

PUBLIC CONSULTATION DOCUMENT

ISSUES FOR A NEW TRANSPORT STRATEGY FOR CAMBRIDGE AND SOUTH CAMBRIDGESHIRE

Cambridgeshire County Council is consulting on what the new Transport Strategy for Cambridge and South Cambridgeshire should look like. This document highlights some of the main issues and challenges for transport in the area, and asks what approach we should take through a new transport strategy to solve these issues.

A separate questionnaire asks for your views on the issues raised in this document.

Please fill in the questionnaire online at www.cambridgeshire.gov.uk/tscsc by 5:00pm on the 28th September.

Alternatively, if you do not have internet access, paper copies of this document and questionnaire are available on request. You can telephone us on 01223 715483 or email us at transport.plan@cambridgeshire.gov.uk.

CONTENTS

PART 1: BACKGROUND INFORMATION	2
1. Introduction and timescales.....	2
2. Background information – Growth.....	4
3. Background information – Transport.....	6
4. Background information – Funding.....	11
5. Your travel habits	11
PART 2: YOUR VIEWS ON ISSUES, VISION & OBJECTIVES	12
6. Purpose of the strategy	12
7. Issues and challenges.....	12
8. The long term vision.....	13
9. Transport strategy objectives	14
PART 3: YOUR VIEWS ON POSSIBLE APPROACHES TO THE STRATEGY.....	15
10. Introduction.....	15
11. Approach 1: ‘Business as usual’.....	15
12. Approach 2: ‘Doing more’	17
Glossary of useful terms.....	21
Appendices	22
Appendix A: Managing the transport network.....	23
Appendix B: Influencing and changing behaviour	27
Appendix C: Providing new transport capacity.....	29

PART 1: BACKGROUND INFORMATION

1. Introduction and timescales

What are we consulting on?

- 1.1. Cambridgeshire County Council is consulting on what the new Transport Strategy for Cambridge and South Cambridgeshire should look like. This document highlights some of the main issues and challenges for transport in Cambridge and South Cambridgeshire and asks what approach we should take through a new transport strategy to solve these issues.
- 1.2. Your views will help us to shape the new long term strategy for transport and accessibility for the area.

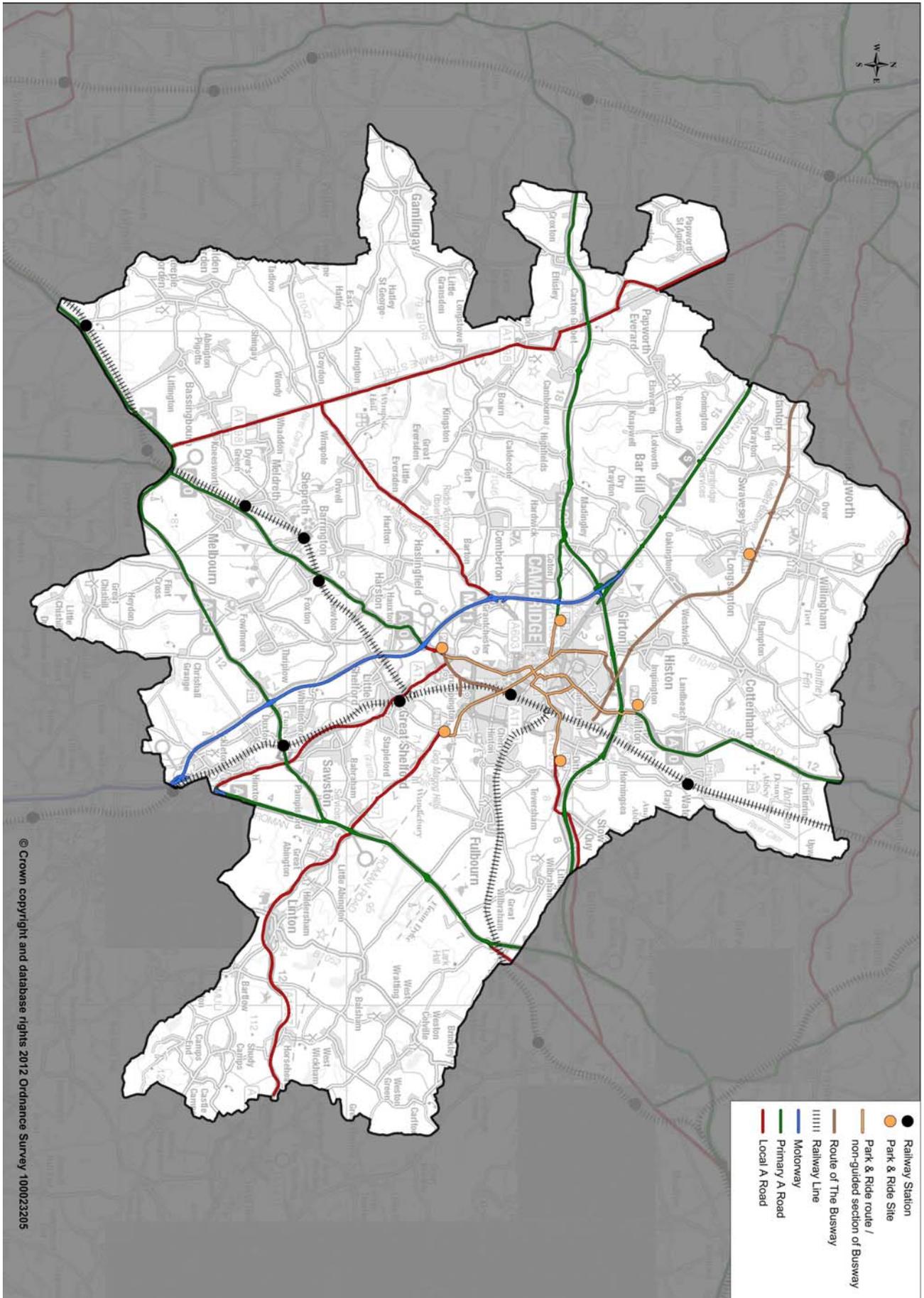
Why do we need a Transport Strategy for Cambridge and South Cambridgeshire?

- 1.3. Cambridge and South Cambridgeshire are popular places to live and work, and have continued to experience high levels of jobs, housing and population growth. This is helping to drive a strong local economy but also means that there is pressure on local transport infrastructure and housing supply. New development is being built on the fringes of the city and is planned for Northstowe. Further growth will continue into the future to meet local needs.
- 1.4. The Transport Strategy for Cambridge and South Cambridgeshire needs to take account of this predicted growth to ensure that current and future transport needs are met, that people can access work and services, and that the character of the area can be preserved. This will help to ensure that people in the area continue to enjoy a high quality of life.
- 1.5. The strategy will sit under the [Third Cambridgeshire Local Transport Plan 2011-2026](#), the main transport policy document for the whole county. The plan sets out the transport challenges across the County and outlines the policies and plans for transport and how they aim to contribute towards the County Council's vision – Creating communities where people want to live and work: now and in the future. The strategy will provide a more detailed policy framework and programme of schemes for the area, consistent with the Local Transport Plan, and building on previous successful strategies.
- 1.6. Having a new transport strategy will allow further transport improvements to be put in place in future, so that the transport network can continue to meet the needs of local people.

Why are we consulting at this time?

- 1.7. There needs to be a close link between planning for growth and development and for transport and accessibility, to ensure that growth can be accommodated in the most sustainable way and that people can access the services and facilities they need to in an efficient and affordable way.

Figure 1: The strategy area



- 1.8. In their roles as Local Planning Authorities, Cambridge City Council and South Cambridgeshire District Council will be consulting on the Local Plans for their areas. The purpose of these Local Plans is to identify what levels of growth and development are needed by 2031 to meet local needs, and to decide where new development within Cambridge City and South Cambridgeshire should be located.
- 1.9. This Transport Strategy for Cambridge and South Cambridgeshire consultation is running at the same time as the City Council and South Cambridgeshire District Council are consulting on their Local Plans, between June and September 2012. We will share information so that the transport strategy and Local Plans fit well together and promote a sustainable pattern of development into the future. This transport strategy will also consider the growth context to 2031 and the longer term perspective.
- 1.10. As the Highways Authority, we want to hear your views on what issues we should be considering for transport for Cambridge and South Cambridgeshire for the future. We are seeking your views on what our approach should be.
 - The information set out in Part 1 of this document sets out to give you a picture of how the area is expected to develop and change, what the current transport situation is, including more details about our current approach to tackling transport issues, and how the situation is expected to change in future.
 - Part 2 then asks for your views on the issues and challenges we face, and on the proposed vision and objectives for the transport strategy.
 - Finally, Part 3 asks for your views on different approaches to dealing with transport in future.

What will happen after this consultation ends?

- 1.11. This document asks for your views on transport issues, challenges and approaches. Once we have considered your views and feedback, we will produce a draft Transport Strategy for Cambridge and South Cambridgeshire. We will consult on the draft transport strategy at around the same time as Cambridge City Council and South Cambridgeshire District Council are considering their draft Local Plans during 2013.
- 1.12. The County Council will then consider views and make any changes necessary before finalising and adopting the Transport Strategy for Cambridge and South Cambridgeshire as part of the Cambridgeshire Local Transport Plan 2011-2026.

2. Background information – Growth

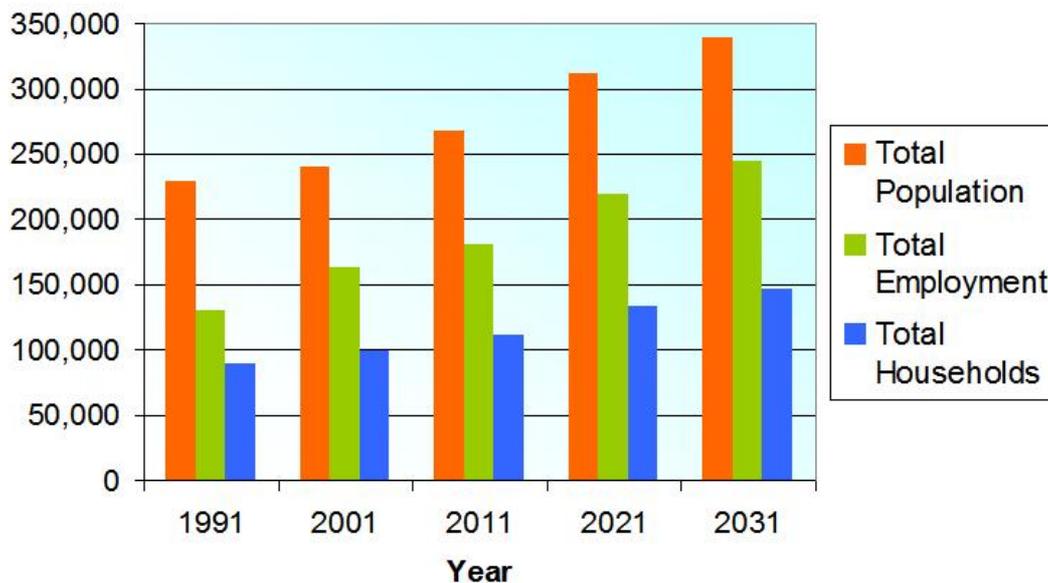
Past levels of growth and expected future growth.

