutions. Rolling programme of review of rural bus services to deliver locally led and appropriate transport services for rural communities.	Ongoing	Ongoing revenue funding

Scheme / programme	Delivery timescale	Indicative cost
Highways Agency road improvements		
A1 / A421 Black Cat roundabout capacity improvements. Major capacity improvements ahead of or as part of the A428 Caxton Gibbet to Black Cat capacity improvements (see below) (scheme in Bedford).	To be determined	Highway Agency funded
A428 Caxton Gibbet to Black Cat capacity improvements. Scheme to address congestion on the A428 St Neots Southern Bypass and on the A1 between its junctions with the A428 at St Neots and the A421 at the Black Cat roundabout. The scheme would provide an offline improvement taking the A428 directly into the Black Cat roundabout without requiring traffic to use the A1. The scheme would incorporate the A1 / A421 Black Cat roundabout scheme detailed above, and the A428 / A1198 Caxton Gibbet roundabout scheme detailed in Figure 4.3 (scheme primarily in Cambridgeshire but short sections in Bedford and Central Bedfordshire).	To be determined	Highway Agency funded
A1 capacity improvements at Buckden Consideration of options for relieving congestion at the Buckden roundabout on the A1. Options considered will need to include a bypass feeding into the stretch of the A1 that will be widened as part of the A14 Cambridge to Huntingdon scheme. Work to be led by Highways Agency's London to Leeds Route Based Strategy.	To be determined	Highway Agency funded
A47 capacity improvements, Peterborough to Thorney bypass. Dualling of the A47 between Peterborough and the Thorney Bypass (scheme in Peterborough).	To be determined	Highway Agency funded
A47 capacity improvements, Thorney bypass to Walton Highway. Dualling of the A47 between Thorney Bypass and Walton Highway (scheme primarily in Cambridgeshire, but with sections in Peterborough and Norfolk).	To be determined	Highway Agency funded
A14 / A142 junction capacity improvements, Newmarket, Capacity to support growth in East Cambridgeshire and in Newmarket (scheme in Suffolk).	To be determined	To be determined
Rail infrastructure capacity improvements		
 Electrification of rural rail routes in Cambridgeshire and surrounding counties. Felixstowe to Nuneaton (Newmarket to Peterborough in strategy area). Cambridge to Newmarket. Ely to Norwich. Electrification will allow electrically powered freight trains to serve Felixstowe Port from the north. It will also allow passenger services between Cambridge and Ipswich, Cambridge and Norwich, Peterborough and Ipswich and Stansted Airport and Birmingham New Street to be run using more widely available and flexible electric powered rolling stock. 	Lobbying for delivery in Network Rail Control Period 6 (2019-24)	Network Rail to fund and deliver.
Addenbrooke's station. A new station at Addenbrooke's to serve the Cambridge Biomedical campus. Additional track capacity is likely to be needed between Cambridge Station and Shelford junction to facilitate this work, but growth in patronage on the railway and future growth are likely to necessitate such work. The station could be served by trains to London Kings Cross, London Liverpool Street and Stansted Airport, and trains on the Thameslink core route through central London. In addition, East West Rail services could serve the station.	Early to mid- 2020s	To be determined

Scheme / programme	Delivery timescale	Indicative cost
Rail service capacity improvements		
Additional opportunities arising from the Thameslink programme. Possibilities include:		
 Increase in frequency of semi fast and slow services between Cambridge and London (from two to four trains an hour). Additional destinations to the south of London to be served direct from Cambridge, such as Maidstone East and Brighton. 	To be determined	Rail industry funded
Cambridge to Ipswich service increase in frequency to half hourly. Additional double track capacity between Cambridge and Newmarket may be required to allow trains to pass.	To be determined	Rail industry funded
New rolling stock on rural rail routes. New electric powered rolling stock on the rural routes noted above.	To be determined	Rail industry funded

D Further schemes that may be needed, including in the longer term

The schemes set out in this section fall in two categories. Firstly, there are schemes that may be needed to address capacity or congestion issues as a result of growth, but which the need for has not yet been established. If they are needed, they are more likely to be delivered in the medium to longer term, but depending on need, may be brought forward.

Figure 4.5. Further schemes that may be needed, including in the longer term

Scheme / programme	Delivery timescale	Indicative cost
Locally promoted major schemes		
 Cambridge orbital highway capacity. Schemes that may needed could include: Additional capacity on M11 corridor between Trumpington and Girton. Highway capacity between Addenbrooke's Road and Babraham Road Highway capacity between Babraham Road and Cherry Hinton (Yarrow Road) including tunnel under the Gogs. Highway capacity between Airport Way and the A14 Fen Ditton junction. 	Longer term	To be determined
A505 capacity improvements. Consideration of measures that may be needed to provide additional capacity on the A505, particularly the busiest stretch between the A11 and M11 in the Duxford / Whittlesford / Pampisford area.	Longer term	To be determined
A10 Harston and Hauxton capacity and access improvements Consideration of measures that may be needed to address the impacts of high traffic flows on the A10 in the villages of Harston and Hauxton, in the context of the overall strategy objectives to focus on provision of new transport capacity on public transport, walking and cycling.	Longer term	To be determined
A1123 Earith. Monitor the impact and effectiveness of recent improvements to A1123 (which include raising levels, electronic signage & telemetry) in Earith aimed at reducing impacts of flooding on accessibility. Depending on the results, further investigation of options may be needed to resolve traffic problems associated with the closure of the A1123 when the floodplain between the Old and New Bedford Rivers is flooded. Potential solutions would be considered in the context of the underlying trend of closures and the economic impact of those closures compared to the cost of a permanent solution.	Longer term	To be determined

Scheme / programme	Delivery timescale	Indicative cost
Highways Agency road improvements		
M11 capacity in Cambridge area. Consideration of need for capacity improvements between M11 junctions 11 and 14 (Trumpington to Girton) in the medium to longer term, including consideration of junction capacity, and of hard shoulder running (Smart Motorways).	To be determined	Highway Agency funded
M11 capacity improvements south of Cambridge. Consideration of need for capacity improvements between M11 junctions 8 and 11 (Stansted Airport / Bishop's Stortford to Trumpington) in the medium to longer term, including consideration of junction capacity, and of hard shoulder running. Work to be led by Highways Agency's London to Leeds Route Based Strategy.	To be determined	Highway Agency funded
A14 capacity improvements east of Cambridge. Consideration of need for capacity improvements between Milton Interchange and Newmarket in the medium to longer term. Work to be led by Highways Agency's Midlands to Felixstowe Route Based Strategy.	To be determined	Highway Agency funded
Rail infrastructure capacity improvements		
East West Rail. Subject to a business case for a route demonstrating a compelling economic case, support for the completion of the East West Rail central section on a route to be determined.	Early to mid- 2020s	Rail industry funded
Cherry Hinton and Fulbourn stations. Consideration of new station(s) in the Cherry Hinton / Fulbourn area. Line speed improvements might be required to enable stops at station(s) to be fitted into existing timetable. Additional double track capacity between Newmarket and Cambridge might also be required if Ipswich to Peterborough service were running at a half hour frequency as per the proposal in Figure 4.4.	To be determined	To be determined
Newmarket west curve Reinstatement of the west curve at Newmarket between the Ely to Ipswich and Cambridge to Ipswich railway lines, allowing direct services to be run between Ely and the new station at Soham to Newmarket and Cambridge.	To be determined	Rail industry funded

Maps showing Long Term Transport Strategy schemes

The maps on the following pages show the schemes in Figures 4.2, 4.3, 4.4 and 4.5.

Figure 4.6. Key to maps showing schemes that are required to support major development allocations in current and emerging Local Plans.