- 2.1. High levels of population, housing and jobs growth have occurred in Cambridge and South Cambridgeshire since 1991 and growth is expected to continue.

The wider impacts of growth:

- 2.2. The Cambridge city region is among the best performing economic areas in the country, and is well-positioned to help lead the country out of the economic downturn.

Figure 2: Predicted Growth in Cambridge City and South Cambridgeshire.
(Sources: East of England Forecasting Model – employment, and Cambridgeshire County Council Research, Performance and Business Intelligence Team – population and households).



- 2.3. However, the continuing growth and prosperity of the local economy has led to growing pressure on the county’s transport network and increasing demand for housing. Increasing prosperity has also contributed to an increase in the number of cars on our roads, with overall traffic levels in the county continuing to rise and congestion increasing, despite greater increases in cycling and public transport use.
- 2.4. In Cambridge and South Cambridgeshire, average house prices are around 10-16 times income levels and as a result, many people who work in the city cannot afford to live there. This has resulted in the average commuter journey being longer than the national average, meaning that people often travel further and for longer. This places more pressure on the county’s transport networks and its environment.

Strategies and plans in place to manage growth:

- 2.5. The development strategy (the [2003 Cambridgeshire & Peterborough Development Strategy](#)) aims to concentrate high quality development in Cambridge and its fringes, Northstowe, and the Market Towns. This approach helps to achieve a more sustainable balance between jobs and homes, and reduce the need to travel. Much of that development is now being planned or being built.
- 2.6. To cater for future needs, the new Local Plans will need to consider where and how future growth and development can be planned for as sustainably as possible. Transport and access requirements will need to be considered in an integrated way from the start to ensure that planned growth can be accommodated in the most sustainable way, and in a manner which ensures the area remains an attractive and desirable place to live and work.

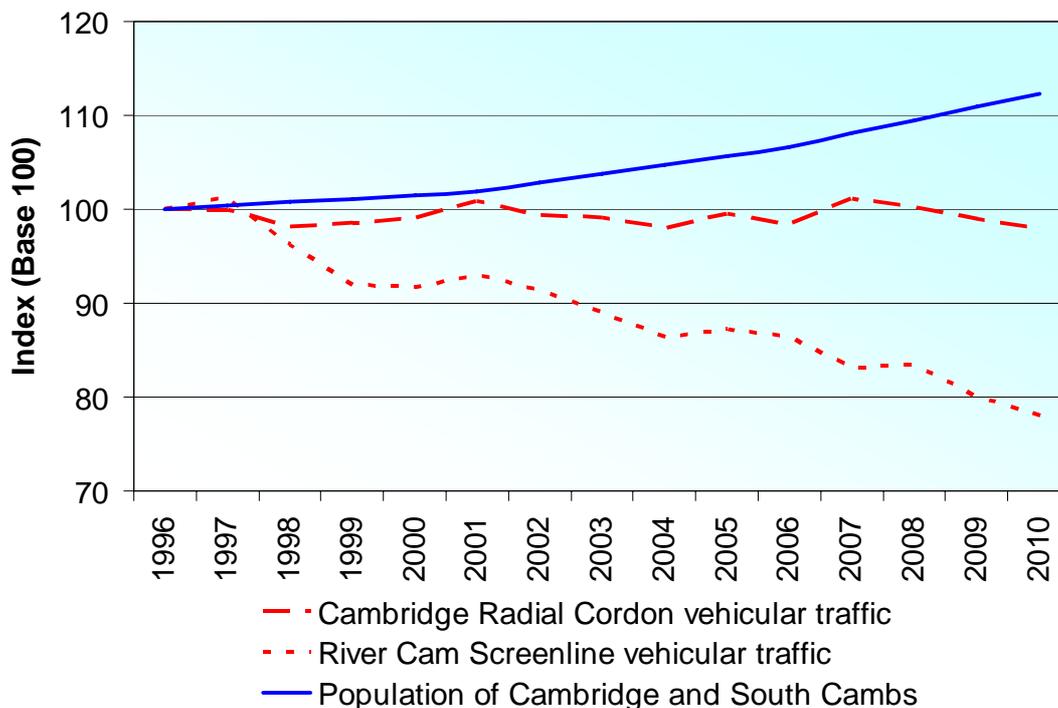
Growth and the transport strategy:

- 2.7. Accommodating further growth to meet local needs means that there will be growing pressures on the transport network and the environment, including the risks of increased congestion, poorer air quality, and increased carbon dioxide emissions.

2.8. The challenge for our future transport strategy will be how to best manage travel demand while facilitating economic growth. With increased and longer commuting distances the reality for many people, and with congestion already a serious problem in and around Cambridge, growth will make this worse without a major change in travel behaviour.

Figure 3: Trends in vehicular traffic in Cambridge

*Cambridge Radial Cordon – used to monitor trips into and out of the city.
River Cam Screenline – used to monitor trips across the river within the city; this provides useful data for estimating how many vehicles are using city centre roads*



3. Background information – Transport

The current transport situation:

3.1. Many schemes and measures have already been implemented to minimise the adverse impacts of traffic and enhance accessibility. These include:

- Cambridge Core Scheme (Rising bollards on Bridge Street, Silver Street, Emmanuel Road and St. Andrew’s Street to restrict general vehicular traffic from the central area)
- Cambridge Park and Ride network.
- ‘Citi’ bus network.
- Major new pedestrian / cycle bridges at Milton, Coldhams Lane and Riverside, the replacement Cutter Ferry bridge and the refurbishment of the Carter Bridge.
- Addenbrooke’s Road.
- Addenbrooke’s Bus Station.
- Travel for Work Partnership (A Partnership hosted by the County Council which provides support and advice to employers and developers to prepare and implement effective travel initiatives to ease transport and access problems).
- Milton Road / Milton Interchange capacity enhancements.
- Hills Road Bridge scheme.

- Cycle Cambridge programme (Government and Developer funded programme of cycling improvements in and around Cambridge).
- The Busway.

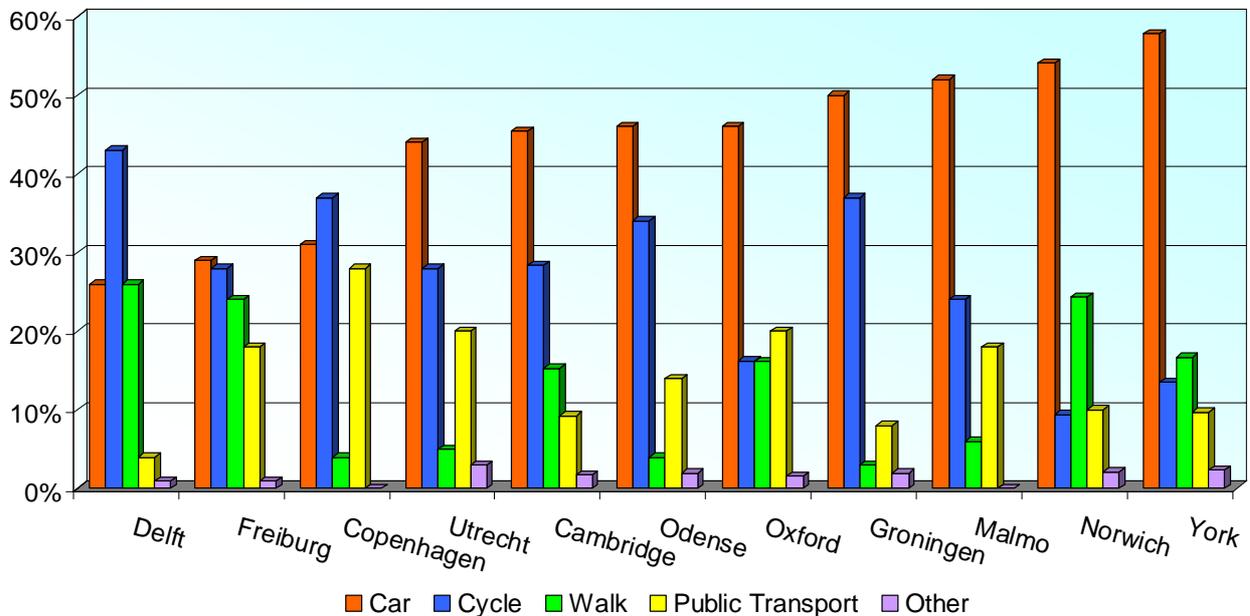
3.2. This approach has been successful. Over the last 20 years, traffic levels into and out of Cambridge city have remained stable despite a 14% rise in population over the same period. More people are walking, cycling and using public transport.

Key facts and figures about the current transport situation

- The population of the city itself has grown from 106,000 to 121,300 between 1991 and 2011. The population of the nine South Cambridgeshire wards surrounding the city¹ was 41,200 in 2011.
- The number of motor vehicles observed crossing the River Cam in 2010 was 15% less than in 2000, and traffic in and out of the city has been stable at current levels since 1996 (see Figure 3).
- The mode share of cycling remains the highest in the UK (26% travel to work mode share in 2001), and monitoring indicates that cycle usage is increasing.
- The number of people using the bus within and in and out of the city has more than doubled since 2001. There were 9.2 million journeys on the ‘Citi’ Network in 2011, and around 3.8 million Park and Ride journeys. Busway services have carried over 200,000 passengers a month since opening, around 40% above opening year forecasts.

3.3. Transport patterns in Cambridge compare favourably to a number of European cities that are often cited as exemplars in terms of their sustainable transport patterns. Figure 4 compares the mode share of travel to work trips seen in a number of British and European towns and cities.

Figure 4: Mode Share of Travel to Work trips – selected British² and European towns and cities³ (sorted by car mode share).



¹ The wards that include the Cambridge fringes – Barton, Fulbourn, Girton, Haslingfield and the Eversdens, Histon and Impington, Milton, Teversham, The Shelfords and Stapleford, and The Wilbrahams.

² The UK figures are based on 2001 census data and do not therefore account for changes in the past 10 years. In this context, it is likely that the public transport mode share for Cambridge is being underreported.