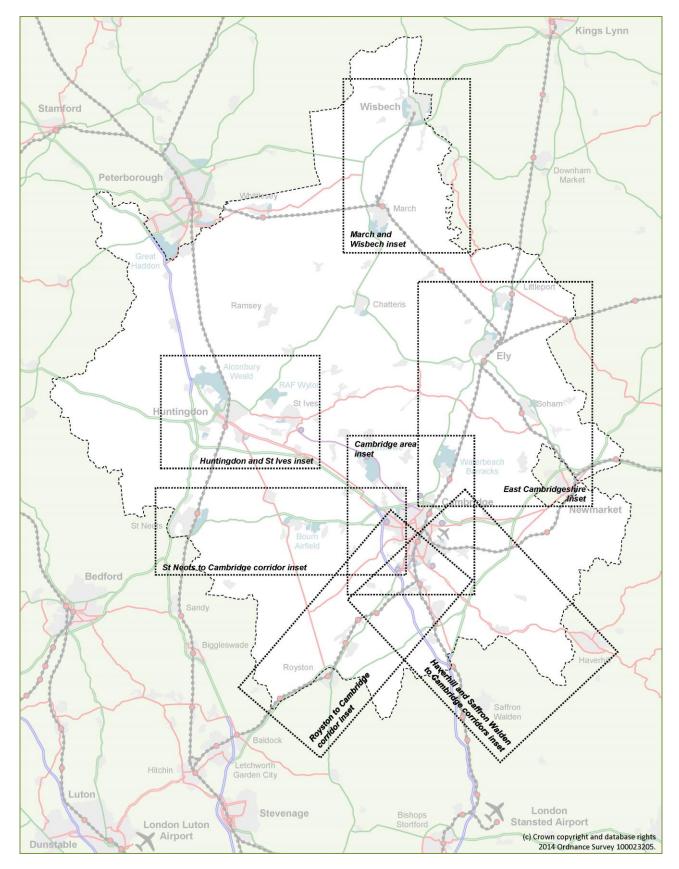


Figure 4.7. Cambridge area inset: Highway Network

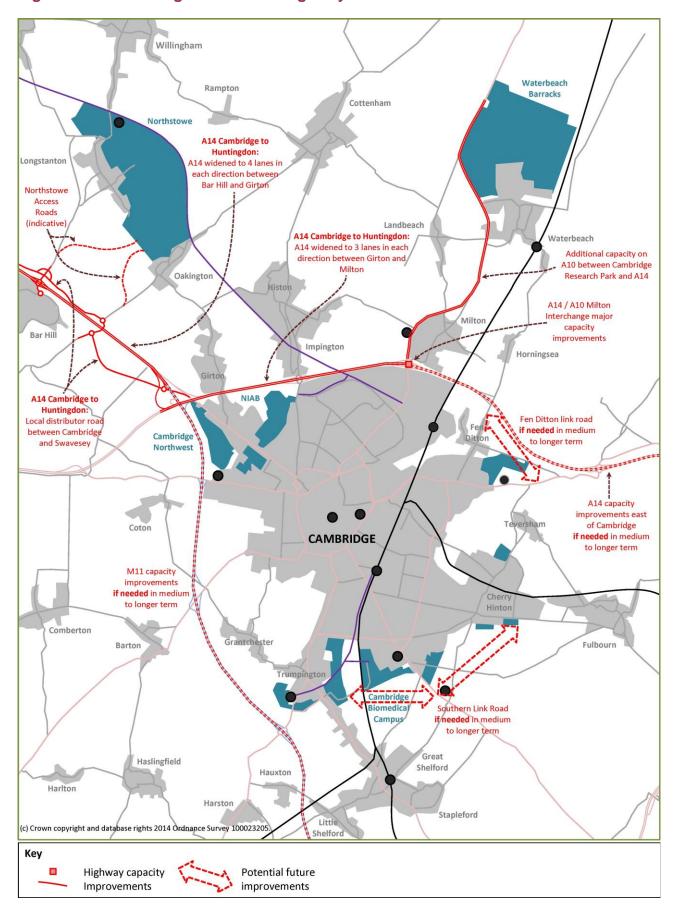


Figure 4.8. Cambridge area inset: Public Transport

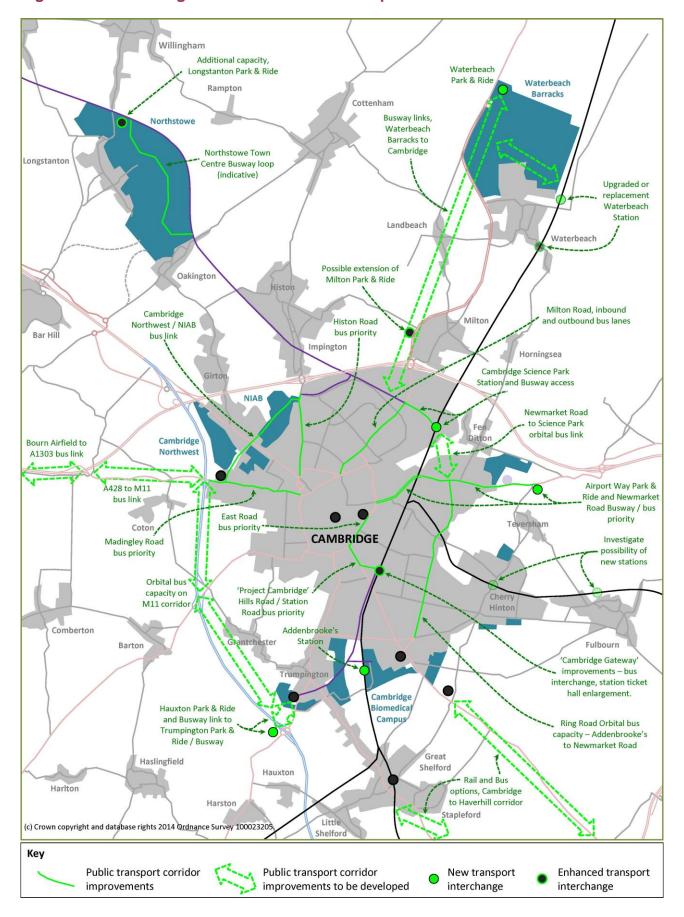


Figure 4.9. Huntingdon and St Ives Inset

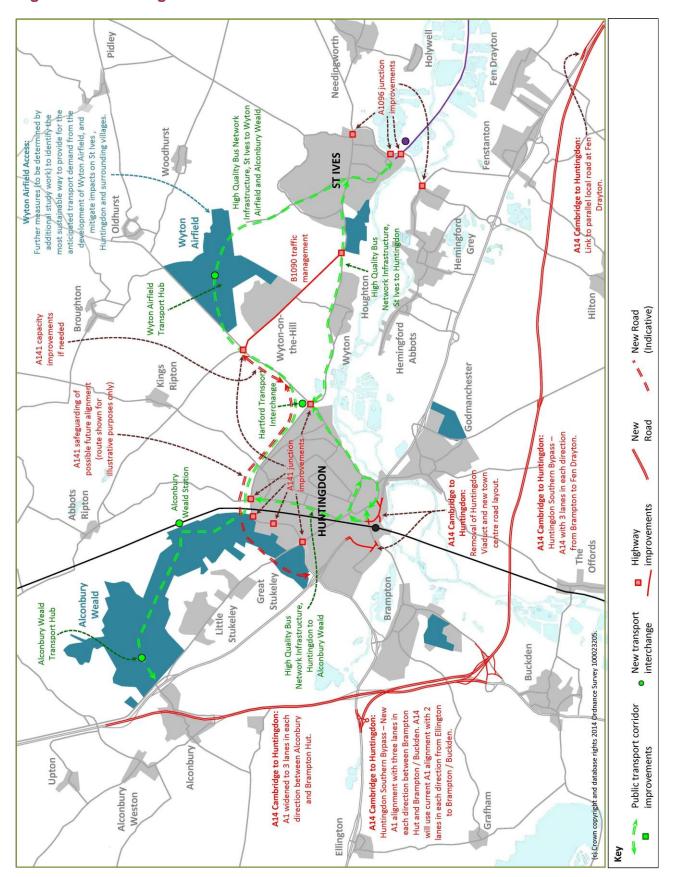


Figure 4.10. St Neots and Cambourne to Cambridge corridor inset

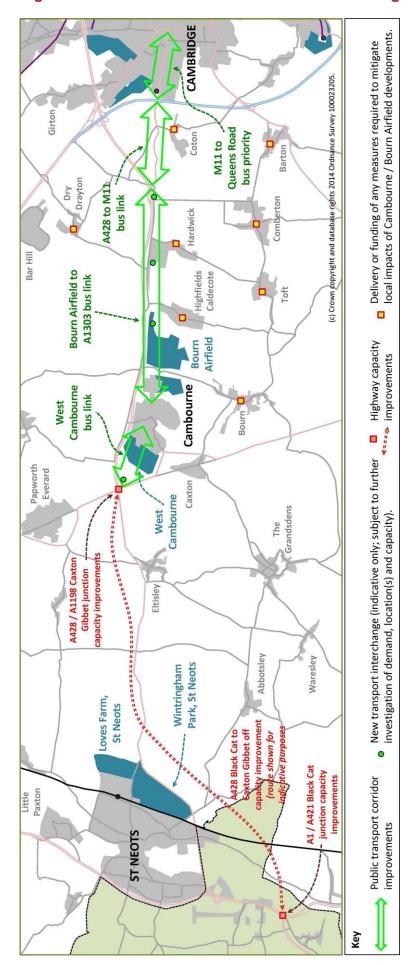


Figure 4.11. East Cambridgeshire inset

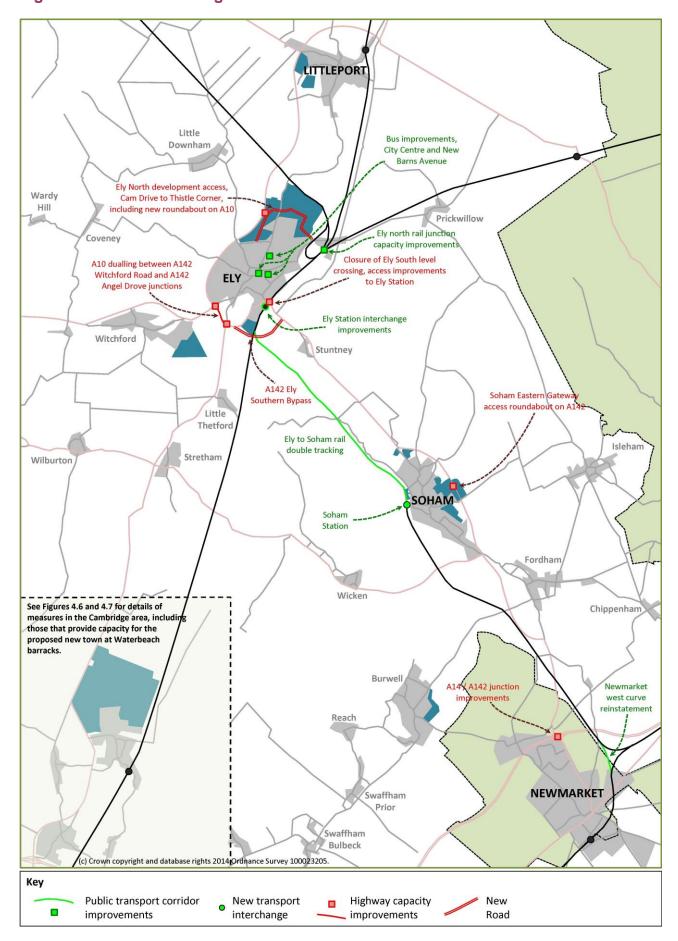


Figure 4.12. March and Wisbech inset

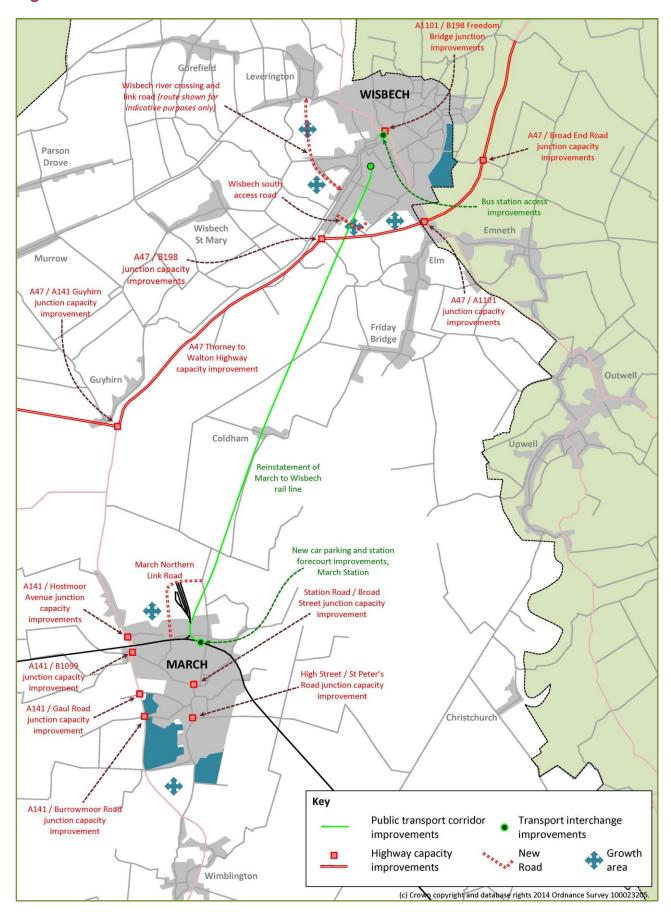


Figure 4.13. Haverhill and Saffron Walden to Cambridge inset

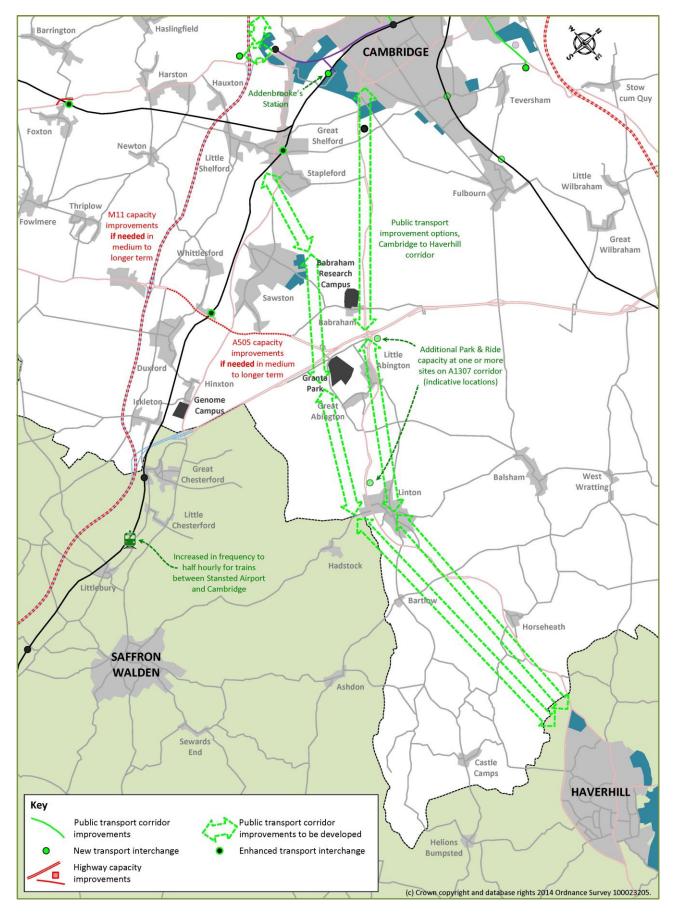


Figure 4.14. Royston to Cambridge corridor inset

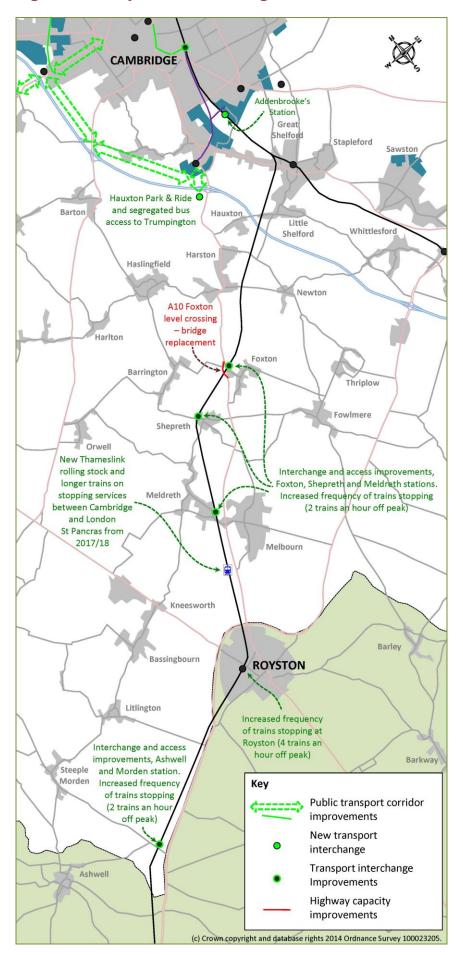
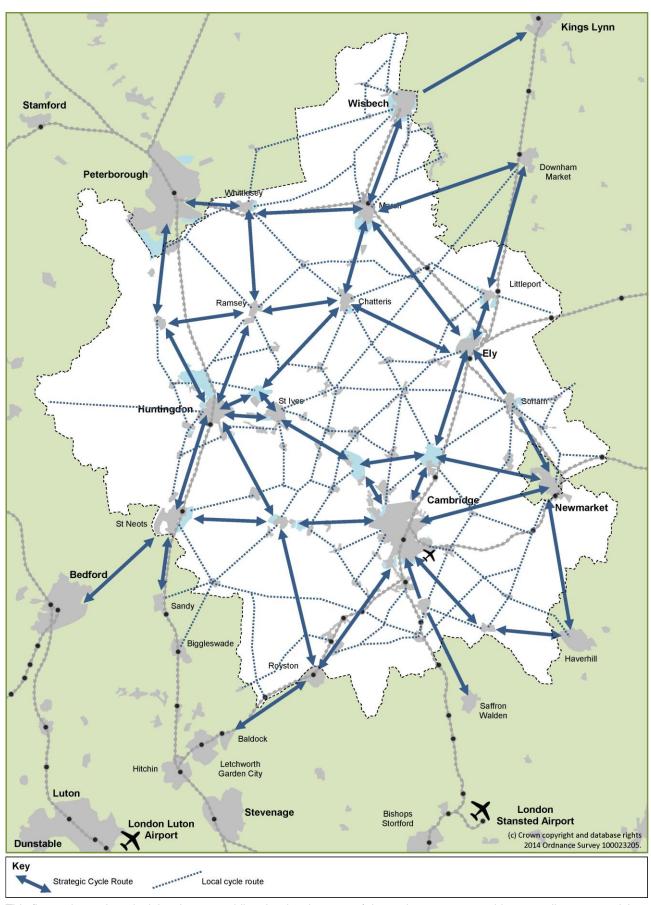
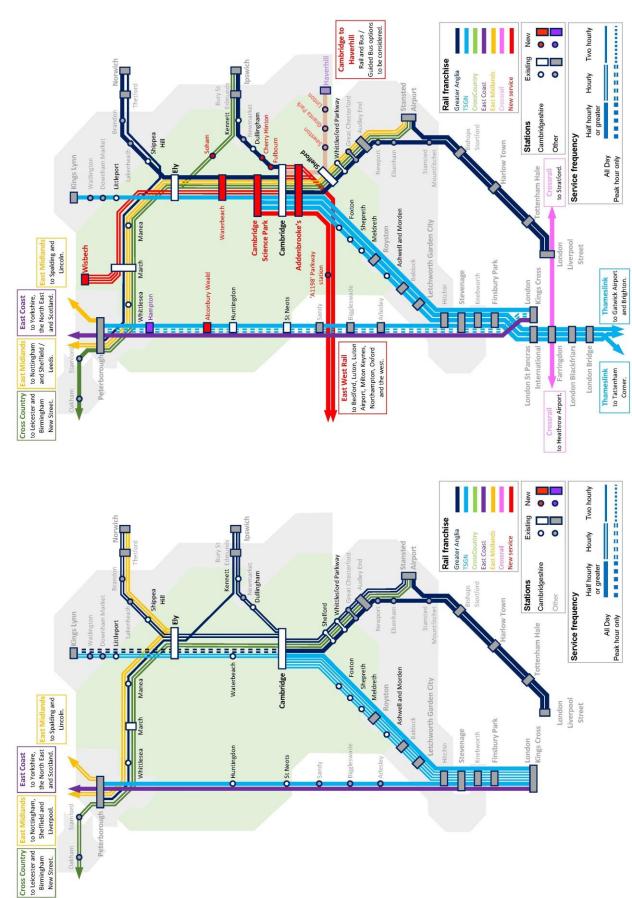


Figure 4.15. Indicative map of the strategic cycle network