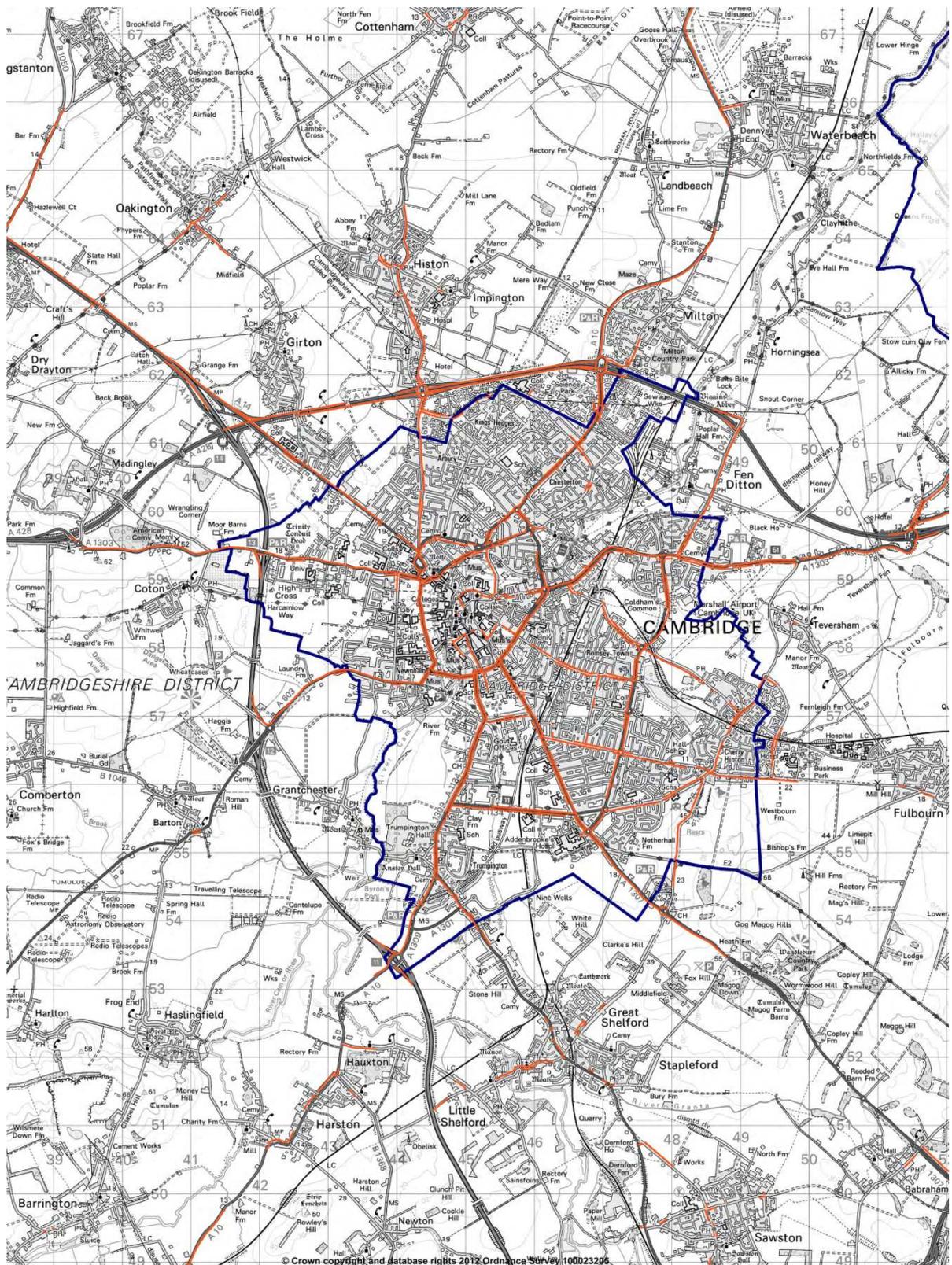
³ Figures do not include working at home, to allow a comparison to be made between different data sets.

- 3.4. However despite these positive trends, there are still some key transport issues which the transport strategy will need to address as growth occurs, including congestion and its economic cost, car reliance, road safety, accessibility, health and wellbeing, the environment and quality of life. It is also vital for the Transport Strategy for Cambridge and South Cambridgeshire to consider transport links beyond the strategy area, as journeys don't stop at the city or district boundaries.

Potential impacts of growth on transport and travel trends in future:

- 3.5. **Commuting distances:** Cambridgeshire commuters already travel further to work than the England average (16.15km compared to 13.31km). Data from the Cambridgeshire Travel for Work Partnership's core group of five major employers showed that travel distance to work rose by 8% between 2004 and 2011. Unless the imbalance between housing supply and demand in the Cambridge City Region is addressed, and affordable housing is available, travel distances are likely to increase.
- 3.6. **Car reliance:** Overall, Cambridgeshire residents are more reliant on the car than the England average with 65% of Cambridgeshire residents travelling to work by car compared to 61% nationally. This proportion is higher (67.5%) in South Cambridgeshire although it is far lower in Cambridge (41%). Well planned growth should give better opportunities to reduce car reliance.
- 3.7. **Congestion:** Congestion is also already an issue in the county; congestion hotspots are shown in Figure 5. Without action, congestion is set to get worse, particularly on roads such as the A10, A14, A505 and A428, and within Cambridge. Growth based on existing travel patterns would mean more congestion and a worsening of its economic and environmental consequences.
- 3.8. **Journey times:** With more congestion, journey times are likely to become longer. A journey in Cambridge which currently takes 10 minutes could take up to 15 minutes by 2021.
- 3.9. **Bus journey times:** Congestion also affects bus services, and often it is the same pinch points on the network where cars and buses share the same congestion. This makes bus journey times longer, less reliable and more difficult to predict.
- 3.10. **CO₂:** Carbon emissions from transport are high in Cambridgeshire, with 32% of the county's carbon footprint from transport compared to a national average of 21%. This is linked to high levels of reliance on the car and long commuting distances, as well as high levels of long distance traffic on the A14, A1(M) and M11. It will be hard to reduce levels of carbon emissions whilst the county's population is increasing and this will only be possible if travel behaviour becomes more sustainable.
- 3.11. **Air Quality:** Central Cambridge already suffers from poor air quality and is designated as an Air Quality Management Area. Poor air quality has significant environmental effects, particularly on internationally important habitat sites, and has both long- and short-term negative effects on health. Growth in traffic levels is likely to make this problem worse.

Figure 5: Road links where average vehicle speeds in the peak hour are at least 30% lower than average speeds throughout the day. (Source: TrafficMaster GPS data, term time weekdays, Sep 2008 to Jul 2009).



3.12. **Road safety:** Accidents on rural roads are a significant issue and above average traffic levels on South Cambridgeshire's rural roads is a contributory factor. The latest available figures show that traffic flow is three times the national average on rural 'A' roads in Cambridgeshire and over double on other rural main roads in the

county. However, road safety trends show an improving picture and the total number of deaths and serious injuries in 2011 was 38% less than in 2001, with slight injuries also being 38% lower. This has been achieved despite traffic growth in Cambridgeshire of 6% over the same period. The new transport strategy will need to continue to improve road safety for all road users, particularly when expected growth means that more journeys are likely to be taking place.

- 3.13. **Health and wellbeing:** Levels of car reliance are already high in some parts of Cambridgeshire. This can lead to inactivity which can impact on health and wellbeing. Greater levels of car reliance and longer commutes in future could result in greater levels of inactivity. Enabling more people to use 'active travel' such as walking and cycling more regularly could result in many positive effects on health and wellbeing.

Developments in technology and transport:

- 3.14. **Broadband and the internet:** Broadband and the internet are likely to have a great impact on how we live and work in future and could have a major impact on reducing the need to travel altogether. Working at home or at places other than a traditional 'office' space is likely to become more common and services which are currently delivered face to face might instead be delivered online. As a County Council, we are firmly committed to making significant improvements to broadband infrastructure, and aim to ensure that at least 90% of the people across the County have access to superfast broadband by 2015. The implications of this will need to be considered in the new transport strategy.
- 3.15. **Other developments in technology:** Developments in vehicle technology, types of fuel available, communications technology and lots of other areas are likely to change how and when, and even whether, people travel in future. It is therefore important that we work with other service providers in developing the transport strategy.

Accessibility and well being:

- 3.16. **Access and accessibility:** Whilst many areas of the county are experiencing population growth and high levels of demand for housing and transport, some of the more rural areas of the county are facing different issues. Access to the public transport system and the ability to reach destinations, services and facilities within a reasonable amount of time, for a reasonable cost is an important issue for many rural communities.
- 3.17. **Social exclusion:** Good transport links are really important for reducing social exclusion, making sure people can lead independent lives, visit family and friends and get to the services and facilities they need. Lack of access to services and facilities can have negative impacts on people's life chances and opportunities. The Cambridgeshire Future Transport initiative seeks to address many of these issues across the county as a whole.
- 3.18. **Quality of life:** Cambridge and South Cambridgeshire are attractive places to live and work. In future, quality of life for those who live and work in Cambridgeshire will continue to be a high priority.

- 3.19. **Heritage and tourism:** Cambridge, particularly the historic centre, is an important cultural and heritage centre. It will be important to respect and enhance the historic and cultural aspects of the city which attract people to live in the area and tourists to visit it.

4. Background information – Funding

Current sources of funding:

- 4.1. As the transport authority for Cambridgeshire, the County Council receives funding for transport improvements from a number of sources.
- Core capital funding for small scale transport improvements and for major maintenance schemes typically comes in the form of central government grants.
 - Core revenue funding for the day-to-day maintenance and operation of the transport network typically comes from the County Council's own budgets.
- 4.2. In addition, the council takes a proactive approach to obtaining additional funding from developers, from local borrowing, and from national and European funding programmes. We have received significant levels of funding in the past 10 years from development, and from successful bids into government programmes such as the Growth Area Fund, the Local Sustainable Transport Fund and the Better Bus Areas Fund.
- 4.3. However, levels of government funding for small scale local transport improvements and for local major transport schemes (costing more than £5M) has fallen by around 50% since 2010, and County Council revenue budgets face similar pressure.

Funding of the new strategy:

- 4.4. A major challenge for the new strategy will be ensuring that it is achievable within the funding that is likely to be available. At the same time, it is important that the needs and aspirations of transport users are reflected, as this gives us a strong basis on which to seek additional funding.
- 4.5. When developing the Transport Strategy for Cambridge and South Cambridgeshire, funding therefore needs to be a key consideration. Given the diminishing levels of central and local government funding, there will have to be greater dependence on developer contributions, private sector investment, loans and innovative sources to help deliver transport schemes and improvements.

5. Your travel habits

- 5.1. To help us formulate the strategy, we would like to know about you and your travel patterns. Data from the 2011 census will be available later this year, but there are further questions on how you would like to travel that will be invaluable to us in developing the new Transport Strategy for Cambridge and South Cambridgeshire.

Questions 1 to 7 in the questionnaire seek information about you and how you travel.