This figure shows the principles that are guiding the development of the cycle strategy; to achieve excellent connectivity between Cambridge the Market Towns of Cambridgeshire and neighbouring towns with a strategic network, and a finer grain of links between villages and towns across the county. Routes shown are therefore indicative.

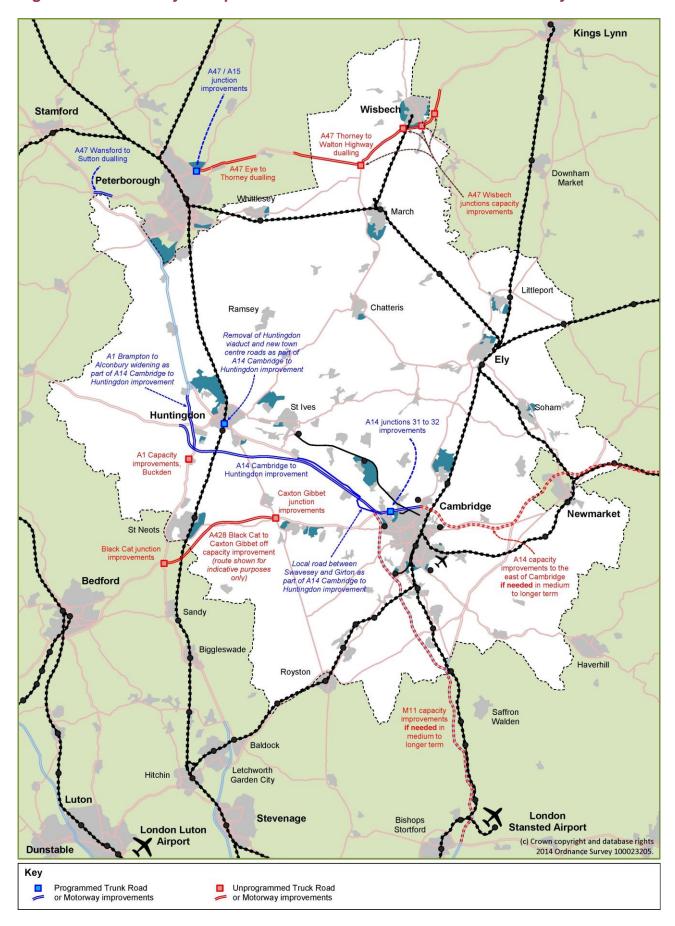
Figure 4.16. Rail service improvements in Cambridgeshire and the GCGPEP area



Current service levels (2014)

Planned and potential service improvements

Figure 4.17. Summary of improvements to the Trunk Road and Motorway network



5. Funding our strategy

This strategy sets out the strategic transport infrastructure needed to support planned growth across Cambridgeshire and Peterborough to 2031/36 and the infrastructure that is likely to be needed to ensure that the network can support growth into the longer term.

Securing funding to fully deliver this strategy may be difficult, given the current challenging funding environment, and with money from traditional sources in decline. Currently, Cambridgeshire receives in the order of £5M per annum of Local Transport Plan funding for small scale transport improvements across the county, but funding from this source is likely to decrease. However, there are new opportunities for funding. These include the City Deal process, which could bring up to £500M of investment in transport infrastructure to the Cambridge and South Cambridgeshire area, and the Local Growth Fund (LGF), which will be the primary source of new funding for transport infrastructure, and will be available for bids for funding from Local Enterprise Partnerships.

We also work with partners and stakeholders to secure commitment to delivery as well as funding contributions for infrastructure improvements that support continued economic prosperity. We are working with neighbouring county and district councils and the Department for Transport to agree a funding package for improvements to the A14 between Cambridge and Huntingdon. We will continue with this approach in future, where infrastructure improvements are shown to have widespread benefits to our partners.

In addition, the council and its partners will continue to lobby central government and other agencies for funding towards infrastructure improvements on the nationally managed trunk road, motorway and rail networks that support economic growth and improved productivity.

Committed funding

Some significant investment is already planned, with £110M of investment in local major schemes being made to 2021, as detailed in Figure 4.1. This includes Cambridge Science Park Station (£30M), the Huntingdon West of Town Centre link road (£10M), and around £76M to deliver six major schemes that have been identified as the priorities of the Local Transport Body, as detailed in Figure 5.1. The Government has committed £14.1M – around 20% of the total cost of these six schemes – through the Local Transport Body, but much of this investment is being made by the Local Authorities with a focus on key schemes which will help to unlock growth and ensure continued economic prosperity.

Figure 5.1. Local Transport Body priority scheme funding, 2015/16 – 2018/19

Promoter	Scheme	Capital cost	LTB contribution
	Ely Southern Bypass.	£35M	£6M
Cambridgeshire County Council	Whittlesey Access Phase 1: A605 Kings Dyke level crossing.	£13.3M	£3M
	Soham Station.	£6.15M	£1M
	Bourges Boulevard improvements, Peterborough.	£7.5M	£2.1M
Peterborough City Council	A47 / A15 junction (A47 junction 20) capacity improvements.	£7M	£2M
	VMS / ITS improvements, Peterborough	£5M	03
Total		£75.95M	£14.1M



The area around Cambridge Station.

Since this photo was taken in 2011, two new platforms have been provided at the station, the Busway has opened, and large parts of the site have been redeveloped for office, housing, student residence and retail use. The development is contributing towards improvements to the station including a major enlargement of the ticket hall and a 2,900 space cycle park.

The City Deal for Greater Cambridge

In the 2014 budget, the Chancellor of the Exchequer announced a City Deal for Greater Cambridge. The deal, between government and Cambridgeshire County Council, Cambridge City Council, South Cambridgeshire District Council, the Greater Cambridge Greater Peterborough Enterprise Partnership and the University of Cambridge will bring up to £500 million pounds of grant funding to invest in transport infrastructure over 15 to 20 years from 2015/16, and help to unlock a £1bn investment in the area.

This City Deal funding is expected to be payable in three tranches, with the initial tranche delivering £100M in the five year period from 2015/16. Future tranches will be dependent on the Council and its partners meeting targets that are likely to include growth and transport factors.

The funding will be used to deliver infrastructure that is necessary to support housing and jobs growth in and around Cambridge, and will focus on radial and orbital movements in and around the city, and on several of the key outer radial corridors where housing and jobs growth is planned, including the A10, A428 and A1307. The schemes that will be delivered are all included in this strategy and a detailed programme for the use of this funding will be now be developed further as the deal has been agreed in principle.

This deal will empower the local partners to support and enhance growth in the Greater Cambridge area, and will bring benefits to the rest of Cambridgeshire and the wider GCGPEP area. The deal also includes proposed changes to governance of strategic

transport and planning in the Cambridge and South Cambridgeshire area, which is expected to see the formation of a Joint Committee and, pending legislative changes, a Combined Authority for the area.

The Local Growth Fund (LGF) and Strategic Economic Plan (SEP)

Government has announced intentions for a significant uplift in investment in 'economic infrastructure' in the next parliament to support growth. The majority of government funding for infrastructure investment to 2021 is likely to be allocated to LEPs, through the Local Growth Fund:

- The LGF will have over £2 billion funding from national skills, housing and transport budgets for 2015-16 (see <u>Figure 5.2</u>).
- Government has committed a further £5 billion of transport funding into the LGF from 2016-17 to 2020-21, and has stated that the LGF will be maintained at a total of at least £2 billion a year in that period to enable long-term planning of priority infrastructure investment.

Around £314 million of the LGF transport funding for 2015/16 has already been allocated to projects, which means there is likely to be around £800 million of local transport funding available nationally to be allocated to projects that support growth.

In order to secure such funding, the Government and LEPs will negotiate Growth Deals on the basis of the LEP's Strategic Economic Plan. Government expects that Growth Deals will include a share of the LGF for spending on delivery of their SEP which should address:

The Growth Plan

Vision for the local area, strategic objectives, opportunities for growth, barriers to growth (market failures), and evidence that proposed interventions are appropriate to address market failure based on a clear evidence base and explanation of why the proposed solutions are optimal including consideration of alternatives.

Figure 5.2. Funding announced in Government's 2013 Spending Review for the Local Growth Fund in 2015/16

Source	Funding, 2015/16 (£M)
Local Authority Transport Majors	819
Local Sustainable Transport Fund	100
Local Transport Plan Integrated Transport Block	200
Further Education Capital	330
European Social Fund skills match funding	170
New Homes Bonus	400
Total	2,019
Of which capital funding	1,449

Value for Money (VfM)

To ensure VfM is assessed credibly, SEPs should provide a reasonable level of detail about the individual interventions which make up the proposed overall programme. Government expects to see "BCRs for shovel-ready transport schemes greater than £5million".

Delivery and Risk

Evidence base that the LEP is making progress, has a track record in delivery and has appropriate plans, governance and accountability structures in place to spend the LGF.

This LTTS will form an important evidence base for informing the Growth Deal. Transport as a key enabler of growth is expected to be a major element of the SEP and the Growth

Plan in the Greater Cambridge Greater Peterborough LEP area. Therefore it will be important to ensure that the related transport challenges and interventions are identified. Government has confirmed that there will not be additional capital funding from Government for local transport projects other than that provided directly to Local Authorities or in the Local Growth Fund, so it will be important to ensure that the SEP includes the full spectrum of transport and infrastructure projects related to growth to 2020/21.

Funding allocated in the initial Growth Deal settlement

In July 2014, Government announced initial Local Growth Fund allocations. Funding was allocated to two transport schemes in Cambridgeshire, and a further two schemes were discussed in the Deal document and may be brought forward subject to the achievement of certain milestones:

- Whittlesey Access Phase 1: A605 Kings Dyke level crossing An allocation of £5M split equally over 2015/16 and 2016/17.
- Wisbech Access Strategy

An allocation of £1M for development of the package of measures Wisbech, with up to £10.5M further between 2017/18 and 2020/21 for scheme delivery.

- A428 to M11 segregated bus links
 Provisional allocation of up to £9M subject to provision of a full business case. This scheme forms part of the larger A428 corridor public transport proposals that will be funded by City Deal and developer funding.
- Ely Southern Bypass
 Now that planning permission being granted, Government will explore funding options with local partners to inform future Local Growth Fund allocation decisions. £16M is sought from the Local Growth Fund for this scheme (see below).

'SEP2': The second round of Growth Deal funding

The Cambridgeshire schemes listed in <u>Figure 5.3</u> are under consideration for funding from the second round of growth deal funding for the Greater GCGP SEP.

Figure 5.3. Cambridgeshire transport schemes being considered for 'SEP2' funding

Scheme	Capital cost	'SEP2' bid
Ely Southern Bypass.	£35M	£16M
Science Park Strategic Link	£4.5M	£2.5M
Huntingdonshire Capacity for Growth	£12M	
Phase 1: A1123 and St Ives town centre bus priority Phase 2: Junction improvements on the A141 Huntingdon Northern Bypass Feasibility Study to develop further phases (see <u>Figure 4.9</u>)	(£6.5M) (£4.5M) (£1M)	£11.5M
Cambridgeshire Sustainable Future (Local Sustainable Transport Fund)	£21.7M+	£14.4M
A605 Whittlesey Access Phase 3 – Whittlesea Station	£1.6M	£1M
Soham Station	£6.4M	£4.2M
Fenland Stations package	£1.3M	£0.8M
Fenland Market Town Transport Strategies	£2.7M	£1.4M
March junctions package	£5.9M	£4.9M
Total		£56.7M

Other Funding

Alongside Growth Deal and City Deal funding, we are committed to investigating and securing alternative and innovative sources of finance to support the delivery of our priorities. This Strategy provides the evidence and policy basis for securing funding for transport infrastructure improvements from a range of sources.