PART 2: YOUR VIEWS ON ISSUES, VISION & OBJECTIVES

6. Purpose of the strategy

- 6.1. Developing a new transport strategy provides an opportunity to consider how to best address transport challenges and achieve long term aspirations for the area. The new transport strategy will also be important in terms of:
- Setting a longer-term vision for transport in Cambridge and South Cambridgeshire.
 - Aligning and integrating with the emerging Local Plans for Cambridge City and South Cambridgeshire District Councils.
 - Providing a robust transport policy basis to inform the assessment of planning applications.
 - Securing funding from development towards transport infrastructure and services needed to accommodate the transport demand of development.
 - The provision of a clear programme of measures / projects for which bids for funding from any other available funding sources can be made.
 - The continued efficient operation of the local transport network.

7. Issues and challenges

- 7.1. There are a range of issues that need to be tackled to improve accessibility, and to manage demand and the pressures of future growth.
- Making it easier to walk, cycle and use public transport for work and leisure journeys.
 - Increasing the number of bus lanes, pedestrian routes and cycle routes.
 - Addressing public transport availability, particularly in rural areas and in the evenings.
 - Finding alternatives to public transport where it is not viable for commercial services to run.
 - Tackling congestion and delays.
 - Managing the increasing demand for road space.
 - Reducing unnecessary through traffic in Cambridge.
 - Tackling stretches of road or junctions where there are accident or congestion problems.
 - Improving road safety.
 - Raising awareness of travel options.
 - Ensuring transport information is available and easy to use.
 - Addressing local air pollution.
 - Reducing reliance on road transport for the movement of freight.
 - Sourcing funding to deliver transport improvements.
 - Improving transport links for new and existing communities.
 - Addressing carbon emissions.
 - Preserving the area's natural environment, including green corridors.
 - Managing parking capacity in a balanced way.

Questions 8 to 11 in the questionnaire seek your views on the issues and challenges that need to be addressed.

8. The long term vision

- 8.1. It is important to have a long term vision that sets out how the transport system will support the wider aspirations of residents and visitors to Cambridge and South Cambridgeshire. It should set the scene and act as a guide for the transport strategy. There will be constraints, including financial, to achieving everything we might wish to; however, having a vision enables consideration of more ambitious longer-term potential and opportunities.
- 8.2. A proposed vision for the transport strategy follows, on which your views are sought.

Vision for the transport strategy for the longer term

In future, Cambridge and the surrounding area of South Cambridgeshire will be renowned for its efficient, accessible and sustainable transport system which will support a thriving and beautiful historic core, and provide efficient and networked links to and from the city, its major employment hubs, and the bustling villages and key centres beyond.

More and more people will walk, cycle or use community or public transport as the more sustainable option when travelling. This will help to reduce car traffic on key routes and protect the area's distinctive character and environment while supporting continued growth of the area as an internationally important cluster for high tech industries and research and development.

There will be an extended network of dedicated public transport routes with fast and frequent links to and from key destinations. This will link up with community or local transport at hubs which will connect with some more rural parts of the area. An improved system of safe and direct cycle and walking routes will provide a viable alternative for journeys between key destinations. Information about sustainable travel options will be readily available and new technology will make this even easier to access. This enhanced accessibility will help to sustain and enhance quality of life and well being of residents.

Both the strategic and local road networks will operate efficiently and reliably, with most car traffic choosing to access the rural hubs or Park & Ride hubs. Accident clusters and congestion hotspots will be addressed and the impacts of congestion on the bus network will be reduced significantly. Although car trips to the city centre will still be possible, they will be channelled along routes away from buses and cyclists.

A frequent and reliable rail service with enhanced services and capacity to London, market towns and cities across the region will ensure that rail travel will continue to be a popular choice for a growing number of residents, commuters and visitors. The Science Park Station and improved City Station will provide links to St Pancras International, Stansted and Gatwick airports, to the European mainland, and to the rest of the UK. The Cambridge City Region's profile as a thriving, attractive and accessible business destination will be further enhanced.

Questions 12 and 13 in the questionnaire seek your views on the vision.

9. Transport strategy objectives

9.1. A number of proposed objectives for the transport strategy are set out below:

- Provide the transport capacity needed to enable economic growth.
- Enhance accessibility to, from and within Cambridge and South Cambridgeshire (and beyond the strategy area).
- Ensure good transport links between new and existing communities, and the jobs and services people wish to access.
- Ensure good transport links between key employment hubs.
- Reduce the impacts of congestion on public transport.
- Meet air quality objectives and carbon reduction targets.
- Preserve the natural environment.
- Prioritise sustainable alternatives to the private car in the strategy area.
- Manage the transport network effectively and efficiently.
- Address pinch points and reallocate road space to sustainable modes at key points on the network where they suffer delay or safety issues.
- Ensure that the transport network supports the economy and acts as a catalyst for sustainable growth.
- Ensure that changes to the transport network respect and conserve the distinctive character of the area and peoples quality of life.
- Ensure the strategy encourages healthy and active travel, supporting improved well-being.

Questions 14 to 17 in the questionnaire seek your views on the objectives.

PART 3: YOUR VIEWS ON POSSIBLE APPROACHES TO THE STRATEGY

10. INTRODUCTION

- 10.1. We are seeking your views on what types of measure we should consider as we develop the new strategy. We also need your views on how ambitious and challenging the strategy should be in considering the transport network in the longer term.
- 10.2. This part of the consultation document outlines two different approaches to the new strategy.

1) Approach 1: 'Business as usual'

In this section, we summarise the types of transport schemes that we currently deliver, based on principles that have guided us over the past 10-15 years and that we could roll forward in the new strategy. Should we continue with similar schemes – should they be part of our future strategy?

2) Approach 2: 'Doing more'

In this section, we set out a menu of further schemes or interventions that go beyond the 'Business as usual' approach and which might be considered as part of a more ambitious strategy. This is not a prescriptive list, but rather a guide to what could be included as an example. We would like to hear your views on what we should include in the new strategy? How ambitious should we be? How radical and challenging?

- 10.3. We also need to know if there are further schemes and interventions that we haven't included that you think should be part of the new strategy.
- 10.4. For both approaches, we have grouped the types of measures into three broad themes. These are:

A) Managing the transport network.

Making the most effective use of currently available transport capacity.

B) Influencing and changing behaviour.

Working with the travelling public – residents, workers, businesses and other stakeholders – to influence people's decisions about travel.

C) Provision of new transport capacity.

New transport infrastructure – cycle routes, footpaths, Busway, road, rail – and services.

11. APPROACH 1: 'BUSINESS AS USUAL'.

- 11.1. Over the past 20 years we have improved the transport network in the Cambridge area by introducing vehicle access controls in the historic core through a system of rising bollards, as well as providing for greater travel choice through the provision of Park & Ride sites. We have also greatly improved bus infrastructure, opened The Busway and expanded the pedestrian and cycle network.

11.2. This has resulted in:

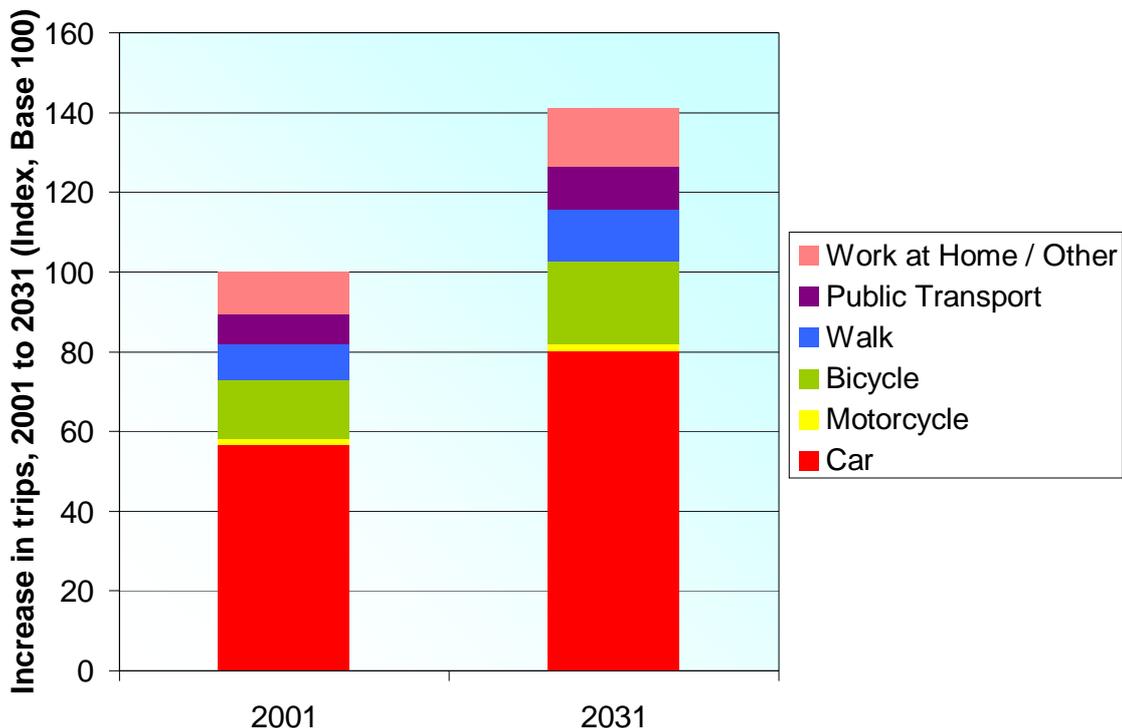
- Traffic levels in Cambridge remaining stable over the past 20 years despite a 14% rise in population.
- Cycling levels already being the highest in the UK and continuing to increase.
- The number of people using the bus in and out of Cambridge has more than doubled since 2001.

11.3. However, despite these measures:

- In South Cambridgeshire residents are reliant on the car with 67.5% of people travelling to work by car (2001 census).
- People are travelling further – a Travel for Work survey of five major employers showed that travel distance to work rose by 8% between 2004 and 2011

11.4. The population in Cambridge and South Cambridgeshire is predicted to be around 40% greater in 2031 compared to 2001. In simple terms, this means that for every 100 trips on the transport network in 2001, there will be 140 trips in 2031. If travel patterns don't change there will be a significant increase in car trips in the area.