We will work with the Greater Cambridge Greater Peterborough Enterprise Partnership (GCGPEP) to ensure a greater share of national transport funding goes to our area to support investment in economic growth and regeneration. The GCGPEP will help to develop and contribute to innovative funding mechanisms to deliver sub-regional projects.

The Alconbury Enterprise Zone will help drive economic growth and job creation. The Zone provides lower tax levels for business and a reduced planning regime and a lighter regulatory and administrative funding. All business rates growth within the zone for a period of at least 25 years will be retained and shared by the LEP area to support our economic priorities. This could provide additional funding for transport infrastructure improvements in the area.

We will work with the district councils to ensure, where appropriate, key transport interventions are identified in the relevant Community Infrastructure Levy Business Plan. Furthermore, where infrastructure is a direct requirement of a new development, the Council and relevant district council will ensure a Section 106 Agreement is in place to secure its provision.

Funding bids to the Department for Transport, the European Union and other funding bodies will also be explored and submitted to maximise the funding for transport infrastructure in the area.

Prioritisation and delivery of the strategy programme

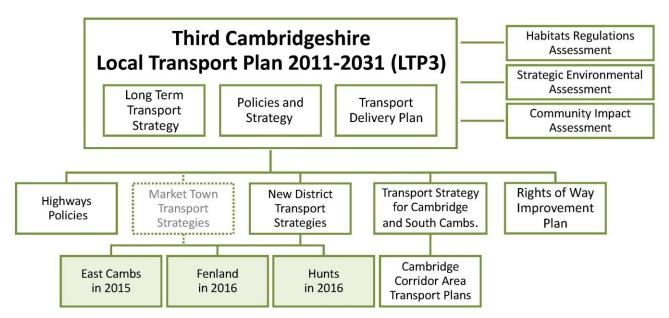
We will work with the City and District Councils to prioritise the schemes that are required to directly facilitate the delivery of housing and jobs growth contained in the Local Plans which cover Cambridgeshire and Peterborough. This scheme list will form part of the wider Local Investment Plan, which will also include other items of public infrastructure such as schools and community facilities that are needed to cater for growth.

Schemes in the Long Term Transport Strategy that do not have a direct link to growth will also be progressed. However, it is recognised that schemes may need to be delivered as funding opportunities allow.

Appendix A. The wider Local Transport Plan strategy framework for Cambridgeshire

The Long Term Transport Strategy does not provide comprehensive detail of local transport schemes such as small-scale junction improvements, village cycle routes or maintenance schemes. Programmes of measures for these types of scheme are typically set out in strategies and action plans that form part of the Cambridgeshire Local Transport Plan. The Local Transport Plan itself has three main parts, as detailed in Figure A.1.

Figure A.1 Local Transport Plan Documents



The framework of transport strategy documents that sit below the LTP, and that cover themes and areas in detail are shown in <u>Figure A.2</u> and <u>Figure A.3</u>. New strategies will be developed for East Cambridgeshire, Fenland and Huntingdonshire, and the nine current Market Town Strategies will be incorporated into them.

The overarching area based strategies will set out programmes of improvements in Action Plans covering:

- Major settlements
- The main transport corridors between these settlements (broadly the primary route network, busway and rail network).

The transport improvements that the county council would expect to see provided by major development allocations included in the city and district council's Local Plans will typically be set out in these Action Plans.

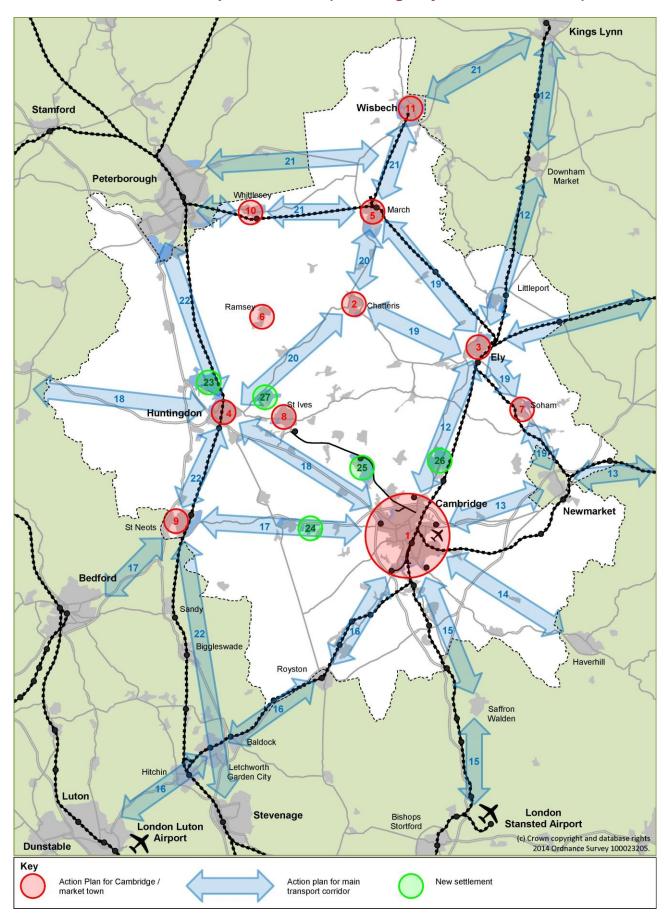
The mechanisms by which local improvements will be identified, funded and delivered in areas not covered by one of the Action Plans will be included in the overarching area strategies.

In addition, thematic strategies set out the detailed policy approach and programme in a number of areas, such as rail, cycling, parking and Heavy Commercial Vehicles.

Figure A.2 LTP documents and their links to wider policies, strategies and plans

Strat	egy	Status	
Area	strategies		
Trans	sport Strategy for Cambridge and South Cambridgeshire		
Action Plans	Cambridge (1)	Adopted March 2014	
	Littleport, Ely & Waterbeach to Cambridge corridor (12), including Waterbeach New Town (26)		
	Newmarket to Cambridge corridor (13)		
	Haverhill & Saffron Walden to Cambridge (also includes consideration of Royston to Newmarket) (14 & 15)		
	Royston to Cambridge corridor (16)		
	St Neots to Cambridge corridor (17) including Bourn Airfield (24)		
	Huntingdon and St Ives to Cambridge corridor (18), including Alconbury Weald (23), Wyton Airfield (27) and Northstowe (25)		
Local	improvements programmes	Reviewed annually	
Trans	sport Strategy for East Cambridgeshire (TSEC)	To be adopted in 2015	
<u>_</u> ω	Ely Market Town (3)	Review as part of TSEC	
Action Plans	Soham (7)	Develop as part of TSEC	
Υп	Newmarket to Ely, Chatteris and March corridor (19)	Develop as part of TSEC / TSF	
Local	improvements programmes	Reviewed annually	
Trans	sport Strategy for Fenland (TSF)	To be adopted in 2016	
	Chatteris Market Town (2)	Review as part of TSF	
(0	March Market Town (5)	Review as part of TSF	
Action Plans	Whittlesey Market Town (10)	Review as part of TSF	
	Wisbech Market Town (11)	Review for adoption in 2014	
	Huntingdon and St Ives to Chatteris and March corridor (20)	Develop as part of TSF / TSH	
4	March & Wisbech to Whittlesey & Peterborough corridor (21)	Develop as part of TSF	
	Newmarket to Ely, Chatteris and March corridor (19)	Develop as part of TSEC / TSF	
Local	improvements programmes	Reviewed annually	
Trans	sport Strategy for Huntingdonshire (TSH)	To be adopted in 2016	
	Huntingdon and Godmanchester Market Town (4)	Review for adoption in 2014	
US	Ramsey Market Town (6)	Review as part of TSH	
Action Plans	St Ives Market Town (8)	Review as part of TSH	
tion	St Neots Market Town (9)	Review as part of TSH	
Ac	Huntingdon and St Ives to Chatteris and March corridor (20)	Develop as part of TSF / TSH	
	St Neots to Huntingdon and Peterborough corridor (22)	Develop as part of TSH	
Local	improvements programmes	Reviewed annually	
Then	natic strategies covering the whole County		
Highway policies (including parking policy, speed limit policy and street lighting policy)		Updated in April 2011	
Heavy Commercial Vehicles strategy		Adopted January 2012	
Cambridgeshire Future Transport programme		Ongoing	
Cycle	strategy	To be developed 2014/15	
Rail Strategy		To be developed 2014/15	
Rights of Way Improvements Plan		To be reviewed by March 2016	

Figure A.3 Coverage of Action Plans covering Cambridge, the market towns and the main transport corridors (including major new settlements).