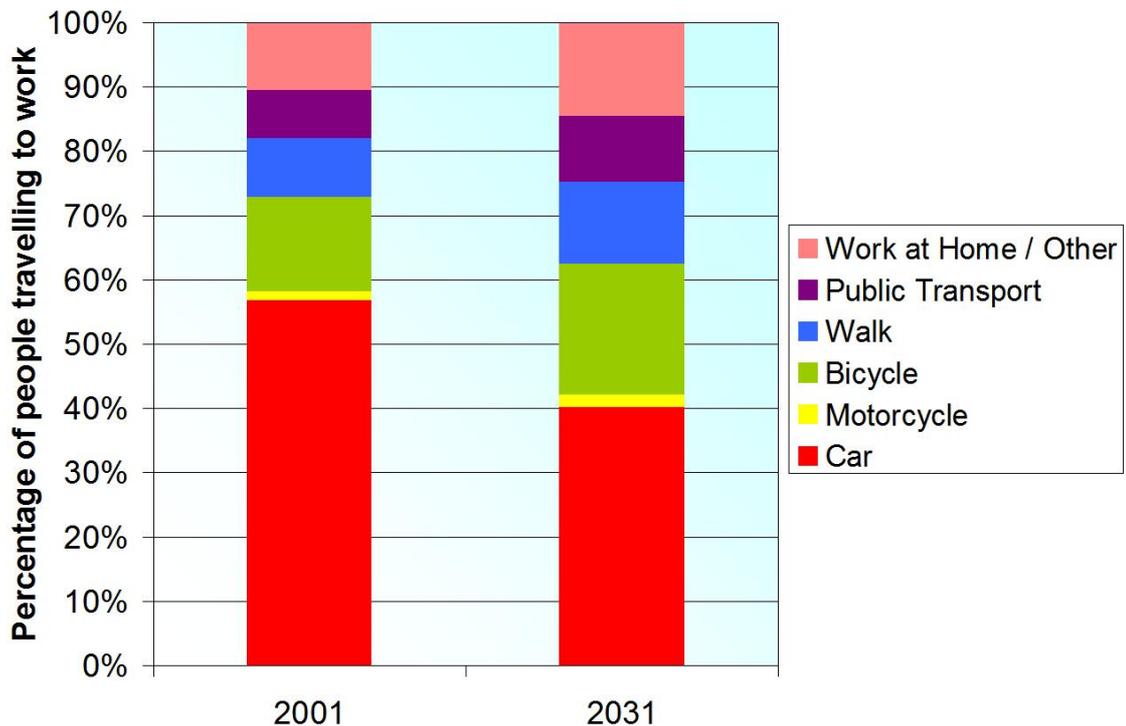
Figure 6: Potential increase in trip making by different modes of transport due to increase in population, assuming travel patterns do not change. (2001 data source: 2001 census – mode share of travel for work, Cambridge and South Cambridgeshire combined).



12. APPROACH 2: 'DOING MORE'

- 12.1. To achieve our proposed vision and provide a transport network that caters for a growing population we need to get even more people using sustainable modes of travel such as walking, cycling and using public transport.
- 12.2. The graph below shows that in order to keep the number of vehicle trips the same in 2031 as it was in 2001, we need to reduce the percentage of journeys made by car from around 56% in 2001, to around 40% in 2031.

Figure 7: Change in travel behaviour that may be needed to accommodate growth in population without increasing traffic and congestion.
(2001 data source: 2001 census – mode share of travel for work, Cambridge and South Cambridgeshire combined).



- 12.3. In order to have a greater impact on people's travel behaviour and maintain or reduce current levels of congestion, it is likely we will need schemes and interventions which go beyond the 'Business as usual' approach and are part of the 'Doing more' approach.

Theme A: Managing the transport network

12.4. This section outlines some of the types of measures which could be included in the 'Business as usual' / Doing more approaches to 'Managing the transport network'. It is not meant to give a complete list of measures that we might consider, but instead to illustrate the types of measures which could be included. Appendix A contains further information and context for these measures.

Figure 8: Types of measures included in the two approaches

Business as usual	Doing more
Maintaining the existing system of vehicle access controls, such as rising bollards.	Additional vehicle access controls, such as more rising bollards to restrict through traffic in Cambridge, retaining public transport access and access to key services and destinations.
Enforcement of parking and traffic offences by the Police and by Civil Enforcement Officers.	Additional enforcement of traffic and parking offences using cameras (such as on bus camera enforcement of bus lane and parking offences, camera enforcement of junction offences).
	Additional restrictions (yellow lines) on parking on key routes where it restricts traffic movements.
Limited additional parking management schemes, (including residents' parking zones, pay & display parking etc) in response to local conditions and public demand.	More extensive use of parking management schemes (residents' parking permit zones pay & display parking).
	Car free or limited parking in new developments.
	No on street parking in new developments.
Limited provision of bus lanes and bus priority measures.	Network of new bus lanes / Busway routes using existing road space on strategic roads in Cambridge and South Cambridgeshire.
	Bus priority measures on all main routes / junctions in South Cambridgeshire.
Limited provision of improvements for cyclists within existing roads and footpaths (i.e. cycle lanes, widened cycle paths, advanced stop lines at traffic lights).	More intensive provision of improvements for cyclists within existing roads and footpaths.
Limited provision of improvements for pedestrians.	More widespread improvements for pedestrians.
	Shared space - remove traditional segregation of motor vehicles, pedestrians and other road users.
	Reduce road space for cars and provide more bus / cycle lanes and pedestrian space.
Removal of some on street parking to give more space to buses and cycles.	Buses and cycles given priority on all key routes.
New technology to detect congestion, improve traffic flow and prioritise buses at congestion hotspots.	Greater investment in new technology.
Improve travel information - electronic signs, Real Time Passenger Information, via internet & mobile phones – such as messages about congestion, car park spaces and bus timetables and maps showing available travel options.	Greater investment in improving travel information.
Influence national policy and funding decisions – including A14 improvements, passenger rail services and rail freight.	

Questions 18 to 20 in the questionnaire seek your views on the types of schemes and measures that might be included as part of the strategy approach to 'Managing the transport network'.

Theme B: Influencing and changing behaviour

12.5. This section outlines a list of types of measures which could be included in the Business as usual / Doing more approaches to 'Influencing and changing behaviour'. It is not meant to give a complete list of measures we are considering, but instead to illustrate the types of measures which could be included. Appendix B contains further information and context for these measures.

Figure 9: Types of measures included in the two approaches

Business as usual	Doing more
<ul style="list-style-type: none"> • New developments to address their transport impacts. 	
<ul style="list-style-type: none"> • Limited support for travel plans including workplace travel plans (through the Travel for Work Partnership), school travel plans and personalised travel plans. 	<ul style="list-style-type: none"> • Greater levels of support for travel plans, including workplace travel plans (through the Travel for Work Partnership), school travel plans and personalised travel plans.
<ul style="list-style-type: none"> • Limited support for Car Clubs (car clubs provide vehicles which can be rented by the hour, and are parked in local neighbourhoods, this can mean nearby residents don't need to own their own car but can use a Car Club car). 	<ul style="list-style-type: none"> • Greater levels of support for Car Clubs.
<ul style="list-style-type: none"> • Improve travel information and marketing so that people are aware of their journey options. 	<ul style="list-style-type: none"> • Greater investment in improving travel information and marketing.
<ul style="list-style-type: none"> • Road safety training, education and campaigns. 	<ul style="list-style-type: none"> • Greater investment in road safety training, education and campaigns.
<ul style="list-style-type: none"> • Support for 'alternatives to travel' (measures which mean people don't need to travel so much). This could include support for home and remote working, for example through investment in broadband. 	<ul style="list-style-type: none"> • Greater support for 'alternatives to travel'.

Questions 21 to 23 in the questionnaire seek your views on the types of schemes and measures that might be included as part of the strategy approach to 'Influencing and changing behaviour'.

Theme C: Providing new transport capacity

12.6. This section outlines a list of types of measures which could be included in the Business as usual / Doing more approaches to 'Providing new transport capacity'. It is not meant to give a complete list of measures we are considering, but instead to illustrate the types of measures which could be included. Appendix C contains further information and context for these measures.

Figure 10: Types of measures included in the two approaches

Business as usual	Doing more
<ul style="list-style-type: none"> Limited introduction of new and improved pedestrian and cycle paths. 	<ul style="list-style-type: none"> Networks of very high quality segregated cycle routes linking villages and towns.
<ul style="list-style-type: none"> Car / bus / bicycle interchanges at busier rail stations and bus stops. 	<ul style="list-style-type: none"> Car / bus / bicycle interchanges at all rail stations and more bus stops.
<ul style="list-style-type: none"> Small scale road safety and capacity improvements. 	<ul style="list-style-type: none"> Larger scale road safety and capacity improvements.
<ul style="list-style-type: none"> Some new bus lanes and bus priority measures. 	<ul style="list-style-type: none"> New Busway routes parallel to strategic roads.
<ul style="list-style-type: none"> More Park & Ride spaces at existing sites. 	<ul style="list-style-type: none"> New Park & Ride sites.
<ul style="list-style-type: none"> More cycle parking at key destinations. 	<ul style="list-style-type: none"> Substantial new cycle parking provision, including bespoke facilities.
<ul style="list-style-type: none"> Major transport infrastructure delivered if funding opportunities available. 	<ul style="list-style-type: none"> Improvements to A road junctions and pinch points.
<ul style="list-style-type: none"> 'Cambridgeshire Future Transport' – support for Community Transport services, and for school, health and social services transport. 	<ul style="list-style-type: none"> Major improvements to A roads.
<ul style="list-style-type: none"> Working with rail industry to deliver capacity and service improvements. 	<ul style="list-style-type: none"> Wider availability of Community / Demand Led transport services.
	<ul style="list-style-type: none"> Council investment to deliver rail capacity and service improvements.

Questions 24 to 26 in the questionnaire seek your views on the types of schemes and measures that might be included as part of the strategy approach to 'Providing new transport capacity'.

Are there any other points you would like to raise?

12.7. Finally, we would like to capture any other views or ideas that you have. Please feel free to make any suggestions you wish, not just those mentioned elsewhere in this document. Whilst some suggestions may not be deliverable, we are keen to consider as many ideas as possible.

Question 27 in the questionnaire asks for any other suggestions or comments you might have on the types of measures that might be included in the strategy, suggestions for schemes, and for any further comments.

Glossary of useful terms

Local Transport Plan (LTP)	The main transport policy document for the whole county. The current Plan is the Third Cambridgeshire Local Transport Plan 2011-2026 (LTP3).
Local Highways Authority	The local government organisation which has responsibility for making decisions about transport. (In Cambridgeshire, Cambridgeshire County Council is the Local Highway Authority)
Local Plan	The statutory local policy document which sets out the growth strategy and levels of growth and development for their areas for the long-term and includes policies to guide development. This is prepared by the Local Planning Authority.
Local Planning Authority	The local government organisation which has responsibility for making decisions about planning and development and for preparing Local Plans to guide development in their areas. (In Cambridgeshire county, Cambridge City Council, South Cambridgeshire District Council, East Cambridgeshire District Council, Fenland District Council and Huntingdonshire District Council are the Local Planning Authorities with responsibility for developing Local Plans.)* *Cambridgeshire County Council is the Local Planning Authority with responsibility for developing the Minerals and Waste Plan but does not have responsibility for developing a Local Plan.
Demand management / managing demand	Demand management tools influence the number of people wishing to travel a certain way. Some demand management tools are likely to increase travel demand (e.g. introducing free bus passes is likely to make bus travel more attractive) whilst others are likely to decrease it (e.g. introducing higher parking charges may mean some travellers decide not to drive in order to avoid paying the higher charges).
'Smarter choices'	These are tools and techniques which influence people to use more sustainable travel options such as walking, cycling, using public transport or car-sharing. These tools may also encourage people to travel at a different time of day (for example at off peak times when there is less congestion) or even to not travel at all (for example by working from home instead of from the office).
Travel plans	These are a package of measures which support sustainable travel options. For example a 'Workplace travel plan' could be drawn up by an employer to make it easier for their staff to get to work using sustainable travel and might include the provision of showers for cyclists/walkers, or interest-free loans for bus or train season tickets.

Appendices

The tables on the following pages provide additional information, expanding on the types of measures listed in Figures 8, 9 and 10 (pages 18, 19 and 20 of this document) that might form part of a new strategy. Examples are given to illustrate what each approach could include. They are not intended to be read as proposals.

Business as usual:	<i>For example, from Figure 8 - 'Maintaining existing systems of vehicle access controls, such as rising bollards'.</i>
Doing more:	<i>For example, from Figure 8 - 'Additional vehicle access controls, such as more rising bollards to restrict through traffic in Cambridge, whilst retaining access to key services and destinations'.</i>
<p>Context <i>A brief description of what we do at the moment.</i></p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • <i>Examples of what an intensified approach might involve.</i> <p>Pros and cons</p> <ul style="list-style-type: none"> • <i>The implications of an intensified approach, whether positive...</i> • <i>...or negative.</i> <p>Cost and Deliverability <i>A brief indication of the level of cost involved in 'Doing more' and whether there would be particular obstacles to delivery.</i></p>	

The County Council is seeking views on whether the types of measures noted should be considered as we develop detailed strategy proposals.

Note on funding

Schemes can require revenue or capital funding. Capital funding is for use on a one off basis. For example, a new road scheme would be delivered using capital funding.

Revenue funding is required for schemes that require support on an ongoing basis. For example, the provision of travel information on an ongoing basis and the maintenance and updating of the information and systems would require revenue funding. In the current funding environment, it can be as or more challenging to maintain revenue funding support for ongoing projects than to achieve funding for large capital schemes.

Capital costs are referred to in the following bands

Low	Up to £50,000
Moderate	£50,000 - £1M
High	£1M - £5M
Very high	£5M - £30M
Extremely high	£30M+

Individual schemes at the top end of the 'Very high' band are likely to be at the limit of what the County Council will be able to afford to deliver from known funding sources without requiring significant borrowing against future income.

APPENDIX A: MANAGING THE TRANSPORT NETWORK.

Business as usual:	Maintaining existing systems of vehicle access controls, such as rising bollards.
Doing more:	Additional vehicle access controls, such as more rising bollards to restrict through traffic in Cambridge, whilst retaining access to key services and destinations.
<p>Context The Cambridge Core Traffic Scheme has markedly improved the city centre environment. Together with the Park & Ride system and improvements to pedestrian and cycle networks. It has been part of the successful strategy to maintain city centre access. It caters for more trips overall while reducing car trips in the city. In the more tightly packed residential areas of the city, closures that limit rat running have been implemented, such as those on streets off Mill Road.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • Additional phases of the Core Traffic Scheme might be introduced in the city centre. • Additional closures to limit rat running on residential streets might be introduced in other areas of the city or in villages in South Cambridgeshire. • A more radical option would be to consider severing major routes in the city to general traffic, allowing for car access to the city centre, but prohibiting direct cross city movements. Buses, emergency vehicles and cycle trips would have priority on routes treated in this way. <p>Pros and cons</p> <ul style="list-style-type: none"> • In the longer term, this might achieve a major shift in travel away from the private car to public transport, walking, and cycling, as the quality and reliability of these modes is enhanced, and the ease of accessibility by car is decreased. • Potential for short / medium term increases in congestion; it would take time to change travel / living patterns. <p>Cost and Deliverability Depending on the particular measures used, and the amount of landscaping / streetscape works undertaken, costs will generally be moderate to high. Schemes of this nature tend to be relatively straightforward to deliver as they do not usually require additional land. Capital funding will be required for delivery, but ongoing revenue funding for maintenance and enforcement might be required for some schemes.</p>	
Business as usual:	Enforcement of parking and traffic offences by Police and Civil Enforcement Officers.
Doing more:	Additional enforcement of traffic and parking offences using cameras (such as on bus camera enforcement of bus lane and parking offences, and camera enforcement of junction offences). Additional restrictions (yellow lines) on parking on key routes where it restricts traffic movements.
<p>Context Inappropriately parked or stopped vehicles can cause or exacerbate congestion, and often delay bus journeys disproportionately, particularly when road space is constrained.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • 'No stopping during busy periods' on key roads in the city (similar to red routes in London). • On bus camera enforcement of bus lane offences / parking offences. • Camera enforcement of junction offences (jumping lights, yellow box offences, etc). <p>Pros and cons</p> <ul style="list-style-type: none"> • Improved reliability of bus services and safer conditions for pedestrians and cyclists. • Reduced congestion. • Businesses might incur costs or be inconvenienced by having to change delivery arrangements to avoid contravening restrictions. • Some enforcement may depend on the Government enacting Part 6 of the Traffic Management Act 2004. <p>Cost and Deliverability There would be a capital cost involved in implementing technological solutions and a revenue cost associated with the monitoring and enforcement of the restrictions.</p>	

Business as usual:	Limited additional parking management schemes, (including residents' parking zones, pay & display parking etc) in response to local conditions and public demand.
Doing more:	Greater use of parking management schemes to shape travel choices.
<p>Context A number of residents parking zones and areas of charged on street car parking are managed by the County Council. The City Council runs a number of car parks in the city. The availability of parking impacts on people's travel patterns and congestion. There can be problems for residents parking near their own homes if parking is badly managed.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • More extensive use of parking management schemes (residents' parking permit zones and pay & display parking). • Car free or limited parking in new developments, particularly those that are highly accessible by public transport or cycle. • No on street parking in new developments. <p>Pros and cons</p> <ul style="list-style-type: none"> • Potential to manage pressure from workplace parking spilling onto residential streets. • Discourages car trips / long stay parking where viable alternative travel options are available. • Encourages sustainable travel behaviour by residents in new developments. • There is a cost involved with most resident permit schemes that is typically borne by residents. • Car free / limited parking development can lead to problems with on street parking, even in areas that are highly accessible by other modes. <p>Cost and Deliverability There is a capital cost involved in setting up new parking schemes. To date, schemes in Cambridge have operated on the basis that after their introduction they should be self supporting, with the ongoing management and enforcement costs covered by revenue from permits or from parking charges.</p>	

Business as usual:	Limited provision of bus lanes and bus priority measures.
Doing more:	Network of new bus lanes / Busway routes using existing road space on strategic roads in Cambridge and South Cambridgeshire. Bus priority measures on all main routes / junctions in South Cambridgeshire.
<p>Context A number of major routes in Cambridge have bus lanes, but even on these routes, buses will seldom have an uninterrupted trip in the morning and evening peak periods. On some roads where there are bus lanes, the number of junctions and the intermittent nature of the bus lanes often means that buses get held up by general congestion (for example, on Newmarket Road and Milton Road). On other routes space is limited to achieve any form of bus priority (for example, Histon Road). In South Cambridgeshire, there are many areas where buses get held in congestion, decreasing the attractiveness of longer bus journeys compared to a car or Park & Ride trip.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • Reallocation of road space for bus lanes, particularly on key routes, for example: <ul style="list-style-type: none"> ○ Provide central busway / bus lanes along the entire East Road to Abbey Stadium stretch of Newmarket Road, with reduction in space for general traffic. ○ Reallocate road space on East Road and Gonville Place for bus lanes. • Bus priority through / around pinch-points / on main roads in South Cambridgeshire. <p>Pros and cons</p> <ul style="list-style-type: none"> • Improved conditions for buses, pedestrians and cyclists. • Potential for increased congestion on adjoining parts of the network. <p>Cost and Deliverability Capital costs for schemes of this nature could range from low (£tens of thousands) to very high (£millions / £tens of millions). The scope for funding very high cost schemes from traditional government sources in the foreseeable future is likely to be extremely limited. If such schemes are to form part of the strategy, new ways of funding will need to be found.</p>	

Business as usual:	Limited provision of improvements for cyclists within existing roads and footpaths (i.e. cycle lanes, widened cycle paths, advanced stop lines at traffic lights).
Doing more:	More intensive provision of improvements for cyclists within existing roads and footpaths.
<p>Context The dedicated cycle network in and around Cambridge has been expanded and enhanced very significantly over the past 20 years. However, there are still numerous gaps and pinch points, particularly as you get further from the city. Cycle usage in Cambridge remains the highest in the UK and South Cambridgeshire has high cycle use compared to most other rural areas. Measures in this theme would seek to improve conditions for cyclists within the constraints of the existing road and footway / footpath network.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • More cycle lanes marked on road • Widened cycle paths where space • More advanced stop lines provided at traffic lights <p>Pros and cons</p> <ul style="list-style-type: none"> • Improved conditions for cyclists – greater prominence and safety. • Mode share of cycling increases. • Potential for increased congestion for general traffic if road space is reallocated. <p>Cost and Deliverability The cost of individual schemes might range from low (£tens of thousands) to high (£hundreds of thousands).</p>	
Business as usual:	Limited provision of improvements for pedestrians.
Doing more:	More widespread improvements for pedestrians. Shared space - remove traditional segregation of motor vehicles, pedestrians and other road users. Reduce road space for cars and provide more bus / cycle lanes and pedestrian space.
<p>Context The pedestrian network in Cambridge and South Cambridgeshire has many high standard links, but equally there are many areas with lower quality facilities and many gaps in the network, particularly in South Cambridgeshire.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • In areas with low vehicle speeds – particularly residential areas and town centres, the traditional segregation of paths and roads can be removed. By removing kerbs and changing surfaces, the road and path space can feel like one shared area. In some cases elsewhere, this has given pedestrians and cyclists greater priority over motor vehicles. <p>Pros and cons</p> <ul style="list-style-type: none"> • Improved conditions for pedestrians – greater prominence and safety. • Potential for increased congestion for general traffic if road space is reallocated. <p>Cost and Deliverability The cost of individual schemes might range from low (£tens of thousands) to high (£hundreds of thousands).</p>	
Business as usual:	Removal of some on street parking to give more space to buses and cycles.
Doing more:	Buses and cycles given priority on all key routes.
<p>Context Where road space is constrained, on street parking can restrict the flow of traffic and exacerbate congestion, particularly where traffic volumes are high.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • Removal of on street parking on major routes in Cambridge, and where space allows, replacement with cycle or bus lanes. <p>Pros and cons</p> <ul style="list-style-type: none"> • Reduced congestion improved journey times for buses and safer conditions for cyclists. • Displacement of parking to other streets. <p>Cost and Deliverability Low cost. Traffic orders would probably be required.</p>	