This new Long Term Transport Strategy together with the refreshed LTP: Policies and Strategy provide the opportunity to review progress made to date, take account the views of the public and stakeholders, incorporate major new strategies (such as the Transport Strategy for Cambridge and South Cambridgeshire) and reflect the current funding climate. We can ensure that LTP3 is up to date and reflects the needs of people who live, work and travel in Cambridgeshire.

Figure A.4 Adoption and review of the Third Cambridgeshire Local Transport Plan

Document	Status
LTP: Long Term Transport Strategy	Adopted November 2014.
LTP: Policies and Strategy (this document)	Adopted March 2011. First refresh adopted November 2014.
LTP: Transport Delivery Plan	Implementation Plan adopted March 2011. Transport Delivery Plan to incorporate Implementation Plan and fulfil role from April 2015.

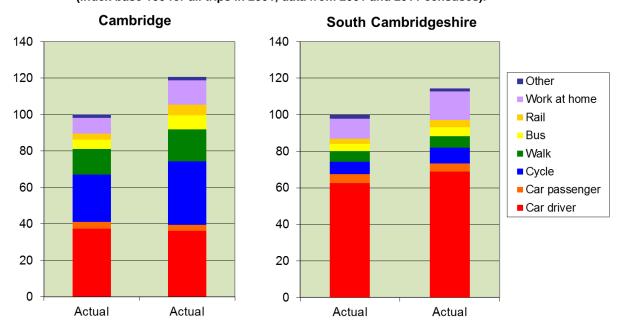
Appendix B. Background on LTTS development

The following sections set out the rationale for the packages of measures to address the transport demands associated with growth.

Development in Cambridge and South Cambridgeshire

Cambridge's road network is operating at or near its capacity. Traffic levels into and out of the city have remained constant since the mid-1990s. Significant growth in population and jobs in and around the city has occurred in this period, and more people are travelling into, out of and within the city. The growth in travel has been accommodated by increased use of the bus and rail networks, and by growth in the levels of walking and cycling.

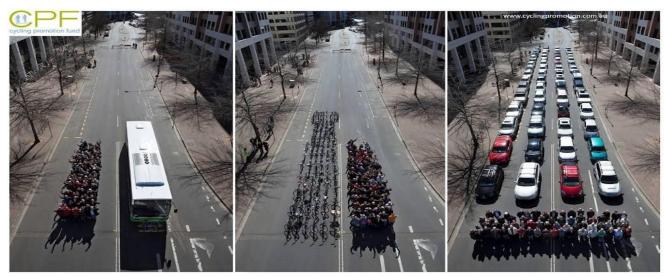
Figure B.1 Employed resident's main mode of travel to work in Cambridge and South Cambridgeshire, factored by employed population. (Index base 100 for all trips in 2001, data from 2001 and 2011 censuses).



With the further growth that is planned, this pattern of travel behaviour change needs to continue. For this to happen, the infrastructure and transport services into and around the city need to improve in many areas, to make the choice of public transport, walking and cycling more obvious for many more trips. In simple terms, the road network in the city is constrained by the built environment and the historic form of the city, and cannot take many more vehicles. However, there is more than enough capacity for more people to make many more trips, if we continue to change the way we use the transport network.

The strategy approach in and around Cambridge is therefore focused on measures to provide more pedestrian, cycle and public transport capacity, with the aim at maintaining traffic at current levels within and into the city.

Each major transport corridor into the city will have one or more high quality public transport option; bus, Guided Bus, Park & Ride or rail. In addition, the major employment clusters in and around the city will be linked more directly by the public transport network. The quality, timeliness and reliability of these public transport services are key priorities, and the competitive advantage over a competing car trip will continue to drive the changes in travel behaviour that have been seen with the Park & Ride network and the Busway.



Picture courtesy of www.cyclingpromotion.com.au

Investment in pedestrian and cycle facilities on and off road will continue, building upon the increases in longer trips by cycle in and around the city that have been seen with investment in routes across the city and to neighbouring villages. The level of cycling in Cambridge is the highest in the United Kingdom, and the transport network of the city operates as well as it does in large part because there are so many people who cycle rather than use their cars. The trend in increasing cycle use has been vital in accommodating growth to date, and will remain so.

Within the city, reallocation of road space to facilitate the reliable movement of buses, and the timely and safe movement of pedestrians and cyclists will be needed in some areas. Through trips by car traffic across the city may need to be managed differently, and more orbital capacity for general vehicular traffic may be needed in the fullness of time to remove trips from the city centre that do not need to be there.

The new and expanding settlement at Northstowe, Waterbeach Barracks, West Cambourne and Bourn Airfield sit on three of the major inter-urban transport corridors into Cambridge. In line with the approach outlined above for the Cambridge area, the focus of the strategy to provide the transport capacity needed for this growth is on the provision of high quality public transport options, and of networks of pedestrian and cycle routes within the settlements and linking to surrounding villages and to Cambridge. In all three cases, some additional capacity for general traffic will also be needed, but not into Cambridge itself, where the overall capacity constraint of the network mean that limited improvements on radial routes into the city are likely to worsen traffic conditions overall in the medium to longer term.

Northstowe

For Northstowe, the Busway has already been constructed and is successfully carrying passengers. A new Busway loop will also be provided through the town centre. Access roads will link the town to the A14 trunk road. In addition, the improvements to the A14 and the new local road between Fenstanton and Girton that will be delivered by the A14 Cambridge to Huntingdon scheme are required to provide capacity for Northstowe.

The Busway and the A14 Cambridge to Huntingdon improvement were both recommendations of the Cambridge to Huntingdon Multi-Modal Study (CHUMMS) that identified them as parts of the package of measures to address the strategic role and local capacity constraints of the route.

Waterbeach Barracks

Waterbeach Barracks lies to the north of the village of Waterbeach between the A10 and the Ely to Cambridge railway line. The A10 to the north of Cambridge is one of the more congested outer radial routes into the city, and some additional capacity will be needed on the section of the route between Waterbeach Barracks and the A14 to cater for the traffic demand of the new town and also of development in Ely. However, the primary focus will again be on public transport, walking and cycling.

The railway line will provide one high quality public transport option, and with the new station at Cambridge Science Park, there is great potential for significant growth in rail patronage into the north of the city, relieving pressure on the A10. In addition, a link to the Busway from Waterbeach Barracks will provide direct public transport links to other key employment sites in the city without the need for interchange.

West Cambourne / Bourn Airfield

West Cambourne and Bourn Airfield lie to the south of the A428 trunk road to the west of Cambridge. The trunk road itself has ample capacity past the sites, but is congested on the eastbound approaches to the Caxton Gibbet roundabout to the north west of Cambourne. Comprehensive improvements to address the problems on the A428 corridor between the A1 and Caxton Gibbet, and some interim works may be needed at Caxton Gibbet as a result of the development of these sites and of Wintringham Park St Neots.

The A1303 that forms the inner radial route between the A428 and Cambridge is frequently congested, and bus trips have no competitive advantage over a car trip on the route. As improvements to the overall capacity of the A1303 would still feed traffic into a congested city centre with no capacity to take additional car trips, the strategy for this corridor focuses on getting buses past the congestion that occurs between the A428 and central Cambridge.

Development in Huntingdonshire

Huntingdon, St Ives, Alconbury Weald and Wyton Airfield development, Huntingdonshire

Alconbury Weald and Wyton Airfield could deliver over 8,500 new dwellings by 2036, with potential for more development at each site in the longer term. In addition, the Enterprise Zone at Alconbury Weald has 150 hectares of land for employment development. Further development is also planned around Huntingdon, and to a lesser extent St Ives. Significant levels of investment in transport infrastructure and services are needed to provide capacity for this growth.