Business as usual:	New technology to detect congestion and improve traffic flow and prioritise buses at congestion hotspots.
Doing more:	Greater investment in new technology.
<p>Context Using new technology to detect congestion at junctions, to improve traffic flow and prioritise buses.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> Greater investment would enable more junctions to be linked by the same technology to improve traffic flow over a much wider area and improve more bus journeys <p>Pros and cons</p> <ul style="list-style-type: none"> Improvements to bus journey times: bus becomes a more reliable and attractive travel choice. <p>Cost and Deliverability The cost per set of traffic signals to introduce this detection is relatively low, although precise costs can depend on the age and condition of the equipment at each junction.</p>	
Business as usual:	Improve travel information - electronic signs, Real Time Passenger Information (RTPI), via internet & mobile phones – such as messages about congestion, car park spaces, bus timetables and maps showing available travel options.
Doing more:	Greater investment in improving travel information.
<p>Context RTPI is provided at many bus stops in Cambridge and 'Variable Message Signs' are used to provide information on congestion and delays on a number of the busier roads into Cambridge. A great deal of information on travel is available online, but while some systems are accessible and user friendly, there is significant scope for improvement.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> Greater investment in information systems. <p>Pros and cons</p> <ul style="list-style-type: none"> The provision of travel information to transport users in real time allows for more informed choices on travel to be made by travellers. Operationally it can allow for better management of the transport network when incidents or delay occurs, <p>Cost and Deliverability The cost of providing RTPI at bus stops and on buses is relatively low per site or bus, but over the entire area and entire bus fleet is quite substantial. Other types of on street infrastructure can cost more. For all types of scheme there will be a 'back office' revenue funding requirement to keep systems running and keep the information provided up to date and relevant.</p>	
Business as usual:	Influence national policy and funding decisions – including A14 improvements, passenger rail services and rail freight.
Doing more:	-
<p>Context The County Council is driving work with Government to deliver the upgrade of the A14 Trunk Road between Huntingdon and Cambridge. It is also working with Local MPs, neighbouring Local Authorities, businesses and Government on a number of other important projects, including:</p> <ul style="list-style-type: none"> The upgrade of the Felixstowe to Nuneaton rail corridor for freight, which will take up to 750,000 Heavy Goods Vehicles a year off the A14. Increases in frequency of passenger rail services, particularly on the rural routes – Cambridge to Norwich, Cambridge to Ipswich and Cambridge to Peterborough. <p>What might 'Doing more' entail? More resource and staff time put into such projects.</p> <p>Pros and cons</p> <ul style="list-style-type: none"> Success in this area brings in more investment in Cambridgeshire's transport network. Could involve local funding of networks that are traditionally managed and run by national government or by businesses, diverting County Council funding away from the locally managed transport network. <p>Cost and Deliverability -</p>	

Appendix B: Influencing and changing behaviour

Business as usual:	New developments to address their transport impacts.
Doing more:	-
<p>Context</p> <p>Developers are required to ensure that the impacts of development on the transport network near their sites can be accommodated. This can involve some or all of the following:</p> <ul style="list-style-type: none"> • Providing road, pedestrian and cycle access into new sites. • Funding contributions towards new / upgraded pedestrian, cycle, bus and road links that would be used by residents / employees (e.g. contributions towards the Busway and Addenbrooke's Access Road). • Funding contributions towards traffic calming or safety schemes. • Development-wide Travel Plans and marketing. <p>What might 'Doing more' entail?</p> <p>The level at which development can contribute is governed by legislation and influenced by commercial concerns. In Cambridge and South Cambridgeshire, significant levels of investment from development are already achieved, and there is relatively little scope to increase the level of direct funding for transport improvements that is received.</p> <p>Pros and cons</p> <p>-</p> <p>Cost and Deliverability</p> <p>-</p>	
Business as usual:	Limited support for travel plans including workplace travel plans (through the Travel for Work Partnership), school travel plans and personalised travel plans.
Doing more:	Greater levels of support for travel plans, including workplace travel plans (through the Travel for Work Partnership), school travel plans and personalised travel plans.
<p>Context</p> <p>'Smarter choices' type measures involve working with people and organisations to influence and change travel behaviour. Current programmes include:</p> <ul style="list-style-type: none"> • Personalised Travel Planning – working with individuals to encourage journeys by sustainable modes. • Travel for Work Partnership – working with businesses to encourage journeys by sustainable modes. • School Travel Planning – working with schools to encourage journeys by sustainable modes <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • More intensive / wider programmes of travel planning in the areas noted above. • More area wide travel planning initiatives (such as Travel Plan Plus, a European / County Council / developer funded project to develop an area wide travel plan for the Cambridge Science Park and the surrounding business parks). <p>Pros and cons</p> <ul style="list-style-type: none"> • An intensified programme would work with more people and businesses and would be able to achieve better results. • Results of this type of programme often give better results than physical improvements. • There would be an increased ongoing revenue cost that might be difficult to maintain in the longer term. • Potential for diminishing returns as intensity of programmes increase. <p>Cost and Deliverability</p> <p>The costs involved in delivery of 'Smarter Choice' type interventions are generally low to moderate, but typically require revenue funding on an ongoing basis.</p>	
Business as usual:	Limited support for car clubs (car clubs provide vehicles which can be rented by the hour, and are parked in local neighbourhoods, this can mean nearby residents don't need to own their own car but can use a car club car).
Doing more:	Greater levels of support for car clubs.
<p>Context</p> <p>The County Council supports car clubs (for example, Streetcar) through the provision of dedicated parking spaces for car club cars. The Camshare car sharing system seeks to link travellers who can share car trips.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • Greater support for car clubs (for example, provision of dedicated parking for car club vehicles). • Greater support for and marketing of car sharing schemes. 	

Business as usual:	Limited support for car clubs (car clubs provide vehicles which can be rented by the hour, and are parked in local neighbourhoods, this can mean nearby residents don't need to own their own car but can use a car club car).
Doing more:	Greater levels of support for car clubs.
<p>Pros and cons</p> <ul style="list-style-type: none"> • Car clubs and car sharing can provide opportunities to reduce and share the cost of car usage, and reduce the number of single occupant trips on the road network. • Car clubs require parking space to be available that might otherwise be used by residents / other drivers. <p>Cost and Deliverability</p> <p>The capital investment required to support car clubs is relatively small. In the current financial climate, provision of revenue funding for the ongoing support of schemes such as Camshare can be challenging.</p>	
Business as usual:	Improve travel information and marketing so that people are aware of their journey options.
Doing more:	Greater investment in improving travel information and marketing.
<p>Context</p> <p>A great deal of travel information is available online or in leaflet form. However, many people are not aware of travel choices that are available in their area, or where these might give them an attractive alternative option to how they currently travel.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • Greater investment in public transport information and marketing. • Greater investment in community transport information and marketing. • More robust and easily accessible journey planning tools. <p>Pros and cons</p> <ul style="list-style-type: none"> • The County Council can provide a single point from which information on the whole range of travel information can be provided. <p>Cost and Deliverability</p> <p>Relatively low cost, but revenue budget required on ongoing basis to maintain.</p>	
Business as usual:	Road safety training, education and campaigns.
Doing more:	Greater investment in road safety training, education and campaigns.
<p>Context</p> <p>The County Council delivers cycle training for children and adults, road safety campaigns and road safety education in schools.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • More intensive programmes in the areas noted above. <p>Pros and cons</p> <ul style="list-style-type: none"> • Improved safety awareness of vulnerable road users. <p>Cost and Deliverability</p> <p>In the current financial climate, the provision of revenue funding to support such programmes on an ongoing basis can be challenging.</p>	
Business as usual:	Support for 'alternatives to travel' (measures which mean people don't need to travel so much).
Doing more:	Greater support for 'alternatives to travel'.
<p>Context</p> <p>If services can be provided locally or in the home, or if home and remote working can reduce the need to travel for work purposes, there will be benefits in terms of reduced traffic levels and congestion. The County Council is investing in broadband provision, aiming to ensure that most areas have access to download speeds of 30Mbps, and never less than 2Mbps, by 2015.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • Support for home and remote working. • Encouraging and working with other service providers to provide or maintain local services. <p>Pros and cons</p> <ul style="list-style-type: none"> • Removal of trips from the transport network, reducing congestion. • Many jobs cannot be undertaken by home or remote working. <p>Cost and Deliverability</p> <p>Costs involved in broadband provision are high, but significant capital funding (£26.75M) already committed.</p>	

Appendix C: Providing new transport capacity.

Business as usual:	Limited introduction of new and improved pedestrian and cycle paths.
Doing more:	Networks of very high quality segregated cycle routes linking villages and towns.
<p>Context</p> <p>The cycle network in Cambridge and South Cambridgeshire has many high standard links, but equally, there are many areas with lower quality facilities, and many gaps in the network, particularly in South Cambridgeshire. Cycle usage in Cambridge remains the highest in the UK, and South Cambridgeshire has high cycle use compared to most other rural areas.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • Networks of new pedestrian/cycle routes. <ul style="list-style-type: none"> ○ New / upgraded pedestrian and cycle routes to main bus and rail routes and large villages across South Cambridgeshire. ○ Major cycle / pedestrian schemes (of the scale / cost of the Riverside Bridge, Cambridge or the Willow Bridge, St Neots), delivered where obstacles such as rivers, railways or major roads significantly discourage or inhibit walking and cycling. • Very high quality (Dutch standard) cycle routes segregated from car traffic on all main routes between Cambridge and neighbouring market towns, and linking all large villages in South Cambridgeshire to Cambridge and / or their nearest town / key service centre. • Major investment in 'missing links' in Cambridge. • New cycle parks in Cambridge city centre. • Provide on street cycle parking in residential areas in the city where storage space for cycles is limited. <p>Pros and cons</p> <ul style="list-style-type: none"> • More people choose to walk and cycle and can then use public transport for longer journeys. • Potential for major shift to walking and cycling across the strategy area, and for cycling to become a far more attractive alternative for many trips. • Benefits in terms of reduced congestion, improved health and lower emissions. • Land acquisition can be difficult. • While far cheaper than road construction, new routes can still be very expensive. The scope to fund an extensive network is likely to be extremely limited from traditional government funding sources. <p>Cost and Deliverability</p> <p>A comprehensive network of high quality off road routes across the area would be very expensive, and in delivering individual schemes there are often local issues that can be tricky to resolve. However, investment in cycling over the past twenty years has seen bike usage increase significantly, and costs are far lower than those involved in new road construction.</p>	
Business as usual:	Car / bus / bicycle interchanges at busier rail stations and bus stops.
Doing more:	Car / bus / bicycle interchanges at all rail stations and more bus stops.
<p>Context</p> <p>The ability to interchange with public transport provides a significant opportunity to reduce the need for car trips over the entire length of a journey. However, at many bus stops and at some smaller stations, the potential to do this is limited by the lack of facilities such as car and cycle parking, footpath links, and safe and comfortable waiting facilities.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • Providing small rural interchange facilities on main bus routes, with some car and cycle parking, and community transport stops. • Providing cycle parking / bus interchange improvements at rail stations. <p>Pros and Cons</p> <ul style="list-style-type: none"> • Potential to achieve modal shift from car to car and bus / rail (or walk / cycle and bus / rail), reducing congestion on the road network. • Unless the bus trip is competitive in journey time with a car trip, the potential of such schemes may be limited compared to current Park & Ride services. <p>Cost and Deliverability</p> <p>Low to moderate investment at each bus stop treated. Moderate to high cost at stations. The ability to deliver schemes may be limited by available space. Work at stations would be undertaken with rail industry partners</p>	