A range of transport strategy options have been tested using the Cambridge Sub Region Model alongside the development of the Huntingdonshire Local Plan. As a starting point, in line with the overall policy approach set out in the LTP: Policies and Strategy, it has been assumed that:

- the new sites will achieve high levels of public transport usage, facilitated by new busway links and interchanges including a new station on the East Coast Main Line.
- comprehensive pedestrian and cycle networks will link the new and existing settlement, and provide excellent connectivity within the new sites settlements.

Traffic conditions around Huntingdon and St Ives can be very congested at peak periods, particularly at times when the A14 is busy or when incidents occur. In this context, as with Northstowe, the A14 Cambridge to Huntingdon scheme is a critical intervention that will release transport capacity on the local road network around Huntingdon and provide capacity for development's travel demand.

With the A14, conditions on the A141 around Huntingdon will markedly improve, to the extent that traffic from Alconbury Weald and Wyton Airfield can largely be accommodated in the Huntingdon area with improvements to junctions on the existing route. However, it is also considered necessary to safeguard a possible new alignment for the A141 around the north of Huntingdon, should further capacity be needed in future. If such a route were provided in future, the intention would be to separate the longer distance strategic and shorter distance local distributor roles of the current route.

Around St Ives and on the A1123 between St Ives and Huntingdon, the A14 Cambridge to Huntingdon scheme provides less relief to current traffic conditions, and planned growth would significantly worsen congestion and delay. A range of options for new road capacity have been tested around St Ives, including combinations of interventions that included:

- A link road from Compass Point into the Wyton Airfield development
- A complete St Ives northern bypass from Compass Point through the Wyton Airfield site to the A141.
- Widening and major junction improvements on the A1096.
- A new alignment for the A1096 between St Ives and the A14 with limited junctions.
- A new road between Wyton Airfield and the A14 between Huntingdon and St Ives (on an unspecified alignment).
- A new road from the Hartford Roundabout of the A141 and the Godmanchester Interchange on the A14.

Additional model runs have looked at new roads between Wyton Airfield and the B1050 / A14 in the Longstanton area, and also at whether changes to the A142 / A10 in the Ely / Witchford / Stretham area would have benefits in the St Ives / Earith/ Sutton area. These options did not address the impacts of development on St Ives.

A number of the interventions noted above would be very expensive and very challenging in social and environmental terms. The only options that provided significant improvements in modelled traffic conditions in the St Ives area were the two new road options between Wyton Airfield and the A14 noted in the final two bullet points above. The analysis of the data indicated that this was in large part because much of the demand in the area is from traffic seeking to access St Ives itself rather than to make longer distance trips around the town. The final two road options are the only ones of those tested to date that would not add additional through traffic to the St Ives area, and that have the potential to remove some current through traffic. However these options are among the most challenging in environmental terms.

Modelling of junction improvements along the length of the A1096 did indicate that some improvements to the flow of traffic could be achieved by increasing the capacity of junctions and managing the flow of traffic more efficiently. However, it should be noted that to address any individual junction in isolation would have very limited benefits; for example, increasing throughput through the Busway junction would lead to an improvement in journey time to the junction, but almost all of the gained time would be lost in queues that formed further along the A1096.

In the context of the above, the strategy approach around St Ives and for Wyton Airfield is to focus investment in bus, pedestrian and cycle infrastructure that will enable high levels of growth in the use of these modes. A particular focus will be placed on achieving a bus / busway network that seamlessly link St Ives, Wyton Airfield, Alconbury Weald and Huntingdon, with onward links to Peterborough and Cambridge.

Further work is needed to identify the most sustainable package of transport options to provide for the transport demand of development at Wyton Airfield and to address congestion and delay in the St Ives area. This work will seek to identify further options across all transport modes that could address the traffic and congestion issues in the St Ives area that are forecast with growth.

Wintringham Park and Love's Farm, St Neots, Huntingdonshire

Modelling to inform the Huntingdonshire Local Plan also looked at St Neots, where around 4,000 new homes are likely to come forward by 2026. The initial modelling tested one intervention – the provision of a new route for the A418 between the A1 / A421 Black Cat roundabout in Bedfordshire and the A428 / A1198 Caxton Gibbet roundabout in South Cambridgeshire. The scheme was assumed to provide grade separated junctions at the two major roundabouts, and have no junctions in between them.

Modelling indicated that as well as providing the final improvement in this important strategic east – west link, such a scheme would also largely resolve congestion problems in St Neots, and allow the current A428 alignment to become part of the town's local road network.

Development in East Cambridgeshire

Ely

Traffic modelling work undertaken as part of the development of the East Cambridgeshire Local Plan indicated that the scale of traffic generated by the Ely North development would have an adverse effect on the local network that without mitigation would lead to large increases in delays at local junctions and the diversion of traffic onto less suitable routes. To address these issues, the transport strategy approach focuses on both local and longer distance trips.

For longer distance trips from Ely, public transport needs to be a viable option for more trips. Cambridge Science Park Station will lead to large reductions in journey times by rail to the Science Park and neighbouring Business Parks and Innovation Centres in the north of Cambridge, with the rail element of the trip taking around twelve minutes from Ely. In the context of the end-to-end journey to Cambridge and beyond, Ely Station needs to be more accessible and rail services and the station itself need capacity for more trips. The rail industry are already planning for increased services and longer trains through Ely, and works to improve interchange facilities and resolve congestion issues in the small ticket hall are planned, as part of a wider package of station improvements.

However, traffic congestion is a disincentive for some trips into the Ely Station Gateway area, and development trips would worsen conditions further. Increases in freight and passenger rail services that are planned on the lines through Ely will provide capacity for growth in Ely and in the wider region. However, without measures to bypass the level crossing and low bridge on the A142, they will also worsen traffic problems in the Ely Station Gateway area due to increased barrier down time at the Ely South level crossing.

The Ely Southern Bypass is a critical intervention to resolve these issues, as it will divert the A142 around the southern edge of the city rather than through the Ely Station Gateway area. The bypass will maximise the benefits from plans for the redevelopment of the Station Gateway area by reducing the amount of traffic on Angel Drove and Station Road and by facilitating the creation of a better environment that isn't dominated by traffic. It will facilitate the achievement of better pedestrian, cycle and bus access to the station as part of a masterplan for the area that relies on the removal of the A142 to achieve many of its aims.

Pedestrian and cycle infrastructure will link the Ely north development to the city centre, and measures to provide priority for buses and to improve bus interchange facilities in the city centre and station area are also necessary and will encourage the use us these modes as part of longer trips by rail, as well as providing for more local journeys.

Some increases in capacity for general traffic will also be needed. New access roads from Ely North development will link into Cam Drive, Thistle Corner and to a new roundabout on the A10. A number of junctions on the A10 may be subject to works to increase their capacity, and the stretch of the A10 between its two junctions with the A142 may be widened.

Fenland Market Town development

Wisbech

Traffic conditions and movement within Wisbech (as with many other areas of Cambridgeshire) are to a large extent dictated by available crossing points of rivers. Traffic in Wisbech is focused on the Freedom Bridge area, which is the major crossing of the River Nene in the town. With growth, there is a need to consider additional crossing points to provide some relief and to allow more to be made of the town centre area which is severed from the north and east of the town by high traffic flows on Churchill Road into the Freedom Bridge roundabout. A new crossing of the River Nene is identified as an intervention that could provide some relief to this problem.

The A47 trunk road between Peterborough and Norfolk is a critical link for Wisbech. One of the main unimproved sections of the route is between Thorney in Peterborough and Walton Highway in Norfolk. This stretch incorporates the Wisbech southern bypass, and while the single carriageway A47 operates surprisingly well for a road that takes large volumes of traffic, the similarly busy A1101 Elm High Road performs rather less well at its junction with the A47. With development in and around Wisbech, improvements to the A47 / A1101 junction and to other junctions in the Wisbech area will be needed as a precursor to a more comprehensive improvement of the A47 that authorities across the region are pressing Highways Agency to develop and deliver.

For longer distance trips, the reintroduction of services on the Wisbech to March rail line would give a significant competitive advantage to rail trips over a comparable car journey to many destinations, including Cambridge and London, and would bring wider benefits to the town.