Business as usual:	Small scale road safety and capacity improvements.
Doing more:	Larger scale road safety and capacity improvements.
<p>Context</p> <p>Over the past ten years, a small number of very large junction improvement schemes have been implemented for safety or capacity reasons. These include a new roundabout at the A505 / A1301 junction, and the A14 / A10 / Milton Road / Cowley Road junction improvements. A far greater number of small and medium sized safety schemes have been implemented in the same period, and the level of road accident casualties across Cambridgeshire (and nationally) is at an all time low. Current safety programmes are focussed on medium and small scale schemes, as most cluster sites with high rates of accidents have been treated, and smaller schemes tend to give a higher reduction in accidents.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • Further large junction improvement schemes. • Intensification of expenditure on small / medium sized safety improvements. <p>Pros and cons</p> <ul style="list-style-type: none"> • Such schemes will bring safety and capacity benefits. • The safety improvements delivered by major safety schemes can often be achieved with more modest levels of investment (at the A141 / A605 Goosetree junction in Fenland, a £0.5M traffic signal scheme was introduced instead of a £2M roundabout, and achieved the desired reduction in accidents). <p>Cost and Deliverability</p> <p>A major safety scheme costing £2M would take up around half of the annual budget for small scale transport improvement across all of Cambridgeshire. For such schemes to be delivered without severely prejudicing other programmes, funding from new sources would need to be found.</p>	

Business as usual:	Some new bus lanes and bus priority measures.
Doing more:	New Busway routes parallel to strategic roads.
<p>Context</p> <p>In Cambridge there are bus lanes on a number of the key radial routes into the city, and bus priority is being provided at most signal junctions through GPS and transponder technology. In South Cambridgeshire, there is far less bus priority, with the notable exception of the Busway route from north Cambridge to St Ives.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • New Busway routes linking Cambridge to new developments. • New Busway routes parallel to strategic roads in South Cambridgeshire, together with Park & Ride sites further away from the city. • Linking the north and south sections of Busway through Cambridge. <p>Pros and cons</p> <ul style="list-style-type: none"> • Increase in reliability and shorter journey times for bus trips. • Bus becomes a far more attractive choice for longer distance trips into Cambridge. Mode shift away from car and from inner ring of Park & Ride. • The scope to fund such routes is likely to be very limited from traditional government funding sources. <p>Cost and Deliverability</p> <p>Schemes of the scale could cost tens or hundreds of million pounds. The scope for funding schemes of this scale from traditional government sources in the foreseeable future is likely to be extremely limited. If such schemes are to form part of the strategy, new ways of funding will need to be found.</p>	

Business as usual:	More Park & Ride spaces at existing sites.
Doing more:	New Park & Ride sites.
<p>Context</p> <p>The Cambridge Park & Ride system takes around four million passengers each year. The sites are in a relatively tight ring around the city, with the exception of the Longstanton and St Ives sites on the Busway. Bus lanes and other bus priority measures are provided on the routes between all of the sites and Cambridge City centre.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • New sites on corridors into Cambridge that are not currently served by Park & Ride. • New sites further away from Cambridge. 	

Business as usual:	More Park & Ride spaces at existing sites.
Doing more:	New Park & Ride sites.
<p>Pros and cons</p> <ul style="list-style-type: none"> • Additional transport capacity into the city, catering for increased demand. • Sites further from Cambridge would have the potential to reduce or limit increases in traffic on routes in South Cambridgeshire. • Unless the bus journey between sites that are further out from the city provide a reliable and competitive journey time compared to the comparable car trip, they may not achieve substantial use. <p>Cost and Deliverability</p> <p>As a rule of thumb, at current day prices, an investment of £1M would allow provision of around 250 additional spaces at an existing Park & Ride site. New sites would have additional costs to provide access for cars, buses, pedestrians and cyclists, and to provide bus stops and passenger waiting facilities. There could be land costs and green belt issues with expansion of existing sites or the development of new sites.</p>	

Business as usual:	More cycle parking at key destinations.
Doing more:	Substantial new cycle parking provision, including bespoke facilities.
<p>Context</p> <p>Cambridge has significant amounts of cycle parking, but in the city centre there are more bikes than stands, and the Grand Arcade cycle park is frequently full. There are typically 1,200 bikes crammed into around 700 spaces at Cambridge Station, and a new 3,000 space facility is planned. Many villages in South Cambridgeshire have little or no cycle parking. The lack of secure cycle parking facilities can act as a deterrent to cyclists, particularly if their bike is going to be left for a few hours or more.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • More cycle parking at destinations such as schools, workplaces, libraries, shops, leisure facilities, etc. • Bespoke facilities at key locations, providing significant increase in capacity. <p>Pros and cons</p> <ul style="list-style-type: none"> • Additional capacity will reduce the disruption for pedestrians that bikes parked on railings or leaning against walls can cause on busy shopping days in the city centre. • Secure cycle parking will reduce bicycle theft. • Unless provided close to cyclist's destination, provision of new capacity may not reduce on street clutter. • Competing demand for space in city centre may limit ability to deliver additional cycle parking. <p>Cost and Deliverability</p> <p>Provision of basic 'Sheffield stands' is a cheap and relatively straightforward matter. Bespoke facilities can be very expensive (the Cambridge Station cycle park will cost £3M - £3.5M for 3,000 spaces), and might require a relatively large amount of land.</p>	

Business as usual:	Major transport infrastructure delivered if funding opportunities available.
Doing more:	Improvements to A road junctions and pinch points or Major improvements to longer stretches of A roads.
<p>Context</p> <p>Motorways and Primary Routes (see Figure 1 on page 3) are the recommended routes for long distance journeys, and in Cambridgeshire, generally take high levels of both local and longer distance traffic. There are a number of other A and B class roads that in the Cambridge area that also take significant levels of traffic. Major road improvements might bring congestion, safety, environmental and quality of life benefits. However, there can also be environmental impacts, and increased capacity for car trips has in some areas simply been taken up by more car trips being made, negating the intended benefits.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • Improvements to A road junctions and pinch points. Examples of this type of scheme might include: <ul style="list-style-type: none"> ○ A bridge over the railway on the A10 at Foxton and closure of Foxton level crossing. ○ Medium sized junction improvement schemes at key points on the A Road network. • A very high cost option for improving the reliability of journey times by car is to provide more capacity for car trips. Examples of this type of scheme might include: <ul style="list-style-type: none"> ○ Major junction improvements – for example: a bridge or underpass for the A10 at the Milton junction with the A14. ○ Dualling of key sections of the primary route network linked to major increase in the capacity of the Park & Ride network. • Upgrades / bypasses on routes that do not form part of the primary route network. 	

Business as usual:	Major transport infrastructure delivered if funding opportunities available.
Doing more:	Improvements to A road junctions and pinch points or Major improvements to longer stretches of A roads.
<p>Pros and cons</p> <ul style="list-style-type: none"> • Targeted schemes to remove pinch points may improve journey times and reduce congestion. • Major improvements could remove or reduce congestion on the key links principal road network. • The removal of a pinch point or provision of new capacity can have the effect of relocating rather than reducing congestion, and therefore have relatively little impact on journey times overall. • Risk of more traffic being generated by road improvement. • Limited space in Cambridge to provide additional capacity might limit the potential benefits of such schemes in South Cambridgeshire. <p>Cost and Deliverability</p> <p>The cost of major road improvement schemes tends to be very high, particularly where major structures such as bridges are involved. For example, a simple road bridge scheme, such as over the railway at Foxton on the A10 would be likely to cost between £8M and £10M.</p> <p>Larger road schemes could cost tens or hundreds of million pounds. The scope for funding schemes of this scale from traditional government sources in the foreseeable future is likely to be extremely limited. If such schemes are to form part of the strategy, new ways of funding will need to be found.</p>	
Business as usual:	'Cambridgeshire Future Transport'– support for community transport solutions, and to meet a range of demands including school, health and social services transport.
Doing more:	Wider availability of Community / Demand Led transport services.
<p>Context</p> <p>The 'Cambridgeshire Future Transport' (CFT) investment programme focuses on the delivery of appropriate demand led transport solutions. It looks at alternative methods of transport delivery and for the Council and local communities to co-design solutions where commercial bus services are not viable.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • Wider support for locally led transport services in South Cambridgeshire that provide links to public transport hubs and to key services. <p>Pros and Cons</p> <ul style="list-style-type: none"> • Locally led and supported community transport services. • Requires revenue funding – if community transport services cannot be self sustaining, there will be an ongoing budgetary requirement that will be difficult to meet. <p>Cost and Deliverability</p> <p>An annual budget of £1.5M countywide has been set aside to provide transport solutions. Deliverability will depend on the expansion of alternative or existing transport providers.</p>	
Business as usual:	Working with rail industry to deliver capacity and service improvements.
Doing more:	Council investment to deliver rail capacity and service improvements.
<p>Context</p> <p>The County Council does not have a direct statutory responsibility for rail. The rail network provides vital public transport links within the county and to national destinations / international gateways. On the A10, M11, A1301 and A14 corridors, rail provides a high quality public transport option for trips into Cambridge.</p> <p>What might 'Doing more' entail?</p> <ul style="list-style-type: none"> • Investment in station facilities and access. • Consideration of investment in track capacity upgrades. • New trains / carriages. <p>Pros and Cons</p> <ul style="list-style-type: none"> • Would relieve congestion on parallel road routes. • There is opportunity to lengthen trains to provide additional capacity in the medium / longer term. • Significant increases in capacity (other than using longer trains) are likely to be limited by the cost of track capacity upgrades in Cambridge and Ely. • Investment in rail should ideally be led by the rail industry rather than the County Council. <p>Cost and Deliverability</p> <p>Increasing track capacity can be very expensive. Unlike the road network, there is a potential revenue stream if improvements delivered would lead to a significant increase in passenger numbers.</p>	